As confidentially submitted to the Securities and Exchange Commission on January 15, 2021
pursuant to Section 6(e) of the Securities Act of 1933, as amended.
This amendment no. 1 to the draft registration statement has not been filed publicly with the Securities and Exchange Commission and all information herein remains strictly confidential

Registration No. 333-

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

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

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

Delaware	**2834**	**45-2518457**
(State or other jurisdiction of incorporation or organization)	(Primary Standard Industrial Classification Code Number)	(I.R.S. Employer Identification Number)

9119 Gaither Road
Gaithersburg, MD 20877
(301) 825-9810
(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

Scott Carmer
Chief Executive Officer
NexImmune, Inc.
9119 Gaither Road
Gaithersburg, MD 20877
(301) 825-9810
(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copies to:

John T. Rudy
John P. Condon
Matthew T. Simpson
Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C.
One Financial Center
Boston, MA 02111
(617) 542-6000

Brent B. Siler
Divakar Gupta
Brian F. Leaf
Cooley LLP
55 Hudson Yards
New York, NY 10001
(212) 479-6000

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

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

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

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

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

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

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

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

CALCULATION OF REGISTRATION FEE

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

(1) Includes initial public offering price of shares that the underwriters may purchase pursuant to an option to purchase additional shares. Estimated solely for the purpose of calculating the amount of the registration fee pursuant to Rule 457(o) under the Securities Act of 1933, as amended.
(2) Calculated pursuant to Rule 457(o) based on an estimate of the proposed maximum aggregate initial public offering price.

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

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

SUBJECT TO COMPLETION, DATED , 2021

PROSPECTUS

Shares

NexImmune, Inc.

Common Stock

This is an initial public offering of shares of the common stock of NexImmune, Inc. We are offering shares of our common stock. No public market currently exists for our common stock.

We intend to apply to list our common stock on The Nasdaq Global Market under the symbol “NEXI.”

We anticipate that the initial public offering price will be between $ and $ per share.

We are an “emerging growth company” and a “smaller reporting company” as defined under the federal securities laws and, as such, have elected to comply with certain reduced reporting requirements for this prospectus and may elect to do so in future filings.

Investing in our common stock involves risks. See “Risk Factors” beginning on page 13 to read about factors you should consider before buying shares of our common stock.

	Per Share	Total
Price to the public	$	$
Underwriting discounts and commissions(1)	$	$
Proceeds to us (before expenses)	$	$

(1) We refer you to the “Underwriting” section beginning on page 193 of this prospectus for additional information regarding underwriting compensation.

We have granted the underwriters the option to purchase additional shares of common stock on the same terms and conditions as set forth above if the underwriters sell more than the shares of common stock in this offering. The underwriters can exercise this option at any time within 30 days after the date of this prospectus.

Neither the Securities and Exchange Commission nor any other regulatory body has approved or disapproved of these securities, or passed upon the adequacy or accuracy of this prospectus. Any representation to the contrary is a criminal offense.

The underwriters expect to deliver the shares on or about , 2021.

Barclays **Cantor** **Raymond James** **Allen & Company LLC**

Prospectus dated , 2021

TABLE OF CONTENTS

	Page
Prospectus Summary	1
Risk Factors	13
Special Note Regarding Forward-Looking Statements	79
Use of Proceeds	81
Dividend Policy	82
Capitalization	83
Dilution	85
Selected Financial Data	88
Management’s Discussion and Analysis of Financial Condition and Results of Operations	90
Business	104
Management	159
Executive and Director Compensation	167
Certain Relationships and Related Party Transactions	174
Principal Stockholders	178
Description of Capital Stock	182
Shares Eligible for Future Sale	188
Certain Material U.S. Federal Income Tax Consequences to Non-U.S. Holders	191
Underwriting	195
Legal Matters	202
Experts	202
Where You Can Find More Information	202
Index to Financial Statements	F-1

We have not, and the underwriters have not, authorized anyone to provide any information or to make any representations other than those contained in this prospectus or in any free writing prospectuses we have prepared. We take no responsibility for, and can provide no assurance as to the reliability of, any other information that others may give you. This prospectus is an offer to sell only the shares offered hereby, but only under circumstances and in jurisdictions where it is lawful to do so. The information contained in this prospectus or in any applicable free writing prospectus is current only as of its date, regardless of its time of delivery or any sale of shares of our common stock. Our business, financial condition, results of operations and prospects may have changed since that date.

For investors outside of the United States: We have not, and the underwriters have not, done anything that would permit this offering or possession or distribution of this prospectus in any jurisdiction where action for that purpose is required, other than the United States. Persons outside of the United States who come into possession of this prospectus must inform themselves about, and observe any restrictions relating to, the offering of the shares of common stock and the distribution of this prospectus outside of the United States.

Unless otherwise indicated, information contained in this prospectus concerning our industry and the markets in which we operate, including our general expectations, market position and market opportunity, is based on our management’s estimates and research, as well as industry and general publications and research, surveys and studies conducted by third parties. We believe that the information from these third-party publications, research, surveys and studies included in this prospectus is reliable. Management’s estimates are derived from publicly available information, their knowledge of our industry and their assumptions based on such information and knowledge, which we believe to be reasonable. This data involves a number of assumptions and limitations which are necessarily subject to a high degree of uncertainty and risk due to a variety of factors, including those described in “Risk Factors.” These and other factors could cause our future performance to differ materially from our assumptions and estimates.

Table of Contents

PROSPECTUS SUMMARY

This summary highlights selected information contained elsewhere in this prospectus and does not contain all of the information that you should consider in making an investment decision. Before investing in our common stock, you should carefully read this entire prospectus, including our financial statements and the related notes thereto and the information set forth under the "Risk Factors" and "Management's Discussion and Analysis of Financial Condition and Results of Operations" sections of this prospectus. Unless the context otherwise requires, we use the terms "NexImmune," "Company," "we," "us" and "our" in this prospectus to refer to NexImmune, Inc.

Overview

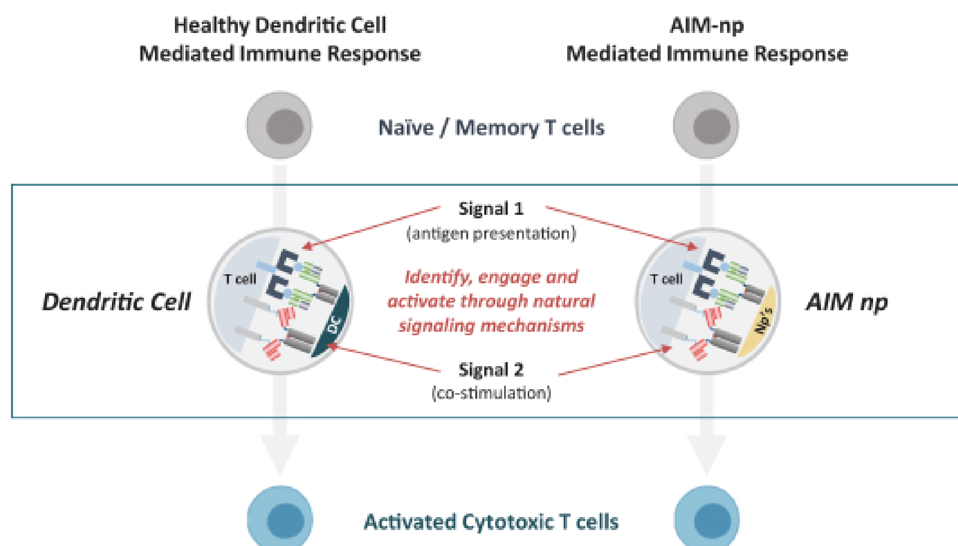
We are a clinical-stage biotechnology company developing a novel approach to immunotherapy designed to employ the body's own T cells to generate a specific, potent and durable immune response that mimics natural biology. Our mission is to create therapies with curative potential for patients with cancer and other life-threatening immune-mediated diseases. Currently, we have two product candidates in human trials: NEXI-001 in acute myeloid leukemia, or AML, and NEXI-002 in multiple myeloma, or MM.

The backbone of our approach is our proprietary Artificial Immune Modulation, or AIM™, nanoparticle technology platform. The AIM technology enables us to construct nanoparticles that function as synthetic dendritic cells capable of directing a specific T cell-mediated immune response. Like natural dendritic cells, the AIM nanoparticles employ natural signaling proteins to deliver specific instructions to specific T cells directing a desired immune response. Importantly, unlike other cell therapy approaches, this is accomplished without any genetic manipulation of the T cell, thereby creating T cell products designed to maintain natural target identification, engagement and killing mechanisms.

By mimicking natural T cell biology, our T cell product candidates are designed to combine the attributes of cellular *precision*, *potency* and *persistence* with reduced potential for undesired toxicities. We believe this is a significant advantage of the AIM platform and our therapeutic product candidates compared to other T cell therapies. The following graphic summarizes the key features of the AIM platform.

At the center of the immune response are T cells, often referred to as the "foot soldiers" of the immune system. Whenever healthy cells are under attack, either by a virus, bacteria or cancer, the immune system calls on the T cell to identify, engage and kill the specific invader or diseased cells. Importantly, natural T cells have the ability to distinguish between diseased and healthy cells. However, T cells need very specific sets of instructions to function effectively. In healthy individuals, these specific instructions are normally delivered to the T cells by dendritic cells, which are also referred to as professional antigen-presenting cells. Dendritic cells provide these instructions through key signaling proteins. However, cancer cells often compromise the function of dendritic cells and the instructions they deliver to T cells.

Our AIM nanoparticle technology is designed to bypass the dendritic cells and deliver the right kind of instructions directly to T cells using natural biology. In essence, we create nano-sized synthetic dendritic cells. These nano-sized synthetic dendritic cells are designed to deliver precise instructions to a specific set of targeted T cells, and these instructions will be different depending on the therapeutic goal. Translating this to cancer, each infusion, or product, contains populations of T cells that can identify and attack multiple tumor-specific antigen targets on a tumor cell. In preclinical studies, we observed that AIM-activated T cells were potent, were able to effectively distinguish between tumor cells and healthy cells and showed potential for long term persistence. As the graphic below illustrates, our AIM nanoparticles emulate natural dendritic cells by delivering immune-specific instructions through two key humanized signaling proteins.



Our two clinical stage product candidates, NEXI-001 and NEXI-002, are adoptive T cell therapies, or ACTs, that contain populations of naturally occurring CD8+ T cells that recognize a defined set of disease-relevant antigen targets. NEXI-001 is a donor-derived, or allogeneic, ACT in a Phase I/II clinical trial for the treatment of patients with relapsed AML after allogeneic stem cell transplantation, or allo-HSCT. NEXI-002 is a patient-derived, or autologous, ACT in a Phase I/II clinical trial for the treatment of MM patients that have failed at least three prior lines of therapy. In December 2020, initial safety, tolerability and immunologic data from our NEXI-001 trial was shared as an oral presentation during the 62nd American Society of Hematology (ASH) Annual Meeting. These preliminary data showed that single infusions of NEXI-001 T cells in the first three patients treated were well-tolerated. Initial indicators of immunologic response after NEXI-001 T cell infusion in each of the three patients were observed, including (i) lymphocyte reconstitution to pre-lymphodepletion baseline levels at timepoints early within the expected range, and an earlier-than-expected recovery of the CD4+ T cell compartment; (ii) the presence, proliferation and persistence of NEXI-001 antigen-specific T cells as measured in

peripheral blood; (iii) clonal expansion of NEXI-001 T cells in both peripheral blood and bone marrow; and (iv) the persistence of less differentiated T cell subtypes in NEXI-001 product candidates over time, as measured in peripheral blood. It is important to note that we are early in the safety evaluation and dose-finding part of the Phase I/II trial, and that these results are derived from the first three patients only and are not statistically significant. We expect to announce data for most patients in both NEXI-001 and NEXI-002 clinical trials by the end of 2021.

Assuming successful final results from these Phase I/II clinical trials, we expect to discuss with the U.S. Federal Drug Administration, or the FDA, plans to progress both programs into registrational trials designed to support potential approval of both product candidates in the United States. In parallel, we plan to explore partnering opportunities for late-stage development and commercialization in these indications.

The modular design of the AIM platform allows us to develop new product candidates for clinical evaluation across a range of other disease areas and indications. We plan to use new AIM nanoparticle constructs to develop new product candidates for additional blood tumor indications, and to expand our development efforts toward solid tumor indications. We are also developing new AIM nanoparticle constructs and modalities for potential clinical evaluation in new disease areas outside of oncology, including autoimmune disorders and infectious diseases.

We were founded in 2011, with the exclusive licensing of the core AIM technology from The Johns Hopkins University, or Johns Hopkins. In 2017, attracted by the promise of this technology, Dr. Sol Barer, the co-founder and former Chairman and Chief Executive Officer of Celgene Corporation, and the current Chairman of Teva Pharmaceutical Industries Ltd., led the acquisition and recapitalization of our company. This recapitalization included significant investments from Dr. Barer, ArrowMark Partners and other experienced biotechnology investors. Dr. Barer currently serves as Chairman of our board of directors, and has recruited a management team whose members have decades of experience in the biotechnology industry.

Our Pipeline

We are evaluating two product candidates in clinical trials, NEXI-001 in patients with AML and NEXI-002 in patients with MM. We are actively dosing patients in both Phase I/II trials and expect to complete enrollment for both trials in 2021, with initial data on most patients in both trials expected by the end of 2021. As Phase I/II trials, the trials consist of two parts. In the first part of the trials, the initial safety evaluation phase, we will assess the safety and tolerability of NEXI-001 or NEXI-002 T cells. In the second part of the trials, the expansion phase, we will further define safety and will also evaluate the initial efficacy of each product candidate at the dose and regimen established in the safety evaluation phase. We are currently in the safety evaluation phase of both trials. Based on analysis of initial data, we also anticipate filing with the FDA to request Breakthrough Therapy Designation and regenerative medicine advanced therapy designation for both our NEXI-001 and NEXI-002 product candidates.

Our next adoptive cell therapy product candidate is planned to be positioned in solid tumors. We have observed in non-clinical studies the generation of melanoma-specific T cells from Stage III/IV melanoma patients as well as the activity and persistence of AIM ACT-generated T cells directed against the MART-1 antigen in melanoma tumor-bearing mice. We have also expanded HPV-specific T cells *in vitro* to support potential clinical evaluation in a variety of virally-mediated solid tumors.

In addition to our programs using the AIM ACT adoptive cell therapy modality, we are also developing a next-generation off-the-shelf injectable modality, which we refer to as AIM INJ. The AIM INJ modality is designed to enable AIM nanoparticles to engage CD8+ T cells directly inside the body without the need for *ex vivo* expansion and manufacturing, which we believe will result in a greater ease of administration and a less complex and less expensive manufacturing process.

The following table summarizes our AIM pipeline.

THERAPY TYPE	NAME	INDICATION/ DISEASE AREA	DISCOVERY	PRECLINICAL	PHASE I	PHASE II	PHASE III
ADOPTIVE CELL THERAPY MODALITY (AIM ACT)							
Donor-derived T cells	NEXI-001*	AML / MDS[1] (r/r post allo-HSCT)					
Patient-derived T cells	NEXI-002*	Multiple Myeloma (r/r ≥3 prior lines of therapy)					
Patient-derived T cells		Solid Tumor					
INJECTABLE MODALITY (AIM INJ)							
Injectable AIM-np		Solid Tumor					
Injectable AIM-np		Autoimmune Diseases					
Injectable AIM-np		Infectious Diseases					

[1] Myelodysplastic Syndrome, or MDS, is the precursor of AML

* Phase I/II Trial

We have completed substantial non-clinical work to advance the AIM INJ modality towards a potential IND filing, including preparing appropriate IND-enabling experiments in support of a planned clinical program focusing on solid tumors. Subject to regulatory feedback and an IND filing, we anticipate a second clinical program that would target autoimmune disease and which would be the first AIM product candidate to suppress, rather than activate, T cell function. In support of this potential program, we have generated and published pre-clinical data in which we observed that AIM nanoparticles engaged and suppressed auto-reactive T cells.

Additionally, we are developing the AIM platform for potential clinical application in patients suffering from specific infectious disease. In non-clinical studies, we have been able to expand CD8+ T cells directed against viral antigens including Epstein-Barr virus, Cytomegalovirus, and Human Papillomavirus. Based on specific size and bio-distribution characteristics, the AIM INJ nanoparticles are designed to engage antigen-specific CD8+ T cell populations at multiple sites *in vivo*, such as the lymph node, lymphatic system, in the peripheral blood, tissue, or the tumor. Similar to AIM ACT nanoparticles, the AIM INJ nanoparticles are designed to mimic the core functions of dendritic cells by delivering two key immune-specific signals: (i) an antigen-specific recognition signal delivered by an HLA molecule loaded with an antigenic peptide (Signal 1), and (ii) a co-stimulatory signal to induce proliferation and expansion of the activated T cells (Signal 2). The only significant difference between the AIM ACT and AIM INJ modality is the nanoparticle core composition; the AIM INJ modality incorporates a biodegradable PLGA-PEG nanoparticle of approximately 100 nanometers in diameter, whereas the AIM ACT modality utilizes a SPIO core of similar size and shape. Importantly, both nanoparticle cores have similar design specifications and use the same chemistry to couple the same humanized signaling proteins. Both use the same antigen peptide loading process to complete the construct of the nanoparticle.

In initial *in vitro* experiments, we have observed that the AIM INJ nanoparticles are stable for at least six months, during which they maintain their functionality and specificity.

[Table of Contents](#)

Our Approach

Our approach to immunotherapy employs the body's own T cells and is designed to generate a specific, potent and durable immune response that mimics natural biology. We believe the core attributes of our platform are:

- ***Precision:*** Deliver specific sets of instructions to specific T cell populations that direct a specific T cell function;
- ***Potency:*** Direct T cells to attack multiple disease relevant antigen targets through naturally occurring identification, engagement and killing mechanisms, with reduced potential for undesired toxicities; and
- ***Persistence:*** Maintain T cell sub-types that support self-renewal, proliferation, immunologic memory and long-term T cell survival.

Importantly, our AIM technology is used to select and amplify the antigen-specific function of naturally occurring T cells, and does not require or employ genetic engineering or genetic manipulation of T cells to accomplish this as a treatment strategy. This is a critical point of differentiation relative to most other targeted T cell therapies in development.

The chart below summarizes key differences that we believe separate our technology from other cellular immunotherapy approaches.

	CAR T Therapies	Engineered TCRs	Endogenous Cell Therapies (such as TILs)	NexImmune
Precision • Deliver specific instructions that direct antigen specific T cell function	✓	✓	✗	✓
Potency • T cells that recognize and attack multiple disease relevant antigen targets	✗	✗	✓	✓
• Reduced potential for serious toxicities	✗	✗	○	✓
Persistence • Consistently produces product candidates with T cell subtypes that support self renewal, proliferation and long-term T cell survival	✗	✗	✗	✓

We have developed a fully closed, automated manufacturing process through which we produce our therapeutic product candidates. This reproducible process delivers consistent composition and quality of final T cells across indications regardless of whether patient or donor cells are used, and is designed for future scale.

Our AIM technology is significantly differentiated from other approaches to T cell therapy, and we believe its modular design further differentiates it as a platform with the potential for rapid product development in multiple therapeutic areas, thereby creating opportunities for both internal program development and partnerships, including licensing or collaboration opportunities. We believe our approach represents a meaningful opportunity to realize the promise of T cell-based immunotherapies.

Our Strategy

Our mission is to create therapies with curative potential for patients with cancer and other life-threatening immune-mediated diseases. We believe that in the long term, our AIM technology has the potential to be a core component of many immunotherapy combinations used to treat a variety of immune-mediated diseases. Our ultimate goal is to develop and bring to patients, independently or working with partners, a portfolio of off-the-shelf T cell products with specific application to a wide range of cancers, autoimmune disorders and infectious diseases.

Key elements of our strategy include:

- Advance NEXI-001 and NEXI-002 to registrational trials.
- Expand AIM ACT into solid tumors.
- Continue development of our AIM INJ modality.
- Leverage partnerships to drive new product development in autoimmune disorders and infectious diseases.

Risk Factors

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

- We have incurred significant operating losses since our inception. We expect to incur losses for the foreseeable future and may never achieve or maintain profitability.
- Our limited operating history may make it difficult for you to evaluate the success of our business to date and to assess our future viability.
- Even if this offering is successful, we will need substantial additional funding. If we are unable to raise capital when needed, we would be compelled to delay, reduce or eliminate our product development programs or commercialization efforts.
- If we are unable to successfully obtain approval for and commercialize NEXI-001 or NEXI-002 and our other product candidates or experience significant delays in doing so, our business will be materially harmed.
- Initial success in our ongoing clinical trials may not be indicative of results obtained when these trials are completed.
- We plan to initially target a small number of patients with our product candidates, and the market opportunities for these product candidates, if and when approved, may be limited to those patients who are ineligible for established therapies or have failed prior treatments and, accordingly, the opportunities may be small.
- Clinical drug development involves a lengthy and expensive process, with an uncertain outcome. We may incur additional costs or experience delays in completing, or ultimately be unable to complete, the development and commercialization of our product candidates.
- The AIM technology is a novel immunotherapy platform and therapies derived from it have not been tested in humans before. As of a result, only limited human study data is available and it remains not fully known as to what kind of cytokines may be released.
- If we are not able to obtain, or if there are delays in obtaining, required marketing approvals, we will not be able to commercialize our product candidates, if approved, and our ability to generate revenue will be materially impaired.

- If we experience delays or difficulties in the enrollment of patients in clinical trials, our receipt of necessary regulatory approvals could be delayed or prevented.
- Our product candidates may cause undesirable side effects that could delay or prevent their marketing approval, limit the commercial profile of an approved label, or result in significant negative consequences following marketing approval, if any.
- Our product candidates are biologics and the manufacturing process for our product candidates is complex, generally more costly than traditional small molecule chemical compounds, and more difficult to reproduce . If we or any of our third-party manufacturers encounter manufacturing difficulties, our ability to provide or secure supply of our product candidates for clinical trials or our products for patients, if approved, could be delayed or stopped, or we may be unable to maintain a commercially viable cost structure.
- We rely on, and expect to continue to rely on, third parties to conduct our clinical trials for our product candidates. If these third parties do not successfully carry out their contractual duties, comply with regulatory requirements or meet expected deadlines, we may not be able to obtain marketing approval for or commercialize our product candidates, and our business could be substantially harmed.
- The third parties upon which we rely for the supply of the source materials, are our sole sources of supply and have limited capacity, and the loss of any of these suppliers could harm our business.
- Even if any of our product candidates receives marketing approval, it may fail to achieve the degree of market acceptance by physicians, patients, third-party payors and others in the medical community necessary for commercial success.
- We face substantial competition, which may result in others discovering, developing or commercializing competing products before or more successfully than we do.
- If we are unable to obtain and maintain intellectual property protection for our technology and products, or if the scope of the intellectual property protection obtained is not sufficiently broad, our competitors could commercialize technology and products similar or identical to ours, and our ability to successfully commercialize our technology and products may be impaired.
- We face risks related to health, pandemics, epidemics and outbreaks, including the novel coronavirus (COVID-19), which could significantly disrupt our preclinical studies and clinical trials.
- We have identified a material weakness in our internal control over financial reporting related to our control environment. If we do not remediate the material weakness in our internal control over financial reporting, or if we fail to establish and maintain effective internal control, we may not be able to accurately report our financial results, which may cause investors to lose confidence in our reported financial information and may lead to a decline in the market price of our stock.

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

We are an emerging growth company as defined in the Jumpstart Our Business Startups Act of 2012, as amended, or the JOBS Act. We will remain an emerging growth company until the earlier of (1) December 31, 2026, (2) the last day of the fiscal year in which we have total annual gross revenues of at least $1.07 billion, (3) the date on which we are deemed to be a “large accelerated filer” as defined in Rule 12b-2 under the Securities Exchange Act of 1934, as amended, or the Exchange Act, 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. An emerging growth company may take advantage of specified reduced reporting requirements and is relieved of certain other significant requirements that are otherwise generally applicable to public companies. As an emerging growth company,

- we may present only two years of audited financial statements, plus unaudited condensed financial statements for any interim period, and related Management’s Discussion and Analysis of Financial Condition and Results of Operations in this prospectus;

- we may avail ourselves of the exemption from the requirement to obtain an attestation and report from our auditors on the assessment of our internal control over financial reporting pursuant to the Sarbanes-Oxley Act of 2002, or the Sarbanes-Oxley Act;
- we may provide reduced disclosure about our executive compensation arrangements; and
- we may not require stockholder non-binding advisory votes on executive compensation or golden parachute arrangements.

We have elected to take advantage of certain of the reduced disclosure obligations in the registration statement of which this prospectus is a part and may elect to take advantage of other reduced reporting requirements in future filings. As a result, the information that we provide to our stockholders may be different than you might receive from other public reporting companies in which you hold equity interests.

Under the JOBS Act, emerging growth companies can also delay adopting new or revised accounting standards until such time as those standards apply to private companies, which may make our financial statements less comparable to companies that comply with new or revised accounting pronouncements as of public company effective dates. Until the date that we are no longer an emerging growth company or affirmatively and irrevocably opt out of the exemption provided by Section 7(a)(2)(B) of the Securities Act of 1933, as amended, or the Securities Act, upon issuance of a new or revised accounting standard that applies to our financial statements and that has a different effective date for public and private companies, we will disclose the date on which we will adopt the recently issued accounting standard.

We are also a "smaller reporting company," meaning that the market value of our stock held by non-affiliates plus the proposed aggregate amount of gross proceeds to us as a result of this offering is less than $700.0 million and our annual revenue is less than $100.0 million during the most recently completed fiscal year. We may continue to be a smaller reporting company after this offering if either (1) the market value of our stock held by non-affiliates is less than $250.0 million or (2) our annual revenue is less than $100.0 million during the most recently completed fiscal year and the market value of our stock held by non-affiliates is less than $700.0 million. If we are a smaller reporting company at the time we cease to be an emerging growth company, we may continue to rely on exemptions from certain disclosure requirements that are available to smaller reporting companies. Specifically, as a smaller reporting company we may choose to present only the two most recent fiscal years of audited financial statements in our Annual Report on Form 10-K and, similar to emerging growth companies, smaller reporting companies have reduced disclosure obligations regarding executive compensation.

Corporate Information

We were incorporated under the laws of the State of Delaware on June 7, 2011. Our principal executive offices are located at 9119 Gaither Road, Gaithersburg, MD 20877, and our telephone number is (301) 825-9810. Our website address is *www.neximmune.com*. The information contained on, or that can be accessed through, our website is not and shall not be deemed to be part of this prospectus. We have included our website address in this prospectus solely as an inactive textual reference. Investors should not rely on any such information in deciding whether to purchase our common stock.

"NexImmune" and our logo are our trademarks. All other service marks, trademarks and trade names appearing in this prospectus are the property of their respective owners. We do not intend our use or display of other companies' trade names, trademarks or service marks to imply a relationship with, or endorsement or sponsorship of us by, these other companies. Solely for convenience, trademarks and trade names referred to in this prospectus may appear without the ® or ™ symbols, but such references are not intended to indicate in any way that we will not assert, to the fullest extent under applicable law, our rights, or that the applicable owner will not assert its rights, to these trademarks and trade names.

Table of Contents

The Offering

Common stock offered by us	shares.
Common stock to be outstanding after this offering	shares (or shares if the underwriters exercise their option to purchase additional shares in full).
Underwriters' option to purchase additional shares	The underwriters have an option within 30 days of the date of this prospectus to purchase up to additional shares of our common stock from us at the public offering price, less underwriting discounts and commissions, on the same terms as set forth in this prospectus.
Use of proceeds	We estimate the net proceeds from this offering will be approximately $ million (or $ million if the underwriters exercise their option to purchase additional shares in full), assuming an initial public offering price of $ per share, which is the midpoint of the estimated price range set forth on the cover page of this prospectus, after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us.
	We intend to use the net proceeds from the offering to advance the clinical development of NEXI-001 and NEXI-002, advance process development and manufacturing activities, further develop our preclinical programs, continue to optimize our AIM platform and fund working capital and general corporate purposes. See the "Use of Proceeds" section of this prospectus for additional information.
Risk factors	You should read the "Risk Factors" section of this prospectus beginning on page 12 and other information included in this prospectus for a discussion of factors to consider carefully before deciding to invest in shares of our common stock.
Proposed Nasdaq Global Market symbol	"NEXI"

The number of shares of our common stock to be outstanding after this offering is based on shares of our common stock outstanding as of December 31, 2020, after giving effect to the automatic conversion of all of our outstanding shares of preferred stock into an aggregate of 217,154,926 shares of our common stock upon the completion of this offering, including the shares of preferred stock issuable upon the automatic conversion of all of our outstanding convertible promissory notes upon the listing of our common stock on the Nasdaq Global Market assuming the listing had occurred on December 31, 2020, and excludes the following:

- 38,590,705 shares of our common stock issuable upon the exercise of outstanding stock options as of December 31, 2020, having a weighted-average exercise price of $0.20 per share;
- shares of common stock reserved for issuance pursuant to future awards under our 2021 Equity Incentive Plan, as amended, or the 2021 Plan; and
- 1,663,910 shares of common stock reserved for issuance pursuant to future awards under our 2018 Equity Incentive Plan, as amended, or the 2018 Plan; and

- 47,779 shares of common stock reserved for issuance pursuant to future awards under our 2017 Equity Incentive Plan, as amended, or the 2017 Plan.

Except as otherwise indicated, all information contained in this prospectus assumes or gives effect to:

- the automatic conversion of all of our outstanding shares of preferred stock into an aggregate of 217,154,926 shares of our common stock upon the completion of this offering, including the shares of preferred stock issuable upon the automatic conversion of all of our outstanding convertible promissory notes upon the listing of our common stock on the Nasdaq Global Market assuming the listing had occurred on December 31, 2020;
- no exercise by the underwriters of their option purchase up to an additional shares of our common stock;
- no exercise of the outstanding options described above;
- a one-for- reverse split of our common stock effected on , 2021; and
- the filing and effectiveness of our amended and restated certificate of incorporation and the adoption of our amended and restated by-laws immediately prior to and upon the completion of this offering.

Summary Financial Data

In the tables below, we provide you with our summary financial data for the periods indicated. You should read the following summary financial data together with our financial statements and unaudited interim condensed financial statements and the related notes appearing elsewhere in this prospectus and the “Selected Financial Data” and “Management’s Discussion and Analysis of Financial Condition and Results of Operations” sections of this prospectus. We have derived the statement of operations data for the years ended December 31, 2018 and 2019 from our audited financial statements appearing elsewhere in this prospectus. We have derived the statement of operations data for the nine months ended September 30, 2019 and 2020 and the balance sheet data as of September 30, 2020 from our unaudited interim condensed financial statements appearing elsewhere in this prospectus, which have been prepared on the same basis as the audited financial statements. In the opinion of management, the unaudited interim condensed financial statements reflect all adjustments, consisting only of normal recurring adjustments, necessary for a fair statement of the financial information in those statements. Our historical results are not necessarily indicative of the results that may be expected in any future period and our operating results for the nine months ended September 30, 2020 are not necessarily indicative of the results that may be expected for the full year ending December 31, 2020 or any other interim periods or any future year or period.

	Year Ended December 31,		Nine Months Ended September 30,	
	2018	2019	2019	2020
	(in thousands, except share and per share data)			
Statement of Operations Data:				
Operating expenses:				
Research and development	$ 7,999	$ 15,172	$ 11,473	$ 13,395
General and administrative	5,244	5,714	4,245	7,406
Total operating expenses	13,243	20,886	15,718	20,801
Loss from operations	(13,243)	(20,886)	(15,718)	(20,801)
Other income (expense):				
Interest income	274	254	228	21
Interest expense	(2)	(7)	(7)	(744)
Change in fair value of derivative liability	-	-	-	(397)
Other	137	92	72	66
Total other income (expense)	409	339	293	(1,054)
Net loss	(12,834)	(20,547)	(15,425)	(21,855)
Accumulated dividends on Redeemable Convertible Preferred Stock	(2,072)	(2,660)	(1,945)	(2,456)
Net loss attributable to common stockholders	$ (14,907)	$ (23,207)	$ (17,370)	$ (24,311)
Net loss per share attributable to common stockholders—basic and diluted(1)	$ (0.77)	$ (1.08)	$ (0.81)	$ (1.12)
Weighted average common shares outstanding—basic and diluted(1)	19,377,217	21,416,665	21,348,440	21,662,672
Pro forma weighted average common shares outstanding, basic and diluted (unaudited)(1)				
Pro forma net loss per share—basic and diluted (unaudited)(1)				

Table of Contents

(1) See Note 3 to our financial statements and Note 3 to our unaudited interim condensed financial statements appearing elsewhere in this prospectus for details on the calculation of basic and diluted net loss per share and unaudited pro forma basic and diluted net loss per share.

	As of September 30, 2020		
	Actual	Pro Forma(2)	Pro Forma as Adjusted(3)
	(in thousands)		
Balance Sheet Data:			
Cash and cash equivalents	$ 1,980	$	$
Total assets	6,694		
Working capital (deficit)(1)	(11,254)		
Convertible notes	9,742		
Total liabilities	15,928		
Redeemable convertible preferred stock	53,621		
Total stockholders’ equity (deficit)	(62,855)		

(1) We define working capital deficit as current assets less current liabilities. See our financial statements and unaudited interim condensed financial statements and related notes appearing elsewhere in this prospectus for further details regarding our current assets and current liabilities.

(2) The pro forma balance sheet data give effect to the automatic conversion of all outstanding shares of our preferred stock into an aggregate of 196,493,935 shares of common stock upon the consummation of this offering, including the shares of preferred stock issuable upon the automatic conversion of all of our outstanding convertible promissory notes upon the listing of our common stock on the Nasdaq Global Market assuming the listing had occurred on September 30, 2020.

(3) The pro forma as adjusted balance sheet data give further effect to the issuance and sale of shares of our common stock in this offering at an assumed initial public offering price of $ per share, which is the midpoint of the estimated price range set forth on the cover page of this prospectus, after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us. The pro forma as adjusted information is illustrative only and will depend on the actual initial public offering price and other terms of this offering determined at pricing. A $1.00 increase (decrease) in the assumed initial public offering price of $ per share, which is the midpoint of the estimated price range set forth on the cover page of this prospectus, would increase (decrease) the pro forma as adjusted amount of each of cash and cash equivalents, total assets, working capital, and total stockholders’ equity by $ million, assuming that the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us. An increase (decrease) of 1,000,000 shares in the number of shares offered by us, as set forth on the cover page of this prospectus, would increase (decrease) the pro forma as adjusted amount of each of cash and cash equivalents, total assets, working capital and total stockholders’ equity by $ million, assuming no change in the assumed initial public offering price per share and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us.

RISK FACTORS

Investing in our common stock involves a high degree of risk. You should carefully consider the risks and uncertainties described below, the section of this prospectus entitled "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our financial statements and related notes, before investing in our common stock. The risks and uncertainties described below are not the only ones we face. Additional risks and uncertainties that we are unaware of, or that we currently believe are not material, may also become important factors that affect us. If any of the following risks occur, our business, operating results and prospects could be materially harmed. In that event, the price of our common stock could decline, and you could lose part or all of your investment.

Risks Related to Our Business and Industry

We are a clinical-stage company and have a limited operating history, which may make it difficult to evaluate our current business and predict our future performance.

We are a clinical-stage biopharmaceutical company that was formed in June 2011. We have no products approved for commercial sale and have not generated any revenue. We are focused on developing immunotherapy products in which the body's immune system is orchestrates a targeted T cell response against disease-relevant cells. Although there have been significant advances in cell-based immunotherapy, our T cell technologies are new and largely unproven. Our operations to date have been limited to organizing and staffing our company, business planning, raising capital, developing our technology, identifying potential product candidates, undertaking preclinical studies, and conducting clinical trials. If one of our product candidates received regulatory approval, we will need to transition from a company with a research and development focus to a company capable of supporting commercial activities. We may not be successful in such a transition. In addition, our limited operating history, particularly in light of the rapidly evolving cancer immunotherapy field, may make it difficult to evaluate our current business and predict our future performance. Our short history as an operating company makes any assessment of our future success or viability subject to significant uncertainty. We will encounter risks and difficulties frequently experienced by early-stage companies in rapidly evolving fields. If we do not address these risks successfully, our business will suffer.

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

We are not profitable and have incurred significant losses in each period since our inception, including net losses of $12.8 million for the year ended December 31, 2018, $20.5 million for the year ended December 31, 2019, and $21.9 million for the nine months ended September 30, 2020. To date, we have financed our operations primarily through private placements of our preferred stock and convertible notes. We have not commercialized any products and have never generated any revenue from product sales. We expect these losses to increase as we continue to incur significant research and development and other expenses related to our ongoing operations, seek regulatory approvals for our product candidates, scale-up manufacturing capabilities and hire additional personnel to support the development of our product candidates and to enhance our operational, financial and information management systems.

A critical aspect of our strategy is to invest significantly in our technology platform to improve the efficacy and safety of our product candidates. To become and remain profitable, we must develop and eventually commercialize products with significant market potential, which we may never achieve. Even if we succeed in commercializing one or more of these product candidates, we will continue to incur losses for the foreseeable future relating to our substantial research and development expenditures to develop our technologies. We may encounter unforeseen expenses, difficulties, complications, delays and other unknown factors that may adversely affect our business. The size of our future net losses will depend, in part, on the rate of future growth of our expenses and our ability to generate revenue. Our prior losses and expected future losses have had and will

continue to have an adverse effect on our stockholders' equity and working capital. Further, the net losses we incur may fluctuate significantly from quarter to quarter and year to year, such that a period to period comparison of our results of operations may not be a good indication of our future performance. If we do achieve profitability, we may not be able to sustain or increase profitability on a quarterly or annual basis. Our failure to become and remain profitable would decrease the value of the company and could impair our ability to raise capital, maintain our discovery and preclinical development efforts, expand our business or continue our operations and may require us to raise additional capital that may dilute your ownership interest. A decline in the value of our company could also cause you to lose all or part of your investment.

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

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

- completing research regarding, and nonclinical and clinical development of, our product candidates;
- obtaining regulatory approvals and marketing authorizations for product candidates for which we complete clinical trials;
- developing a sustainable and scalable manufacturing process for our product candidates, including establishing and maintaining commercially viable supply relationships with third parties and establishing our own manufacturing capabilities and infrastructure;
- launching and commercializing product candidates for which we obtain regulatory approvals and marketing authorizations, either directly or with a collaborator or distributor;
- obtaining market acceptance of our product candidates as viable treatment options;
- addressing any competing technological and market developments;
- identifying, assessing, acquiring and/or developing new product candidates;
- negotiating favorable terms in any collaboration, licensing, or other arrangements into which we may enter;
- maintaining, protecting, and expanding our portfolio of intellectual property rights, including patents, trade secrets, and know-how; and
- attracting, hiring, and retaining qualified personnel.

Because of the numerous risks and uncertainties associated with biopharmaceutical product development, we are unable to accurately predict the timing or amount of increased expenses or when, or if, we will be able to achieve profitability. If we are required by the U.S. Food and Drug Administration, or the FDA, or other regulatory agencies, domestic or foreign, or other comparable foreign authorities, to perform preclinical studies or clinical trials in addition to those we currently anticipate, or if there are any delays in completing our clinical trials or the development of any of our product candidates, our expenses could increase and revenue could be further delayed.

Even if one or more of the product candidates that we develop is approved for commercial sale, we anticipate incurring significant costs associated with commercializing any approved product candidate. Our expenses could increase beyond expectations if we are required by the FDA or other regulatory agencies, domestic or foreign, to change our manufacturing processes or assays, or to perform clinical, nonclinical, or other types of studies in addition to those that we currently anticipate. If we are successful in obtaining regulatory approvals to market one or more of our product candidates, our revenue will be dependent, in part, upon the size

of the markets in the territories for which we gain regulatory approval, the accepted price for the product, the ability to get reimbursement at any price, and whether we own the commercial rights for that territory. If the number of our addressable disease patients is not as significant as we estimate, the indication approved by regulatory authorities is narrower than we expect, or the reasonably accepted population for treatment is narrowed by competition, physician choice or treatment guidelines, we may not generate significant revenue from sales of such products, even if approved. If we are not able to generate revenue from the sale of any approved products, we may never become profitable.

If we fail to obtain additional financing on acceptable terms or at all, we may be unable to complete the development and commercialization of our product candidates.

Our operations have required substantial amounts of cash since inception. We expect to continue to spend substantial amounts to continue the clinical development of our product candidates, particularly as we advance the development of our lead product candidate NEXI-001 as a potential treatment for patients with acute myeloid leukemia, or AML, or myelodysplastic syndrome, or MDS, and NEXI-002 as a potential treatment for patients with multiple myeloma, or MM. If we obtain marketing approval for any of our product candidates, we expect to incur significant commercialization expenses related to product sales, marketing, manufacturing and distribution. Furthermore, we expect to incur additional costs associated with operating as a public company in the United States.

As of September 30, 2020, we had $2.0 million in cash and cash equivalents. We estimate that our net proceeds from the offering will be approximately $ million, after deducting the estimated transaction expenses payable by us. We expect to use the net proceeds from the offering (i) to advance NEXI-001 and NEXI-002 through our Phase I/II clinical trials, (ii) to further develop any additional product candidates that we select, (iii) to expand our internal research and development capabilities, (iv) to expand our manufacturing capabilities, and (v) for working capital and other general corporate purposes. We believe that such proceeds, together with our existing cash, will be sufficient to fund our operations through . However, changing circumstances may cause us to increase our spending significantly faster than we currently anticipate, and we may need to spend more money than currently expected because of circumstances beyond our control. We may require additional capital for the further development and commercialization of our product candidates and may need to raise additional funds sooner if we choose to pursue additional indications or geographies for our product candidates or otherwise expand more rapidly than we presently anticipate. Furthermore, upon the closing of this offering, we expect to incur additional costs associated with operating as a public company. Any additional fundraising efforts may divert our management from their day-to-day activities, which may adversely affect our ability to develop and commercialize our product candidates.

We cannot be certain that additional funding will be available on acceptable terms, or at all. Our ability to raise additional funding will depend on financial, economic and market conditions and other factors, over which we may have no or limited control. In addition, our ability to obtain future funding when needed through equity financings, debt financings or strategic collaborations may be particularly challenging in light of the uncertainties and circumstances regarding the novel coronavirus, or COVID-19, pandemic. We have no committed source of additional capital and if we are unable to raise additional capital in sufficient amounts or on terms acceptable to us, we may have to significantly delay, scale back or discontinue the development or commercialization of our product candidates or other research and development initiatives. Our license and collaboration agreements may also be terminated if we are unable to meet the payment obligations under the agreements. We could be required to seek collaborators for our product candidates at an earlier stage than otherwise would be desirable or on terms that are less favorable than might otherwise be available or relinquish or license on unfavorable terms our rights to our product candidates in markets where we otherwise would seek to pursue development or commercialization ourselves.

Any of the above events could significantly harm our business, prospects, financial condition and results of operations and cause the price of our common stock to decline.

We may not be entitled to forgiveness of our recently received PPP Loan, and our application for the PPP Loan could in the future be determined to have been impermissible or could result in damage to our reputation.

In April 2020, we applied for an unsecured $843,619 loan under the Paycheck Protection Program, or the PPP Loan. The Paycheck Protection Program, or PPP, was established under the Coronavirus Aid, Relief, and Economic Security Act, or the CARES Act, and is administered by the U.S. Small Business Administration, or SBA. On May 1, 2020, the PPP loan was approved and funded. We entered into a promissory note with JP Morgan Chase evidencing the PPP loan.

In order to obtain the PPP Loan, we were required to certify, among other things, that the economic uncertainty presented by the COVID-19 pandemic made the PPP Loan request necessary to support our ongoing operations. We made this certification in good faith after analyzing, among other things, our financial situation and access to alternative forms of capital, and we believe that we satisfied all eligibility criteria for the PPP Loan and that our receipt of the PPP Loan was consistent with the objectives of the PPP. However, the certification described above does not contain any objective criteria and is subject to interpretation. For example, the SBA issued guidance stating that it was unlikely that a public company with substantial market value and access to capital markets would be able to make the required certification in good faith. The lack of clarity regarding loan eligibility under the PPP has resulted in significant media coverage and controversy with respect to public companies applying for and receiving loans. If, despite our good faith belief that we satisfied all eligible requirements for the PPP Loan, we are later determined to have violated any of the laws or governmental regulations that applied to us in connection with the PPP Loan, such as the US False Claims Act, or if it is otherwise determined that we were ineligible to receive the PPP Loan, we may be subject to penalties, including significant civil, criminal and administrative penalties, and we could be required to repay the PPP Loan in its entirety. In addition, our receipt of the PPP Loan may result in adverse publicity and damage to our reputation, and a review or audit by the SBA or other government entity or claims under the US False Claims Act could consume significant financial and management resources.

The PPP Loan indebtedness may be forgiven in whole or in part upon request and we must provide documentation in accordance with the SBA requirements and we must certify that the amounts requested to be forgiven qualify under those requirements. Under the CARES Act, loan forgiveness is available for the sum of documented payroll costs, covered rent payments, covered mortgage interest and covered utilities during the twenty-four week period or, if we elected, the eight week period beginning on the date of the loan is advanced. Not more than 40% of the forgiven amount may be for non-payroll costs. The amount of the PPP Loan eligible to be forgiven may be limited due to declines in headcount, whether voluntary or involuntary, or if salaries and wages for employees with salaries of $100,000 or less annually are reduced by more than 25% as compared to the period of January 1, 2020 through March 31, 2020. We will be required to repay any portion of the outstanding principal that is not forgiven, along with accrued interest, in accordance with the amortization schedule described above, and we cannot provide any assurance that we will be eligible for loan forgiveness, that we will ultimately apply for forgiveness, or that any amount of the PPP Loan will ultimately be forgiven by the SBA. Furthermore, on April 28, 2020, the Secretary of the U.S. Department of the Treasury stated that the SBA will perform a full review of any PPP loan over $2.0 million before forgiving the loan.

The SBA may approve or deny our loan forgiveness application, in whole or part. The amount of potential loan forgiveness may be reduced if we fail to maintain employee and salary levels during the applicable eight-week or 24-week period following receipt of the loan proceeds. As of September 30, 2020, we had not applied for forgiveness. While we plan on submitting a forgiveness application, there can be no assurance that any part of the PPP Loan will be forgiven. The PPP Loan contains customary borrower default provisions and lender remedies, including the right of JP Morgan Chase to require immediate repayment in full the outstanding principal balance of the PPP Loan with accrued interest.

The biotechnology and immunotherapy industries are characterized by rapid technological developments and a high degree of competition. We may be unable to compete with more substantial enterprises.

The biotechnology and biopharmaceutical industries are characterized by rapid technological developments and a high degree of competition. As a result, our actual or proposed immunotherapies could become obsolete before we recoup any portion of our related research and development and commercialization expenses. Competition in the biopharmaceutical industry is based significantly on scientific and technological factors. These factors include the availability of patent and other protection for technology and products, the ability to commercialize technological developments and the ability to obtain governmental approval for testing, manufacturing and marketing. We compete with specialized biopharmaceutical firms in the United States, Europe and elsewhere, as well as a growing number of large pharmaceutical companies that are applying biotechnology to their operations. Many biopharmaceutical companies have focused their development efforts in the human therapeutics area, including cancer. Many major pharmaceutical companies have developed or acquired internal biotechnology capabilities or made commercial arrangements with other biopharmaceutical companies. These companies, as well as academic institutions, governmental agencies and private research organizations, also compete with us in recruiting and retaining highly qualified scientific personnel and consultants. Our ability to compete successfully with other companies in the pharmaceutical field will also depend to a considerable degree on the continuing availability of capital to us.

We are aware of certain investigational new drugs under development or approved products by competitors that are used for the prevention, diagnosis, or treatment of certain diseases we have targeted for drug development. Various companies are developing biopharmaceutical products that have the potential to directly compete with our immunotherapies even though their approach may be different. The competition comes from both biotechnology firms and from major pharmaceutical companies. Many of these companies have substantially greater financial, marketing, and human resources than us. We also experience competition in the development of our immunotherapies from universities, other research institutions and others in acquiring technology from such universities and institutions.

In addition, certain of our immunotherapies may be subject to competition from investigational new drugs and/or products developed using other technologies, some of which have completed numerous clinical trials.

The successful development of immunotherapies is highly uncertain.

Successful development of biopharmaceuticals is highly uncertain and depends on numerous factors, many of which are beyond our control. Immunotherapies that appear promising in the early phases of development may fail to reach the market for several reasons including:

- clinical study results that may show the immunotherapy to be less effective than expected (e.g., the study failed to meet its primary endpoint) or to have unacceptable side effects;
- failure to receive the necessary regulatory approvals or a delay in receiving such approvals. Among other things, such delays may be caused by slow enrollment in clinical studies, length of time to achieve study endpoints, additional time requirements for data analysis, or preparation of Biologics License Application, or BLA, discussions with the FDA, an FDA request for additional preclinical or clinical data, or unexpected safety or manufacturing issues;
- manufacturing costs, formulation issues, pricing or reimbursement issues, or other factors that make the immunotherapy uneconomical; and
- the proprietary rights of others and their competing products and technologies that may prevent the immunotherapy from being commercialized.

Success in preclinical and early clinical studies does not ensure that large-scale clinical studies will be successful. Clinical results are frequently susceptible to varying interpretations that may delay, limit or prevent regulatory approvals. The length of time necessary to complete clinical studies and to submit an application for

marketing approval for a final decision by a regulatory authority varies significantly from one immunotherapy to the next and may be difficult to predict.

Even if we are successful in getting market approval, commercial success of any of our product candidates will also depend in large part on the availability of coverage and adequate reimbursement from third-party payors, including government payors such as the Medicare and Medicaid programs and managed care organizations, which may be affected by existing and future health care reform measures designed to reduce the cost of health care. Third-party payors could require us to conduct additional studies, including post-marketing studies related to the cost effectiveness of a product, to qualify for reimbursement, which could be costly and divert our resources. If government and other health care payors were not to provide adequate coverage and reimbursement levels for any of our products once approved, market acceptance and commercial success would be reduced.

Our technology platform, including our proprietary Artificial Immune Modulation, or AIM, technology is a new approach to treat cancer and other immune-related diseases that presents significant challenges.

We have concentrated our research and development efforts on advancing a new generation of immunotherapies based on the AIM technology, and our future success is highly dependent on the successful development of our product candidates, which target cancer and other immune-related diseases. Our technology platform is the foundation for our innovative approach to immunotherapy in which the body's immune system is orchestrates a targeted T cell response against disease-relevant cells. Central to the AIM technology are synthetic dendritic cells that present antigens to T cells eliciting a targeted therapy driven by the patient's immune system. Because this is a new approach to immunotherapy and for the treatment of cancer and other immune-related diseases generally, developing and commercializing our product candidates subjects us to a number of challenges, including:

- educating medical personnel about the administration of the AIM product candidates;
- educating medical personnel regarding the potential side effect profile of our product candidates, such as the potential adverse side effects related to cytokine release syndrome, neurotoxicity or autoimmune or rheumatologic disorders. As the AIM technology is a novel immunotherapy platform and therapies derived from it have not been tested in humans before, only limited human study data is available, and it remains not fully known as to what kind of cytokines may be released. Medical personnel will need to continue to monitor on an ongoing basis;
- administering chemotherapy to patients in advance of administering our product candidates, which may increase the risk of adverse side effects;
- sourcing clinical and, if approved, commercial, supplies for the materials used to manufacture and process our product candidates;
- manufacturing the proteins necessary for the cell therapy and injections and issues with our facility, quality control or general production process may arise, which could delay the development of our product candidates;
- developing AIM INJ, a direct-injectable modality of the AIM technology that has not previously been demonstrated and may not work as originally contemplated;
- potentially moving the development of AIM INJ into the clinic, and addressing uncertainty around the regulatory requirements that may need to be met in connection with such an investigational new drug application, or IND;
- managing the risk in relying on one single source for the production of AIM nanoparticles, including the risk that if that source is unable to provide us with the necessary particles that may result in significant delays to our clinical trials;

- developing a robust and reliable T cell manufacturing process, including efficiently managing shipment of patient cells from and to clinical sites, minimizing potential contamination to the cell product and effectively scaling manufacturing capacity to meet demand;
- managing costs of inputs and other supplies while scaling production;
- using medicines to manage adverse side effects of our product candidates, which may not adequately control the side effects and/or may have a detrimental impact on the efficacy of the treatment;
- obtaining and maintaining regulatory approval from the FDA;
- addressing the broader uncertainty around the regulatory requirements and pathway for the approval of an adoptive cell therapy;
- establishing sales and marketing capabilities upon obtaining any regulatory approval to gain market acceptance of a novel therapy.

We cannot be sure that our AIM technology will yield satisfactory products that are safe and effective, scalable, or profitable.

Although we are a cell therapy company our technology could become subject to many of the challenges and risks that gene therapies face, including:

- regulatory requirements governing gene and cell therapy products have changed frequently and may continue to change in the future.
- the FDA could recommend follow-up observation period of up to 15 years for all patients who receive our treatment. We may need to adopt such an observation period for our product candidates.
- clinical trials using genetically modified cells conducted at institutions that receive funding for recombinant DNA research from the U.S. National Institutes of Health, or the NIH, are subject to review by the NIH Office of Biotechnology Activities' Recombinant DNA Advisory Committee, or the RAC. Although the FDA decides whether individual protocols may proceed, the RAC review process can impede the initiation of a clinical trial, even if the FDA has reviewed the study and approved its initiation.

Moreover, public perception of therapy safety issues, including adoption of new therapeutics or novel approaches to treatment, may adversely influence the willingness of subjects to participate in clinical trials, or if approved, of physicians to subscribe to the novel treatment mechanics. Physicians, hospitals and third-party payors often are slow to adopt new products, technologies and treatment practices that require additional upfront costs and training. Physicians may not be willing to undergo training to adopt this novel and personalized therapy, may decide the therapy is too complex to adopt without appropriate training and may choose not to administer the therapy. Based on these and other factors, hospitals and payors may decide that the benefits of this new therapy do not or will not outweigh its costs.

Our near-term ability to generate product revenue is dependent on the success of one or more of our product candidates, each of which are at an early-stage of development and will require significant additional clinical testing before we can seek regulatory approval and begin commercial sales.

Our near-term ability to generate product revenue is highly dependent on our ability to obtain regulatory approval of and successfully commercialize one or more of our product candidates. Like all of our product candidates, NEXI-001 and NEXI-002 are in the early stages of development and will require additional clinical and nonclinical development, regulatory review and approval in each jurisdiction in which we intend to market the products, substantial investment, access to sufficient commercial manufacturing capacity, and significant marketing efforts before we can generate any revenue from product sales. To date, our most advanced product candidates, NEXI-001 and NEXI-002, have been tested in fewer than three patients in the aggregate. Before obtaining marketing approval from regulatory authorities for the sale of our product candidates, we must conduct extensive clinical trials to demonstrate the safety, purity, and potency of the product candidates in humans. We

cannot be certain that any of our product candidates will be successful in clinical trials and they may not receive regulatory approval even if they are successful in clinical trials.

Before we can generate any revenues from sales of our lead product candidates, we must complete the following activities for each of them, any one of which we may not be able to successfully complete:

- conduct additional preclinical and clinical development with successful outcomes;
- manage preclinical, manufacturing and clinical activities;
- obtain regulatory approval from the FDA and other comparable foreign regulatory authorities;
- establish manufacturing relationships for the clinical and post-approval supply of the applicable drug candidate in compliance with all regulatory requirements;
- build a commercial sales and marketing team, either internally or by contract with third parties;
- establish and maintain patent and trade secret protection or regulatory exclusivity for our product candidates;
- develop and implement marketing strategies for successful commercial launch of our product candidates, if and when approved;
- secure and maintain acceptance of our products, if and when approved, by patients, from the relevant medical communities and from third-party payors;
- compete effectively with other therapies;
- establish and maintain adequate health care coverage and reimbursement from third-party payors;
- ensure continued compliance with any post-marketing requirements imposed by regulatory authorities, including any required post-marketing clinical trials or the elements of any post-marketing Risk Evaluation and Mitigation Strategy, or REMS, that may be required by the FDA or comparable requirements in other jurisdictions to ensure the benefits of the product outweigh its risks;
- maintain continued acceptable safety profile of the product candidates following approval; and
- invest significant additional cash in each of the above activities.

If we are unable to address one or more of these factors in a timely manner or at all, we could experience significant delays in the successful commercialization of, or an inability to successfully commercialize, our product candidates, which would materially harm our business. If we do not receive regulatory approvals for one or more of our product candidates, we may not be able to continue our operations. Even if we successfully obtain regulatory approvals to manufacture and market our product candidates, our revenues will be dependent, in part, upon the size of the markets in the territories for which we gain regulatory approval and have commercial rights. If the markets for patient subsets that we are targeting are not as significant as we estimate, we may not generate significant revenues from sales of such products, if approved.

In addition, because NEXI-001 and NEXI-002 are our most advanced product candidates, and because our other product candidates are based on similar technology, if NEXI-001 and NEXI-002 encounter safety or efficacy problems, developmental delays, regulatory issues, or other problems, our development plans and business could be significantly harmed. Further, competitors who are developing products with similar technology may experience problems with their products that could identify problems that would potentially harm our business.

We may encounter substantial delays in our clinical trials, or may not be able to conduct our trials on the timelines we expect.

Clinical testing is expensive, time consuming, and subject to uncertainty. We cannot guarantee that any clinical trials will be conducted as planned or completed on schedule, if at all. A failure of one or more clinical

trials can occur at any stage of testing, and our future clinical trials may not be successful. Events that may prevent successful or timely completion of clinical development include:

- inability to generate sufficient preclinical, toxicology, or other *in vivo* or *in vitro* data to support the initiation of clinical trials;
- delays in reaching a consensus with regulatory agencies on trial design;
- the FDA may not allow us to use the clinical trial data from a research institution to support an IND if we cannot demonstrate the comparability of our product candidates with the product candidate used by the relevant research institution in its clinical trials;
- our INDs have been approved in a timely manner thus far, however the FDA may not agree with our approach and strategy, which could result in potential delays, and changes to our regulatory strategy;
- we may be required to complete additional preclinical studies in HLAs before we can proceed with our INDs;
- delays in reaching agreement on acceptable terms with prospective contract research organizations, or CROs, and clinical trial sites, the terms of which can be subject to extensive negotiation and may vary significantly among different CROs and clinical trial sites;
- delays in obtaining required Institutional Review Board, or IRB, approval at each clinical trial site;
- imposition of a temporary or permanent clinical hold by regulatory agencies for a number of reasons, including after review of an IND application or amendment, or equivalent application or amendment; as a result of a new safety finding that presents unreasonable risk to clinical trial participants; a negative finding from an inspection of our clinical trial operations or trial sites; developments on clinical trials conducted by competitors for related technology that raises FDA concerns about risk to patients of the technology broadly; or if FDA finds that the investigational protocol or plan is clearly deficient to meet its stated objectives;
- delays in recruiting suitable patients to participate in our clinical trials;
- difficulty collaborating with patient groups and investigators;
- failure by our CROs, other third parties, or us to adhere to clinical trial requirements;
- failure to perform in accordance with the FDA's current good clinical practice regulations, or cGCPs, requirements, or similar applicable regulatory guidelines in other countries;
- delays in having patients complete participation in a trial or return for post-treatment follow-up;
- patients dropping out of a trial;
- occurrence of adverse events associated with the product candidate that are viewed to outweigh its potential benefits;
- changes in regulatory requirements and guidance that require amending or submitting new clinical protocols;
- changes in the standard of care on which a clinical development plan was based, which may require new or additional trials;
- the cost of clinical trials of our product candidates being greater than we anticipate;
- clinical trials of our product candidates producing negative or inconclusive results, which may result in our deciding, or regulators requiring us, to conduct additional clinical trials or abandon product development programs;
- delays in developing our manufacturing processes and transferring to new third-party facilities to support future development activities and commercialization that are operated by contract manufacturing organizations, or CMOs, in a manner compliant with all regulatory requirements; and

- delays in manufacturing, testing, releasing, validating, or importing/exporting sufficient stable quantities of our product candidates for use in clinical trials or the inability to do any of the foregoing.

Many of the factors that cause, or lead to, a delay in the commencement or completion of clinical trials may also ultimately lead to the denial of marketing approval for our product candidates.

Any inability to successfully complete preclinical and clinical development could result in additional costs to us or impair our ability to generate revenue. In addition, if we make manufacturing or formulation changes to our product candidates, we may be required to or we may elect to conduct additional trials to bridge our modified product candidates to earlier versions. Clinical trial delays could also shorten any periods during which our products have patent protection and may allow our competitors to bring products to market before we do, which could impair our ability to successfully commercialize our product candidates and may harm our business and results of operations.

If we do not achieve our projected development and commercialization goals in the timeframes we announce and expect, the commercialization of any of our product candidates may be delayed, and our business will be harmed.

Elsewhere in this prospectus we have provided a number of timing estimates regarding the initiation of clinical trials and clinical development milestones, and the expected availability of data resulting from these trials for certain of our product candidates. We expect to continue to estimate the timing of these types of development milestones and our expected timing for the accomplishment of various other scientific, clinical, regulatory and other product development objectives. From time to time following the completion of this offering, we may publicly announce the expected timing of some of these events. However, the achievement of many of these milestones and events may be outside of our control. All of these timing estimations are based on a variety of assumptions we make which may cause the actual timing of these events to differ from the timing we expect, including:

- our available capital resources and our ability to obtain additional funding as needed;
- the rate of progress, costs and results of our clinical trials and research and development activities;
- our ability to identify and enroll patients who meet clinical trial eligibility criteria;
- our receipt of approvals by the FDA, European Medicines Agency, or EMA, and other regulatory authorities and the timing of these approvals;
- our ability to access sufficient, reliable and affordable supplies of materials used in the manufacture of our product candidates;
- the efforts with respect to the commercialization of our product candidates;
- the securing of, costs related to, and timing issues associated with, manufacturing our therapeutic
- candidates and, if any of our product candidates are approved, associated with sales and marketing activities and the commercial manufacture of our product candidates; and
- circumstances arising from or relating to the COVID-19 pandemic, including potential effects on the global supply chain, our manufacturers and the availability of raw materials needed for the research and development of our product candidates.

If we fail to achieve announced milestones in the timeframes we expect, the commercialization of any of our product candidates may be delayed, and our business and results of operations may be harmed and our stock price may decline.

Failure to successfully identify, develop and commercialize additional therapeutics or product candidates could impair our ability to grow.

Although a substantial amount of our efforts will focus on the continued preclinical and clinical testing and potential approval of our product candidates in our current pipeline, we expect to continue to innovate and potentially expand our portfolio. Because we have limited financial and managerial resources, research programs to identify product candidates may require substantial additional technical, financial and human resources, whether or not any new potential product candidates are ultimately identified. Our success may depend in part upon our ability to identify, select and develop promising product candidates and therapeutics. We may expend resources and ultimately fail to discover and generate additional product candidates suitable for further development. All product candidates are prone to risks of failure typical of biotechnology product development, including the possibility that a product candidate may not be suitable for clinical development as a result of its harmful side effects, limited efficacy or other characteristics indicating that it is unlikely to receive approval by the FDA, the EMA and other comparable foreign regulatory authorities and achieve market acceptance. If we do not successfully develop and commercialize new product candidates we have identified and explored, our business, prospects, financial condition and results of operations could be adversely affected.

We face risks related to health, pandemics, epidemics and outbreaks, including the COVID-19 pandemic, which could significantly disrupt our preclinical studies and clinical trials.

If a pandemic, epidemic or outbreak of an infectious disease occurs in the United States or worldwide our business may be adversely affected. In December 2019, a novel strain of coronavirus named SARS-CoV-2 was identified in Wuhan, China. This virus continues to spread globally, including in the United States and the disease it causes, COVID-19, has been declared a pandemic by the World Health Organization. The COVID-19 pandemic has impacted the global economy and may impact our operations, including the potential interruption of our clinical trial activities, regulatory reviews and our supply chain. For example, the COVID-19 pandemic may delay enrollment in our clinical trials due to prioritization of hospital resources toward the outbreak or other factors, and some patients may be unwilling to enroll in our trials or be unable to comply with clinical trial protocols if quarantines impede patient movement or interrupt healthcare services, which would delay our ability to conduct clinical trials or release clinical trial results and could delay our ability to obtain regulatory approval and commercialize our product candidates. Furthermore, the spread of the virus may affect the operations of key governmental agencies, such as the FDA, which may delay the development or approval process for our product candidates.

At present, we are not experiencing significant impact or delays from COVID-19 on our business or operations. However, the enrollment of patients in, and the conduct of, our clinical trials have been, and we expect may continue to be, affected by the COVID-19 pandemic. In particular, the trial start date for our current NEXI-002 clinical trial was delayed from April to September 2020. We have also experienced delays in transporting blood products from donors to manufacturing sites in California and in planned technology transfer in connection with our manufacturing process. The global outbreak of COVID-19 may further delay enrollment in our planned or ongoing clinical trials due to prioritization of hospital resources toward the outbreak, the protection of the health of patients and investigators at the clinical trial sites, and restrictions on work and travel. In addition, some patients may be unwilling to enroll in our trials or be unable to comply with clinical trial protocols if quarantines or travel restrictions impede patient movement or interrupt healthcare services. These and other factors could significantly delay our ability to conduct clinical trials or release clinical trial results. We will continue to monitor carefully the situation with respect to each of our clinical trials and follow guidance from local and federal health authorities.

COVID-19 may also affect employees of third-party contract research organizations that we rely upon to carry out our clinical trials. The spread of COVID-19, or another infectious disease, could also negatively affect the operations at our CMOs, which could result in delays or disruptions in the supply of our product candidates. In addition, we have taken precautionary measures, and may take additional measures, intended to help minimize the risk of the virus to our employees, including temporarily requiring certain employees to work remotely,

suspending all non-essential travel worldwide for our employees, and discouraging employee attendance at industry events and in-person work-related meetings, which could negatively affect our business.

We cannot presently predict the extent to which current or future business shutdowns and disruptions may impact or limit our ability or the ability of any of the third parties with which we engage to conduct business in the manner and on the timelines presently planned. Any such impacts or limitations could have a material adverse impact on our business and our results of operation and financial condition. While the potential economic impact brought by and the duration of the coronavirus outbreak may be difficult to assess or predict, a widespread pandemic could result in significant disruption of global financial markets, reducing our ability to access capital, which could in the future negatively affect our liquidity. In addition, a recession or market correction resulting from the spread of COVID-19 could materially affect our business and the value of our common stock.

A significant outbreak of other infectious diseases in the future also could result in a widespread health crisis that could adversely affect the economies and financial markets worldwide, resulting in an economic downturn that could impact our business, financial condition and results of operations.

The FDA or comparable foreign regulatory authorities may disagree with our regulatory plans and we may fail to obtain regulatory approval of our product candidates.

The FDA standard for regular approval of a biologic generally requires two well-controlled phase 3 studies or one large and robust, well-controlled phase 3 study in the patient population being studied that provides substantial evidence that a biologic is safe and effective for its proposed indication. Phase III clinical trials typically involve hundreds of patients, have significant costs and take years to complete. Product candidates 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 trials establishing that the product candidate 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 accelerated approval, the FDA may require a sponsor of a drug or biologic 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 withdrawal procedures by the FDA that are more accelerated than those available for regular approvals. Although we intend to request accelerated approval status for NEXI-001 and NEXI-002, we can provide no assurance that the FDA will such designation for either product candidate, nor can we provide any assurance that even if the FDA grants such designation that it will improve the likelihood that the agency will ultimately approve either product candidate.

As part of its marketing authorization process, the EMA may grant marketing authorizations on the basis of less complete data than is normally required, when, for certain categories of medicinal products, doing so may meet unmet medical needs of patients and serve the interest of public health. In such cases, it is possible for the Committee for Medicinal Products for Human Use, or CHMP, to recommend the granting of a marketing authorization, subject to certain specific obligations to be reviewed annually, which is referred to as a conditional marketing authorization. This may apply to medicinal products for human use that fall under the jurisdiction of the EMA, including those that aim at the treatment, the prevention, or the medical diagnosis of seriously debilitating diseases or life-threatening diseases and those designated as orphan medicinal products.

A conditional marketing authorization may be granted when the CHMP finds that, although comprehensive clinical data referring to the safety and efficacy of the medicinal product have not been supplied, all the following requirements are met:

- the risk-benefit balance of the medicinal product is positive;

- it is likely that the applicant will be in a position to provide the comprehensive clinical data;
- unmet medical needs will be fulfilled; and
- the benefit to public health of the immediate availability on the market of the medicinal product concerned outweighs the risk inherent in the fact that additional data are still required.

The granting of a conditional marketing authorization is restricted to situations in which only the clinical part of the application is not yet fully complete. Incomplete nonclinical or quality data may only be accepted if duly justified and only in the case of a product intended to be used in emergency situations in response to public-health threats.

Conditional marketing authorizations are valid for one year, on a renewable basis. The holder will be required to complete ongoing studies or to conduct new studies with a view to confirming that the benefit-risk balance is positive. In addition, specific obligations may be imposed in relation to the collection of pharmacovigilance data.

The granting of a conditional marketing authorization will allow medicines to reach patients with unmet medical needs earlier than might otherwise be the case and will ensure that additional data on a product are generated, submitted, assessed and acted upon. Although we may seek a conditional marketing authorization for one or more of our product candidates by the EMA, the EMA or CHMP may ultimately not agree that the requirements for such conditional marketing authorization have been satisfied.

Our clinical trial results may also not support approval, whether accelerated approval, conditional marketing authorizations, or regular approval. The results of preclinical studies and clinical trials may not be predictive of the results of later-stage clinical trials, and product candidates in later stages of clinical trials may fail to show the desired safety and efficacy despite having progressed through preclinical studies and initial clinical trials. In addition, our product candidates could fail to receive regulatory approval for many reasons, including the following:

- the FDA or comparable foreign regulatory authorities may disagree with the design or implementation of our clinical trials;
- the population studied in the clinical program may not be sufficiently broad or representative to assure safety in the full population for which we seek approval;
- we may be unable to demonstrate that our product candidates' risk-benefit ratios for their proposed indications are acceptable;
- the results of clinical trials may not meet the level of statistical significance required by the FDA or comparable foreign regulatory authorities for approval;
- we may be unable to demonstrate that the clinical and other benefits of our product candidates outweigh their safety risks;
- the FDA or comparable foreign regulatory authorities may disagree with our interpretation of data from preclinical studies or clinical trials;
- the data collected from clinical trials of our product candidates may not be sufficient to the satisfaction of the FDA or comparable foreign regulatory authorities to support the submission of a BLA or other comparable submission in foreign jurisdictions or to obtain regulatory approval in the United States or elsewhere;
- the FDA or comparable foreign regulatory authorities may fail to approve the manufacturing processes, our own manufacturing facilities, or a third-party manufacturer's facilities with which we contract for clinical and commercial supplies; and
- the approval policies or regulations of the FDA or comparable foreign regulatory authorities may significantly change in a manner rendering our clinical data insufficient for approval.

Further, failure to obtain approval for any of the above reasons may be made more likely due to the novel nature of our AIM technology. Failure to obtain regulatory approval to market any of our product candidates would significantly harm our business, results of operations, and prospects.

Our clinical trials may fail to demonstrate adequately the safety and efficacy of our product candidates, which would prevent or delay regulatory approval and commercialization.

The clinical trials of our product candidates are, and the manufacturing and marketing of our products will be, subject to extensive and rigorous review and regulation by numerous government authorities in the United States and in other countries where we intend to test and market our product candidates. Before obtaining regulatory approvals for the commercial sale of any of our product candidates, we must demonstrate through lengthy, complex and expensive preclinical testing and clinical trials that our product candidates are both safe and effective for use in each target indication. In particular, because our product candidates are subject to regulation as biological drug products, we will need to demonstrate that they are safe, pure, and potent for use in their target indications. Each product candidate must demonstrate an adequate risk versus benefit profile in its intended patient population and for its intended use. The risk/benefit profile required for product licensure will vary depending on these factors and may include not only the ability to show tumor shrinkage, but also adequate duration of response, a delay in the progression of the disease, and/or an improvement in survival. For example, response rates from the use of our product candidates may not be sufficient to obtain regulatory approval unless we can also show an adequate duration of response. Clinical testing is expensive and can take many years to complete, and its outcome is inherently uncertain. Failure can occur at any time during the clinical trial process. The results of preclinical studies and early clinical trials of our product candidates may not be predictive of the results of later-stage clinical trials. The results of studies in one set of patients or line of treatment may not be predictive of those obtained in another. We expect there may be greater variability in results for products processed and administered on a patient-by-patient basis, as anticipated for our product candidates which involve personalized T cell therapy, than for “off-the-shelf” products, like small molecule drugs which are not personalized for each patient. There is typically an extremely high rate of attrition from the failure of product candidates proceeding through clinical trials. Product candidates in later stages of clinical trials may fail to show the desired safety and efficacy profile despite having progressed through preclinical studies and initial clinical trials. A number of companies in the biopharmaceutical industry have suffered significant setbacks in advanced clinical trials due to lack of efficacy or unacceptable safety issues, notwithstanding promising results in earlier trials. Most product candidates that begin clinical trials are never approved by regulatory authorities for commercialization.

In addition, even if our clinical trials are successfully completed, we cannot guarantee that the FDA or foreign regulatory authorities will interpret the results as we do, and more trials could be required before we submit our product candidates for approval. To the extent that the results of the trials are not satisfactory to the FDA or foreign regulatory authorities for support of a marketing application, we may be required to expend significant resources, which may not be available to us, to conduct additional trials in support of potential approval of our product candidates.

Our product candidates may cause undesirable side effects or have other properties that could halt their clinical development, prevent their regulatory approval, limit their commercial potential, or result in significant negative consequences.

As with most biological products, use of our product candidates could be associated with side effects or adverse events, which can vary in severity from minor reactions to death and in frequency from infrequent to prevalent. Undesirable side effects or unacceptable toxicities caused by our product candidates could cause us or regulatory authorities to interrupt, delay, or halt clinical trials.

The FDA or comparable foreign regulatory authorities could delay or deny approval of our product candidates for any or all targeted indications and negative side effects could result in a more restrictive label for any product that is approved. Side effects such as toxicity or other safety issues associated with the use of our

product candidates could also require us or our collaborators to perform additional studies or halt development or sale of these product candidates.

Treatment-related side effects could also affect patient recruitment or the ability of enrolled subjects to complete the trial, or could result in potential product liability claims. In addition, these side effects may not be appropriately or timely recognized or managed by the treating medical staff, as toxicities resulting from personalized T cell therapy are not normally encountered in the general patient population and by medical personnel. We expect to have to train medical personnel using our product candidates to understand their potential side effect profiles, both for our planned clinical trials and upon any commercialization of any product candidates. Inadequate training in recognizing or managing the potential side effects of our product candidates could result in adverse effects to patients, including death. Any of these occurrences may materially and adversely harm our business, financial condition and prospects.

Additionally, if one or more of our product candidates receives marketing approval, and we or others later identify undesirable side effects caused by such products, including during any long-term follow-up observation period recommended or required for patients who receive treatment using our products, a number of potentially significant negative consequences could result, including:

- regulatory authorities may withdraw or limit their approvals of such products;
- regulatory authorities may require the addition of labeling statements, specific warnings or a contraindications;
- we may be required to create a Risk Evaluation and Mitigation Strategy, or REMS, plan, which could include a medication guide outlining the risks of such side effects for distribution to patients, a communication plan for healthcare providers, and/or other elements to assure safe use;
- we may be required to change the way such products are distributed or administered, or change the labeling of the products;
- the FDA or a comparable foreign regulatory authority may require us to conduct additional clinical trials or costly post-marketing testing and surveillance to monitor the safety and efficacy of the products;
- we may decide to recall such products from the marketplace after they are approved;
- we could be sued and held liable for harm caused to individuals exposed to or taking our products; and
- our reputation may suffer.

In addition, adverse side effects caused by any therapeutics that may be similar in nature to our product candidates could delay or prevent regulatory approval of our product candidates, limit the commercial profile of an approved label for our product candidates, or result in significant negative consequences for our product candidates following marketing approval.

We believe that any of these events could prevent us from achieving or maintaining market acceptance of the affected product candidates and could substantially increase the costs of commercializing our product candidates, if approved, and significantly impact our ability to successfully commercialize our product candidates and generate revenues.

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

The timely completion of clinical trials in accordance with their protocols depends, among other things, on our ability to enroll a sufficient number of patients who remain in the trial until its conclusion. We may experience difficulties in patient enrollment in our clinical trials for a variety of reasons, including:

- the size and nature of the patient population;
- the patient eligibility criteria defined in the protocol;

- the size of the study population required for analysis of the trial's primary endpoints;
- the proximity of patients to trial sites;
- the design of the trial;
- our ability to recruit clinical trial investigators with the appropriate competencies and experience;
- competing clinical trials for similar therapies or other new therapeutics not involving T cell based immunotherapy;
- clinicians' and patients' perceptions as to the potential advantages and side effects of the product candidate being studied in relation to other available therapies, including any new drugs or treatments that may be approved for the indications we are investigating;
- our ability to obtain and maintain patient consents; and
- the risk that patients enrolled in clinical trials will not complete a clinical trial.

In addition, our clinical trials will compete with other clinical trials for product candidates that are in the same therapeutic areas as our product candidates, and 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. Because the number of qualified clinical investigators is limited, we may conduct some of our clinical trials at the same clinical trial sites that some of our competitors use, which will reduce the number of patients who are available for our clinical trials at such clinical trial sites. Moreover, because our product candidates represent a departure from more commonly used methods for cancer treatment, potential patients and their doctors may be inclined to use conventional therapies, such as chemotherapy and hematopoietic cell transplantation, rather than enroll patients in any future clinical trial.

Even if we are able to enroll a sufficient number of patients in our clinical trials, delays in patient enrollment may result in increased costs or may affect the timing or outcome of the planned clinical trials, which could prevent completion of these trials and adversely affect our ability to advance the development of our product candidates.

***Clinical trials are expensive, time-consuming and difficult to design and implement, and our clinical trial costs may be higher than for more conventional therapeutic technologies or drug products*.**

Clinical trials are expensive and difficult to design and implement, in part because they are subject to rigorous regulatory requirements. Because our product candidates are based on new technologies and manufactured on a patient-by-patient basis, we expect that they will require extensive research and development and have substantial manufacturing costs. In addition, costs to treat patients with relapsed/refractory cancer and to treat potential side effects that may result from our product candidates can be significant. Accordingly, our clinical trial costs are likely to be significantly higher per patient than those of more conventional therapeutic technologies or drug products.

In addition, one of our early-stage product candidates that is currently in preclinical development is for a novel class of injectable biologics. Development of the underlying technology may be affected by unanticipated technical, regulatory, manufacturing or other problems, among other research and development issues, and the possible insufficiency of funds needed in order to complete development of this product candidate.

Our proposed personalized product candidates involve several complex and costly manufacturing and processing steps, the costs of which will be borne by us. Depending on the number of patients we ultimately enroll in our trials, and the number of trials we may need to conduct, our overall clinical trial costs may be higher than for more conventional treatments.

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

Although our most advanced product candidates are NEXI-001 and NEXI-002, we are simultaneously pursuing clinical development of additional product candidates developed employing our AIM technology. We are at an early stage of development and our technology platform has not yet led, and may never lead, to approved or commercially successful products.

Even if we are successful in continuing to build our pipeline, obtaining regulatory approvals and commercializing additional product candidates will require substantial additional funding beyond the net proceeds of this transaction and are prone to the risks of failure inherent in medical product development. Investment in biopharmaceutical product development involves significant risk that any potential product candidate will fail to demonstrate adequate efficacy or an acceptable safety profile, gain regulatory approval, and become commercially viable. We cannot provide you any assurance that we will be able to successfully advance any of these additional product candidates through the development process. Our research programs may initially show promise in identifying potential product candidates, yet fail to yield product candidates for clinical development or commercialization for many reasons, including the following:

- our platform may not be successful in identifying additional product candidates;
- we may not be able or willing to assemble sufficient resources to acquire or discover additional product candidates;
- our product candidates may not succeed in preclinical or clinical testing;
- a product candidate may on further study be shown to have harmful side effects or other characteristics that indicate it is unlikely to be effective or otherwise does not meet applicable regulatory criteria;
- competitors may develop alternatives that render our product candidates obsolete or less attractive;
- product candidates we develop may nevertheless be covered by third parties’ patents or other exclusive rights;
- the market for a product candidate may change during our program so that the continued development of that product candidate is no longer reasonable;
- a product candidate may not be capable of being produced in commercial quantities at an acceptable cost, or at all; and
- a product candidate may not be accepted as safe and effective by patients, the medical community or third-party payors, if applicable.

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

Even if we receive FDA approval to market additional product candidates, whether for the treatment of cancers or other diseases, we cannot assure you that any such product candidates will be successfully commercialized, widely accepted in the marketplace or more effective than other commercially available alternatives. Further, because of our limited financial and managerial resources, we are required to focus our research programs on certain product candidates and on specific diseases. As a result, we may fail to capitalize on viable commercial products or profitable market opportunities, be required to forego or delay pursuit of opportunities with other product candidates or other diseases that may later prove to have greater commercial

potential, or relinquish valuable rights to such product candidates through collaboration, licensing or other royalty arrangements in cases in which it would have been advantageous for us to retain sole development and commercialization rights. For additional information regarding the factors that will affect our ability to achieve revenue from product sales, see the risk factor above "—*We have never generated any revenue from product sales and our ability to generate revenue from product sales and become profitable depends significantly on our success in a number of factors.*"

Our product candidates are biologics and the manufacture of our product candidates is complex and we may encounter difficulties in production, particularly with respect to process development or scaling-out of our manufacturing capabilities. If we or any of our third-party manufacturers encounter such difficulties, our ability to provide supply of our product candidates for clinical trials or our products for patients, if approved, could be delayed or stopped, or we may be unable to maintain a commercially viable cost structure.

Our product candidates are biologics and the process of manufacturing our products is complex, highly-regulated and subject to multiple risks. The manufacture of our product candidates involves complex processes, including harvesting T cells from patients, enriching and expanding T cells *ex vivo*, and ultimately infusing the T cells back into a patient's body. As a result of the complexities, the cost to manufacture biologics in general, and our modified cell product candidates in particular, is generally higher than traditional small molecule chemical compounds, and the manufacturing process is less reliable and is more difficult to reproduce. Our manufacturing process will be susceptible to product loss or failure due to logistical issues associated with harvesting T cells, or starting material, from the patient, shipping such material to the manufacturing site, shipping the final product back to the patient, and infusing the patient with the product, manufacturing issues associated with the differences in patient starting materials, interruptions in the manufacturing process, contamination, equipment or reagent failure, improper installation or operation of equipment, vendor or operator error, inconsistency in cell growth, and variability in product characteristics. Even minor deviations from normal manufacturing processes could result in reduced production yields, product defects, and other supply disruptions. If for any reason we lose a patient's starting material or later-developed product at any point in the process, the manufacturing process for that patient may need to be restarted and the resulting delay may adversely affect that patient's outcome. Our product candidate relies on donor's providing their blood, which is used to harvest T-cells. If issues arise with the product candidate, the donor may need to wait three months before they are able to donate again. This could result in the patient not being treated. Additionally, if microbial, viral, or other contaminations are discovered in our product candidates or in the manufacturing facilities in which our product candidates are made, such manufacturing facilities may need to be closed for an extended period of time to investigate and remedy the contamination. Because our product candidates are manufactured for each particular patient, we will be required to maintain a chain of identity with respect to materials as they move from the patient to the manufacturing facility, through the manufacturing process, and back to the patient. Maintaining such a chain of identity is difficult and complex, and failure to do so could result in adverse patient outcomes, loss of product, or regulatory action including withdrawal of our products from the market. Further, as product candidates are developed through preclinical to late stage clinical trials towards approval and commercialization, it is common that various aspects of the development program, such as manufacturing methods, are altered along the way in an effort to optimize processes and results. Such changes carry the risk that they will not achieve these intended objectives, and any of these changes could cause our product candidates to perform differently and affect the results of planned clinical trials or other future clinical trials. As a result of the complexities of our manufacturing process, we have in the past encountered difficulties in producing our product candidates. For example, our manufacturer has in prior instances produced batches of the active ingredient in our product candidate that did not meet the dosing requirement of our clinical trial protocol.

Our manufacturing strategy involves the use of one or more CMOs, and we expect in the future to establish our own capabilities and infrastructure, including a manufacturing facility. We expect that development of our own manufacturing facility will provide us with enhanced control of material supply for both clinical trials and the commercial market, enable the more rapid implementation of process changes, and allow for better long-term margins. However, we have no experience as a company in developing a manufacturing facility and may never

be successful in developing our own manufacturing facility or capability. We may establish multiple manufacturing facilities as we expand our commercial footprint to multiple geographies, which may lead to regulatory delays or prove costly. Even if we are successful, our manufacturing capabilities could be affected by cost-overruns, unexpected delays, equipment failures, labor shortages, natural disasters, power failures and numerous other factors that could prevent us from realizing the intended benefits of our manufacturing strategy and have a material adverse effect on our business.

In addition, the manufacturing process for any products that we may develop is subject to FDA and foreign regulatory authority approval process, and we will need to contract with manufacturers who can meet all applicable FDA and foreign regulatory authority requirements on an ongoing basis. If we or our CMOs are unable to reliably produce products to specifications acceptable to the FDA or other regulatory authorities, we may not obtain or maintain the approvals we need to commercialize such products. Even if we obtain regulatory approval for any of our product candidates, there is no assurance that either we or our CMOs will be able to manufacture the approved product to specifications acceptable to the FDA or other regulatory authorities, to produce it in sufficient quantities to meet the requirements for the potential launch of the product, or to meet potential future demand. Any of these challenges could delay completion of clinical trials, require bridging clinical trials or the repetition of one or more clinical trials, increase clinical trial costs, delay approval of our product candidate, impair commercialization efforts, increase our cost of goods, and have an adverse effect on our business, financial condition, results of operations and growth prospects.

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

We do not currently own any facility that may be used as our clinical-scale manufacturing and processing facility and currently rely on a single source vendor to manufacture supplies and process our product candidates, which is and will need to be done on a patient-by-patient basis. We have not yet caused our product candidates to be manufactured or processed on a commercial scale and may not be able to do so for any of our product candidates.

Although in the future we do intend to develop our own manufacturing facility, we also intend to use third parties as part of our manufacturing process and may, in any event, never be successful in developing our own manufacturing facility. Our anticipated reliance on a limited number of third-party manufacturers exposes us to the following risks:

- We may be unable to identify manufacturers on acceptable terms or at all because the number of potential manufacturers is limited and the FDA must approve any manufacturers. This approval would require new testing and good manufacturing practices compliance inspections by FDA. In addition, a new manufacturer would have to be educated in, or develop substantially equivalent processes for, production of our products.
- Our manufacturers may have little or no experience with autologous cell products, which are products made from a patient’s own cells, and therefore may require a significant amount of support from us in order to implement and maintain the infrastructure and processes required to manufacture our product candidates.
- Our third-party manufacturers might be unable to timely manufacture our product or produce the quantity and quality required to meet our clinical and commercial needs, if any.
- Contract manufacturers may not be able to execute our manufacturing procedures and other logistical support requirements appropriately.
- Our future contract manufacturers may not perform as agreed, may not devote sufficient resources to our products, or may not remain in the contract manufacturing business for the time required to supply our clinical trials or to successfully produce, store, and distribute our products.

- Manufacturers are subject to ongoing periodic unannounced inspection by the FDA and corresponding state agencies to ensure strict compliance with current good manufacturing practices, or cGMP, current good tissue practices, or cGTP, if applicable and other government regulations and corresponding foreign standards. We do not have control over third-party manufacturers’ compliance with these regulations and standards.
- We may not own, or may have to share, the intellectual property rights to any improvements made by our third-party manufacturers in the manufacturing process for our products.
- Our third-party manufacturers could breach or terminate their agreement with us.
- Raw materials and components used in the manufacturing process, particularly those for which we have no other source or supplier, may not be available or may not be suitable or acceptable for use due to material or component defects.
- Our contract manufacturers and critical reagent suppliers may be subject to inclement weather, as well as natural or man-made disasters.
- Our contract manufacturers may have unacceptable or inconsistent product quality success rates and yields.

Each of these risks could delay or prevent the completion of our clinical trials or the approval of any of our product candidates by the FDA, result in higher costs or adversely impact commercialization of our product candidates. In addition, we will rely on third parties to perform certain specification tests on our product candidates prior to delivery to patients. If these tests are not appropriately done and test data are not reliable, patients could be put at risk of serious harm and the FDA could place significant restrictions on our company until deficiencies are remedied.

Although our agreements with our CMOs require them to perform according to certain cGMP and, if applicable, cGTP requirements such as those relating to quality control, quality assurance and qualified personnel, we cannot control the conduct of our CMOs to implement and maintain these standards. If any of our CMOs cannot successfully manufacture material that conforms to our specifications and the regulatory requirements of the FDA, EMA or other comparable foreign authorities, we would be prevented from obtaining regulatory approval for our drug candidates unless and until we engage a substitute CMO that can comply with such requirements, which we may not be able to do. Any such failure by any of our CMOs would significantly impact our ability to develop, obtain regulatory approval for or market our drug candidates, if approved.

The manufacture of biological drug products is complex and requires significant expertise and capital investment, including the development of advanced manufacturing techniques and process controls.

Manufacturers of biologic products often encounter difficulties in production, particularly in scaling up or out, validating the production process, and assuring high reliability of the manufacturing process (including the absence of contamination). These problems include logistics and shipping, difficulties with production costs and yields, quality control, including stability of the product, product testing, operator error, availability of qualified personnel, as well as compliance with strictly enforced federal, state and foreign regulations. Furthermore, if contaminants are discovered in our supply of our product candidates or in the manufacturing facilities, such manufacturing facilities may need to be closed for an extended period of time to investigate and remedy the contamination. We cannot assure you that any stability failures or other issues relating to the manufacture of our product candidates will not occur in the future. Additionally, our manufacturers may experience manufacturing difficulties due to resource constraints or as a result of labor disputes or unstable political environments. If our manufacturers were to encounter any of these difficulties, or otherwise fail to comply with their contractual obligations, our ability to provide our product candidate to patients in clinical trials would be jeopardized. Any delay or interruption in the supply of clinical trial supplies could delay the completion of clinical trials, increase the costs associated with maintaining clinical trial programs and, depending upon the period of delay, require us to begin new clinical trials at additional expense or terminate clinical trials completely.

Our third-party manufacturers may be unable to successfully scale up manufacturing of our product candidates in sufficient quality and quantity, which would delay or prevent us from developing our product candidates and commercializing any approved product candidates.

Our manufacturing partners may be unable to successfully increase the manufacturing capacity for our product candidates in a timely or cost-effective manner, or at all, as needed for our development efforts or, if our product candidates are approved, our commercialization efforts. Quality issues may also arise during scale-up activities. If we, or any manufacturing partners, are unable to successfully scale up the manufacture of our product candidates in sufficient quality and quantity, the development, testing, and clinical trials of our product candidates may be delayed or infeasible, and regulatory approval or commercial launch of any resulting therapeutic may be delayed or not obtained, which could significantly harm our business.

Cell-based therapies rely on the availability of reagents, specialized equipment, and other specialty materials, which may not be available to us on acceptable terms or at all. For some of these reagents, equipment, and materials, we rely or may rely on sole source vendors or a limited number of vendors, which could impair our ability to manufacture and supply our products.

Manufacturing our product candidates will require many reagents, which are substances used in our manufacturing processes to bring about chemical or biological reactions, and other specialty materials and equipment, some of which are manufactured or supplied by small companies with limited resources and experience to support commercial biologics production. We currently depend on a limited number of vendors for certain materials and equipment used in the manufacture of our product candidates. Some of these suppliers may not have the capacity to support commercial products manufactured under cGMP by biopharmaceutical firms or may otherwise be ill-equipped to support our needs. We also do not have supply contracts with many of these suppliers and may not be able to obtain supply contracts with them on acceptable terms or at all. Accordingly, we may experience delays in receiving key materials and equipment to support clinical or commercial manufacturing.

For some of these reagents, equipment, and materials, we rely and may in the future rely on sole source vendors or a limited number of vendors. An inability to continue to source product from any of these suppliers, which could be due to regulatory actions or requirements affecting the supplier, adverse financial or other strategic developments experienced by a supplier, labor disputes or shortages, unexpected demands, or quality issues, could adversely affect our ability to satisfy demand for our product candidates, which could adversely and materially affect our product sales and operating results or our ability to conduct clinical trials, either of which could significantly harm our business.

As we continue to develop and scale our manufacturing process, we expect that we will need to obtain rights to and supplies of certain materials and equipment to be used as part of that process. We may not be able to obtain rights to such materials on commercially reasonable terms, or at all, and if we are unable to alter our process in a commercially viable manner to avoid the use of such materials or find a suitable substitute, it would have a material adverse effect on our business.

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

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

We rely and will rely heavily on third parties over the course of our clinical trials, and as a result will have limited control over the clinical investigators and limited visibility into their day-to-day activities, including with

respect to how they are providing and administering T cell therapy. Nevertheless, we are responsible for ensuring that each of our trials is conducted in accordance with the applicable protocol and legal, regulatory, and scientific standards, and our reliance on third parties does not relieve us of our regulatory responsibilities. We and these third parties are required to comply with good clinical practices, or GCP, which are regulations and guidelines enforced by the FDA and comparable foreign regulatory authorities for product candidates in clinical development. Regulatory authorities enforce these GCP through periodic inspections of trial sponsors, principal investigators, and trial sites. If we or any of these third parties fail to comply with applicable GCP regulations, the clinical data generated in our clinical trials may be deemed unreliable and the FDA or comparable foreign regulatory authorities may require us to perform additional nonclinical or clinical trials before approving our marketing applications. We cannot be certain that, upon inspection, such regulatory authorities will determine that any of our clinical trials comply with the applicable GCP regulations. In addition, our clinical trials must be conducted with biologic product produced under cGMP, and likely cGTP regulations and will require a large number of test patients. Our failure or any failure by these third parties to comply with these regulations or to recruit a sufficient number of patients may require us to repeat clinical trials, which would delay the regulatory approval process. Moreover, our business may be implicated if any of these third parties violates federal or state fraud and abuse or false claims laws and regulations or healthcare privacy and security laws.

Any third parties conducting our clinical trials are not and will not be our employees and, except for remedies available to us under our agreements with such third parties, we cannot control whether or not they devote sufficient time and resources to our ongoing preclinical, clinical, and nonclinical programs. These third parties may also have relationships with other commercial entities, including our competitors, for whom they may also be conducting clinical trials or other drug development activities, which could affect their performance on our behalf. If these third parties do not successfully carry out their contractual duties or obligations or meet expected deadlines, if they need to be replaced, or if the quality or accuracy of the clinical data they obtain is compromised due to the failure to adhere to our clinical protocols or regulatory requirements or for other reasons, our clinical trials may be extended, delayed, or terminated and we may not be able to complete development of, obtain regulatory approval of or successfully commercialize our product candidates. As a result, our financial results and the commercial prospects for our product candidates would be harmed, our costs could increase, and our ability to generate revenue could be delayed.

Any agreements governing our relationships with CROs or other contractors with whom we currently engage or may engage in the future may provide those outside contractors with certain rights to terminate a clinical trial under specified circumstances. If any of our relationships with these third-party CROs terminate, we may not be able to enter into arrangements with alternative CROs or do so on commercially reasonable terms. Switching or adding additional CROs involves additional cost and requires management time and focus. In addition, there is a natural transition period when a new CRO begins work. As a result, delays occur, which can materially impact our ability to meet our desired clinical development timelines. Though we carefully manage our relationships with our CROs, there can be no assurance that we will not encounter similar challenges or delays in the future or that these delays or challenges will not have a material adverse impact on our business, financial condition, and prospects.

The market opportunities for our product candidates, if and when approved, may be limited to those patients who are ineligible for established therapies or have failed prior treatments and may be small.

Cancer therapies are sometimes characterized as first line, second line, or third line, and the FDA often approves new therapies initially only for third line use. When cancer is detected early enough, first line therapy is sometimes adequate to cure the cancer or prolong life without a cure. Whenever first line therapy, usually chemotherapy, hormone therapy, surgery, or a combination of these, proves unsuccessful, second line therapy may be administered. Second line therapies often consist of more chemotherapy, radiation, antibody drugs, tumor targeted small molecules, or a combination of these. Third line therapies can include bone marrow transplantation, antibody and small molecule targeted therapies, more invasive forms of surgery, and new technologies. We expect to initially seek approval of our product candidates as a third line therapy for patients

who have failed other approved treatments. Subsequently, for those products that prove to be sufficiently beneficial, if any, we would expect to seek approval as a second line therapy and potentially as a first line therapy, but there is no guarantee that our product candidates, even if approved, would be approved for second line or first line therapy. In addition, we may have to conduct additional clinical trials prior to gaining approval for second line or first line therapy.

Our projections of both the number of people who have the cancers we are targeting, as well as the subset of people with these cancers in a position to receive third line therapy and who have the potential to benefit from treatment with our product candidates, are based on our beliefs and estimates. These estimates have been derived from a variety of sources, including scientific literature, surveys of clinics, patient foundations, or market research and may prove to be incorrect. Further, new studies may change the estimated incidence or prevalence of these cancers. The number of patients may turn out to be lower than expected. Additionally, the potentially addressable patient population for our product candidates may be limited or may not be amenable to treatment with our product candidates. For instance, we expect to initially target a small patient population with our product candidates. NEXI-001 is being developed for the treatment of AML or MDS patients with relapsed disease after an allogeneic hematopoietic cellular transplant and NEXI-002 is being developed for the treatment of MM patients that have failed at least three prior lines of therapy. Even if we obtain significant market share for our product candidates, because the potential target populations are small, we may never achieve profitability without obtaining regulatory approval for additional indications, including use as a first or second line therapy.

Our market opportunities may also be limited by competitor treatments that may enter the market. See the risk factor below "—*We face significant competition from other biotechnology and pharmaceutical companies, and our operating results will suffer if we fail to compete effectively.*"

We plan to seek orphan drug status for some or all of our product candidates, but we may be unable to obtain such designations or to maintain the benefits associated with orphan drug status, including market exclusivity, which may cause our revenue, if any, to be reduced.

Under the Orphan Drug Act, the FDA may grant orphan designation to a 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 in the United States, or a patient population greater than 200,000 in the United States when there is no reasonable expectation that the cost of developing and making available the 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. In the United States, orphan drug designation entitles a party to financial incentives such as opportunities for grant funding towards clinical trial costs, tax advantages, and user-fee waivers. After the FDA grants orphan drug designation, the generic identity of the drug and its potential orphan use are disclosed publicly by the FDA. Orphan drug designation does not convey any advantage in, or shorten the duration of, the regulatory review and approval process.

If a product 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 BLA, to market the same biologic for the same indication for seven years, except in limited circumstances such as a showing of clinical superiority to the product with orphan drug exclusivity or if 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. As a result, even if one of our drug candidates receives orphan exclusivity, the FDA can still approve other drugs that have a different active ingredient for use in treating the same indication or disease. Furthermore, the FDA can waive orphan exclusivity if we are unable to manufacture sufficient supply of our product.

We plan to seek orphan drug designation for some or all of our product candidates in specific orphan indications in which there is a medically plausible basis for the use of these products, including AML or MDS

and MM, but exclusive marketing rights in the United States may be limited if we seek approval for an indication broader than the orphan designated indication and may be lost if the FDA later determines that the request for designation was materially defective or if the manufacturer is unable to assure sufficient quantities of the product to meet the needs of patients with the rare disease or condition. In addition, although we intend to seek orphan drug designation for other product candidates, we may never receive such designations.

We plan to seek but may fail to obtain breakthrough therapy designation for some or all of our product candidates.

As part of the enactment of Food and Drug Administration Safety and Innovation Act, or FDASIA, in 2012, the Congress established a "breakthrough therapy" designation which is intended to expedite the development and review of products that treat serious or life-threatening diseases when "preliminary clinical evidence indicates that the drug may demonstrate substantial improvement over existing therapies on one or more clinically significant endpoints, such as substantial treatment effects observed early in clinical development." The designation of a product candidate as a breakthrough therapy provides potential benefits that include more frequent meetings with FDA to discuss the development plan for the product candidate and ensure collection of appropriate data needed to support approval; more frequent written correspondence from FDA about such things as the design of the proposed clinical trials and use of biomarkers; intensive guidance on an efficient drug development program, beginning as early as Phase I; organizational commitment involving senior managers; and eligibility for rolling review and priority review.

Breakthrough therapy designation does not change the standards for product approval. We intend to seek breakthrough therapy designation for some or all of our product candidates for the treatment of AML or MDS and MM, but there can be no assurance that we will receive breakthrough therapy designation. In addition, although we intend to seek breakthrough therapy designation for other product candidates, we may never receive such designations.

The review processes of regulatory authorities are lengthy, time consuming, expensive and inherently unpredictable. If we are unable to obtain approval for our product candidates from applicable regulatory authorities, we will not be able to market and sell those product candidates in those countries or regions and our business could be substantially harmed.

The research, testing, manufacturing, labeling, approval, sale, marketing and distribution of drug products are, and will remain, subject to extensive regulation by the FDA in the United States and by the respective regulatory authorities in other countries where regulations differ. We are not permitted to market our biological product candidates in the United States until we receive the respective approval of a BLA from the FDA, or in any foreign countries until we receive the requisite approval from the respective regulatory authorities in such countries. The time required to obtain approval, if any, by the FDA, EMA and comparable foreign authorities is unpredictable, but typically takes many years following the commencement of clinical trials, if approval is obtained at all, and depends upon numerous factors, including the substantial discretion of the regulatory authorities and the type, complexity and novelty of the product candidates involved. Regulatory authorities have substantial discretion in the approval process and may refuse to accept any application or may decide that our data are insufficient for approval and require additional nonclinical studies or clinical trials. We have not submitted a marketing application such as a BLA to the FDA, an MAA to the EMA, or any similar application to any other jurisdiction. We have limited experience in planning and conducting the clinical trials required for marketing approvals, and we have and expect to continue to rely on third-party CROs to assist us in this process. Obtaining marketing approval requires the submission of extensive nonclinical and clinical data and supporting information to regulatory authorities for each therapeutic indication to establish the product candidate's safety and efficacy. Securing marketing approval also requires the submission of information about the product manufacturing process, and in many cases the inspection of manufacturing, processing, and packaging facilities by the regulatory authorities. Our product candidates may not be effective, may be only moderately effective or may prove to have undesirable or unintended side effects, toxicities or other characteristics that may preclude our

obtaining marketing approval or prevent or limit commercial use, or there may be deficiencies in cGMP compliance by us or by our CMOs that could result in the candidate not being approved. Moreover, we have not obtained regulatory approval for any drug candidate in any jurisdiction and it is possible that none of our existing drug candidates or any drug candidates we may seek to develop in the future will ever obtain regulatory approval.

Our biological product candidates could fail to receive, or could be delayed in receiving, regulatory approval for many reasons, including any one or more of the following:

- the FDA, EMA or comparable foreign regulatory authorities may disagree with the design or implementation of our clinical trials;
- we may be unable to demonstrate to the satisfaction of the FDA, EMA or comparable foreign regulatory authorities that a product candidate is safe and effective for its proposed indication;
- the results of clinical trials may not meet the level of statistical significance required by the FDA, EMA or comparable foreign regulatory authorities for approval;
- we may be unable to demonstrate that a product candidate's clinical and other benefits outweigh its safety risks;
- the FDA, EMA or comparable foreign regulatory authorities may disagree with our interpretation of data from preclinical studies or clinical trials;
- the data collected from clinical trials of our product candidates may not be sufficient to support the submission of a BLA or other submission or to obtain regulatory approval in the United States or elsewhere;
- upon review of our clinical trial sites and data, the FDA or comparable foreign regulatory authorities may find our record keeping or the record keeping of our clinical trial sites to be inadequate;
- the manufacturing processes or facilities of third-party manufacturers with which we contract for clinical and commercial supplies may fail to meet the requirements of the FDA, EMA or comparable foreign regulatory authorities;
- the FDA, EMA or comparable foreign regulatory authorities may fail to approve the companion diagnostics we contemplate developing internally or with partners; and
- the change of the medical standard of care or the approval policies or regulations of the FDA, EMA or comparable foreign regulatory authorities may significantly change in a manner that renders our clinical data insufficient for approval.

The time and expense of the approval process, as well as the unpredictability of future clinical trial results and other contributing factors, may result in our failure to obtain regulatory approval to market, in one or more jurisdictions, NEXI-001, NEXI-002, or any other drug candidates we are developing or may seek to develop in the future, which would significantly harm our business, results of operations and prospects. In such case, we may also not have the resources to conduct new clinical trials and/or we may determine that further clinical development of any such product candidate is not justified and may discontinue any such programs.

In addition, even if we were to obtain regulatory approval in one or more jurisdictions, regulatory authorities may approve any of our product candidates for fewer or more limited indications than we request, may not approve prices we may propose to charge for our products, may grant approval contingent on the performance of costly post-marketing clinical trials (referred to as "conditional" or "accelerated" approval depending on the jurisdiction), or may approve a product candidate with a label that does not include the labeling claims necessary or desirable for the successful commercialization of that drug candidate. Any of the foregoing circumstances could materially harm the commercial prospects for our drug candidates.

Additionally, on June 23, 2016, the electorate in the United Kingdom voted in favor of leaving the European Union, commonly referred to as Brexit. On March 29, 2017, the country formally notified the European Union of

its intention to withdraw pursuant to Article 50 of the Lisbon Treaty. Since a significant proportion of the regulatory framework in the United Kingdom is derived from European Union directives and regulations, the referendum could materially impact the regulatory regime with respect to the approval of our product candidates in the United Kingdom or the European Union. Any delay in obtaining, or an inability to obtain, any marketing approvals in the United Kingdom, as a result of Brexit or otherwise, would prevent us from commercializing our product candidates in the United Kingdom and reduce our ability to generate revenue and achieve and sustain profitability. If any of these outcomes occur, we may be forced to restrict or delay efforts to seek regulatory approval in the United Kingdom for our product candidates, which could significantly and materially harm our business.

Furthermore, other European countries may seek to conduct referenda with respect to continuing membership with the European Union. We do not know to what extent Brexit or other comparable initiatives, or any resulting changes, would affect our ability to conduct clinical trials or obtain marketing approval in these jurisdictions, and each could materially impact our ability to conduct clinical trials or obtain marketing approval on a timely basis, or at all.

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

We currently have no sales, marketing, or commercial product distribution capabilities and have no experience in marketing products. We intend to develop an in-house marketing organization and sales force, which will require significant capital expenditures, management resources, and time. We will have to compete with other pharmaceutical and biotechnology companies to recruit, hire, train, and retain marketing and sales personnel.

If we are unable or decide not to establish internal sales, marketing and commercial distribution capabilities for any or all products we develop, we will likely pursue collaborative arrangements regarding the sales and marketing of our products. However, there can be no assurance that we will be able to establish or maintain such collaborative arrangements, or if we are able to do so, that they will have effective sales forces. Any revenue we receive will depend upon the efforts of such third parties, which may not be successful. We may have little or no control over the marketing and sales efforts of such third parties, and our revenue from product sales may be lower than if we had commercialized our product candidates ourselves. We also face competition in our search for third parties to assist us with the sales and marketing efforts of our product candidates.

There can be no assurance that we will be able to develop in-house sales and commercial distribution capabilities or establish or maintain relationships with third-party collaborators to successfully commercialize any product in the United States or overseas, and as a result, we may not be able to generate product revenue.

A variety of risks associated with operating our business internationally could materially adversely affect our business.

We may seek regulatory approval of our product candidates outside of the United States and, accordingly, we expect that we, and any potential collaborators in those jurisdictions, will be subject to additional risks related to operating in foreign countries, including:

- differing regulatory requirements and reimbursement regimes in foreign countries;
- unexpected changes in tariffs, trade barriers, price and exchange controls, and other regulatory requirements;
- economic weakness, including inflation, or political instability in particular foreign economies and markets;

- compliance with tax, employment, immigration, and labor laws for employees living or traveling abroad;
- foreign taxes, including withholding of payroll taxes;
- foreign currency fluctuations, which could result in increased operating expenses and reduced revenue, and other obligations incident to doing business in another country;
- difficulties staffing and managing foreign operations;
- workforce uncertainty in countries where labor unrest is more common than in the United States;
- potential liability under the Foreign Corrupt Practices Act of 1977 or comparable foreign laws;
- challenges enforcing our contractual and intellectual property rights, especially in those foreign countries that do not respect and protect intellectual property rights to the same extent as the United States;
- production shortages resulting from any events affecting raw material supply or manufacturing capabilities abroad; and
- business interruptions resulting from geo-political actions, including war and terrorism.

These and other risks associated with our planned international operations may materially adversely affect our ability to attain or maintain profitable operations.

We face significant competition from other biotechnology and pharmaceutical companies, and our operating results will suffer if we fail to compete effectively.

The biopharmaceutical industry, and the rapidly evolving market for developing T cell therapies in particular, is characterized by intense competition and rapid innovation. Our competitors may be able to develop other compounds or drugs that are able to achieve similar or better results. Our potential competitors include major multinational pharmaceutical companies, established biotechnology companies, specialty pharmaceutical companies, universities, and other research institutions. Many of our competitors have substantially greater financial, technical and other resources, such as larger research and development staff and experienced marketing and manufacturing organizations as well as established sales forces. Smaller or early-stage companies may also prove to be significant competitors, particularly through collaborative arrangements with large, established companies. Mergers and acquisitions in the biotechnology and pharmaceutical industries may result in even more resources being concentrated in our competitors. Competition may increase further as a result of advances in the commercial applicability of technologies and greater availability of capital for investment in these industries. Our competitors, either alone or with collaborative partners, may succeed in developing, acquiring or licensing on an exclusive basis drug or biologic products that are more effective, safer, more easily commercialized, or less costly than our product candidates or may develop proprietary technologies or secure patent protection that we may need for the development of our technologies and products.

Specifically, we face competition from companies developing T cell therapies such as Cue Biopharma, Atara Biotherapeutics, Iovance Biotherapeutics and Parvus Therapeutics. Even if we obtain regulatory approval of our product candidates, we may not be the first to market and that may affect the price or demand for our product candidates. Additionally, the availability and price of our competitors' products could limit the demand and the price we are able to charge for our product candidates. We may not be able to implement our business plan if the acceptance of our product candidates is inhibited by price competition or the reluctance of physicians to switch from existing methods of treatment to our product candidates, or if physicians switch to other new drug or biologic products or choose to reserve our product candidates for use in limited circumstances. Additionally, a competitor could obtain orphan product exclusivity from the FDA with respect to such competitor's product. If such competitor product is determined to be the same product as one of our product candidates, that may prevent us from obtaining approval from the FDA for such product candidate for the same indication for seven years, except in limited circumstances.

We are highly dependent on our key personnel, and if we are not successful in attracting, motivating and retaining highly qualified personnel, we may not be able to successfully implement our business strategy.

Our ability to compete in the highly competitive biotechnology and pharmaceutical industries depends upon our ability to attract, motivate and retain highly qualified managerial, scientific and medical personnel. We are highly dependent on our management, particularly our chief executive officer, Scott Carmer, who is an at-will employee, and our scientific and medical personnel. The loss of the services of any of our executive officers, other key employees, and other scientific and medical advisors, and our inability to find suitable replacements, could result in delays in product development and harm our business.

We conduct our operations at our facility in Gaithersburg, Maryland, in a region that is headquarters to many other biopharmaceutical companies and many academic and research institutions. Competition for skilled personnel is intense and the turnover rate can be high, which may limit our ability to hire and retain highly qualified personnel on acceptable terms or at all. We expect that we will need to recruit talent from outside of our region, and doing so may be costly and difficult.

To induce valuable employees to remain at our company, in addition to salary and cash incentives, we have provided restricted stock and stock option grants that vest over time. The value to employees of these equity grants that vest over time may be significantly affected by movements in our stock price that are beyond our control, and may at any time be insufficient to counteract more lucrative offers from other companies. Although we have employment agreements with our key employees, these employment agreements provide for at-will employment, which means that any of our employees could leave our employment at any time, with or without notice. We do not maintain “key man” insurance policies on the lives of all of these individuals or the lives of any of our other employees.

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

As of December 31, 2020, we had 44 employees, most of whom are full-time. As our development and commercialization plans and strategies develop, and as we transition into operating as a public company, we must add a significant number of additional managerial, operational, sales, marketing, financial, and other personnel. Future growth will impose significant added responsibilities on members of management, including:

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

Our future financial performance and our ability to commercialize our product candidates will depend, in part, on our ability to effectively manage any future growth, and our management may also have to divert a disproportionate amount of its attention away from day-to-day activities in order to devote a substantial amount of time to managing these growth activities.

We currently rely, and for the foreseeable future will continue to rely, in substantial part on certain independent organizations, advisors and consultants to provide certain services. There can be no assurance that the services of these independent organizations, advisors and consultants will continue to be available to us on a timely basis when needed, or that we can find qualified replacements. In addition, if we are unable to effectively manage our outsourced activities or if the quality or accuracy of the services provided by consultants is compromised for any reason, our clinical trials may be extended, delayed, or terminated, and we may not be able to obtain regulatory approval of our product candidates or otherwise advance our business. There can be no assurance that we will be able to manage our existing consultants or find other competent outside contractors and consultants on economically reasonable terms, if at all.

If we are not able to effectively expand our organization by hiring new employees and expanding our groups of consultants and contractors, we may not be able to successfully implement the tasks necessary to further develop and commercialize our product candidates and, accordingly, may not achieve our research, development, and commercialization goals.

We may form or seek collaborations or strategic alliances or enter into additional licensing arrangements in the future, and we may not realize the benefits of such alliances or licensing arrangements.

We may form or seek strategic alliances, create joint ventures or collaborations, or enter into additional licensing arrangements with third parties that we believe will complement or augment our development and commercialization efforts with respect to our product candidates and any future product candidates that we may develop. Any of these relationships may require us to incur non-recurring and other charges, increase our near and long-term expenditures, issue securities that dilute our existing stockholders, or disrupt our management and business. In addition, we face significant competition in seeking appropriate strategic partners and the negotiation process is time-consuming and complex. Moreover, we may not be successful in our efforts to establish a strategic partnership or other alternative arrangements for our product candidates because they may be deemed to be at too early of a stage of development for collaborative effort and third parties may not view our product candidates as having the requisite potential to demonstrate safety and efficacy.

Further, collaborations involving our product candidates, such as our collaborations with third-party research institutions, are subject to numerous risks, which may include the following:

- collaborators have significant discretion in determining the efforts and resources that they will apply to a collaboration;
- collaborators may not pursue development and commercialization of our product candidates or may elect not to continue or renew development or commercialization programs based on clinical trial results, changes in their strategic focus due to the acquisition 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 trials, provide insufficient funding for a clinical trial, stop a clinical trial, abandon a product candidate, repeat or conduct new clinical trials, or require a new formulation of a product candidate for clinical testing;
- collaborators could independently develop, or develop with third parties, products that compete directly or indirectly with our products or product candidates;
- a collaborator with marketing and distribution rights to one or more products may not commit sufficient resources to their marketing and distribution;
- 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 product candidates, or that result in costly litigation or arbitration that diverts management attention and resources;
- collaborations may be terminated and, if terminated, may result in a need for additional capital to pursue further development or commercialization of the applicable product candidates; and
- collaborators may own or co-own intellectual property covering our products that results from our collaborating with them, and in such cases, we would not have the exclusive right to commercialize such intellectual property.

As a result, if we enter into collaboration agreements and strategic partnerships or license our products or businesses, we may not be able to realize the benefit of such transactions if we are unable to successfully integrate them with our existing operations and company culture, which could delay our timelines or otherwise adversely affect our business. We also cannot be certain that, following a strategic transaction or license, we will achieve the revenue or specific net income that justifies such transaction. Any delays in entering into new collaborations or strategic partnership agreements related to our product candidates could delay the development and commercialization of our product candidates in certain geographies for certain indications, which would harm our business prospects, financial condition, and results of operations.

If we engage in future acquisitions or strategic partnerships, this may increase our capital requirements, dilute our stockholders, cause us to incur debt or assume contingent liabilities, and subject us to other risks.

We may evaluate various acquisitions and strategic partnerships, including licensing or acquiring complementary products, intellectual property rights, technologies, or businesses. Any potential acquisition or strategic partnership may entail numerous risks, including:

- increased operating expenses and cash requirements;
- the assumption of additional indebtedness or contingent liabilities;
- assimilation of operations, intellectual property and products of an acquired company, including difficulties associated with integrating new personnel;
- our inability to achieve desired efficiencies, synergies or other anticipated benefits from such acquisitions or strategic partnerships;
- the diversion of our management’s attention from our existing product programs and initiatives in pursuing such a strategic merger or acquisition;
- retention of key employees, the loss of key personnel, and uncertainties in our ability to maintain key business relationships;
- risks and uncertainties associated with the other party to such a transaction, including the prospects of that party and their existing products or product candidates and regulatory approvals; and
- our inability to generate revenue from acquired technology and/or products sufficient to meet our objectives in undertaking the acquisition or even to offset the associated acquisition and maintenance costs.

In addition, if we undertake acquisitions, we may issue dilutive securities, assume or incur debt obligations, incur large one-time expenses and acquire intangible assets that could result in significant future amortization expense. Moreover, we may not be able to locate suitable acquisition opportunities and this inability could impair our ability to grow or obtain access to technology or products that may be important to the development of our business.

Raising additional capital may cause dilution to our existing stockholders, restrict our operations or require us to relinquish rights to our technologies or product candidates.

Until such time as we can generate substantial revenue from product sales, if ever, we expect to finance our cash needs through a combination of public and private equity offerings, debt financings, strategic partnerships, and alliances and licensing arrangements. To the extent that we raise additional capital through the sale of equity or debt securities, your ownership interest will be diluted, and the terms may include liquidation or other preferences that adversely affect your rights as a stockholder. The incurrence of indebtedness would result in increased fixed payment obligations and could involve restrictive covenants, such as limitations on our ability to incur additional debt, limitations on our ability to acquire or license intellectual property rights and other operating restrictions that could adversely impact our ability to conduct our business. If we raise additional funds

through strategic partnerships and alliances and licensing arrangements with third parties, we may have to relinquish valuable rights to our technologies or product candidates, or grant licenses on terms unfavorable to us. If we are unable to raise additional capital through equity or debt financings when needed (including if we are unable to do so as a result of the COVID-19 pandemic), we may be required to delay, limit, reduce or terminate our product development or future commercialization efforts, or grant rights to develop and market product candidates that we would otherwise develop and market ourselves.

If we, our CROs or our CMOs use hazardous and biological materials in a manner that causes injury or violates applicable law, we may be liable for damages.

Our research and development activities involve the controlled use of potentially hazardous substances, including chemical and biological materials, by us or third parties, such as CROs and CMOs. We and such third parties are subject to federal, state, and local laws and regulations in the United States governing the use, manufacture, storage, handling, and disposal of medical and hazardous materials. Although we believe that our and such third parties' procedures for using, handling, storing, and disposing of these materials comply with legally prescribed standards, we cannot completely eliminate the risk of contamination or injury resulting from medical or hazardous materials. As a result of any such contamination or injury, we may incur liability or local, city, state, or federal authorities may curtail the use of these materials and interrupt our business operations. In the event of an accident, we could be held liable for damages or penalized with fines, and the liability could exceed our resources. We do not have any insurance for liabilities arising from medical or hazardous materials. Compliance with applicable environmental laws and regulations is expensive, and current or future environmental regulations may impair our research, development and production efforts, which could harm our business, prospects, financial condition, or results of operations.

Our internal computer systems, or those used by our third-party research institution collaborators, CROs or other contractors or consultants, may fail or suffer security breaches.

Despite the implementation of security measures, our internal computer systems and those of our future CROs and other contractors and consultants are vulnerable to damage from computer viruses and unauthorized access. Although to our knowledge we have not experienced any such material system failure or security breach to date, if such an event were to occur and cause interruptions in our operations, it could result in a material disruption of our development programs and our business operations. For example, the loss of clinical trial data from completed or future clinical trials could result in delays in our regulatory approval efforts and significantly increase our costs to recover or reproduce the data. Likewise, we rely on our third-party research institution collaborators for research and development of our product candidates and other third parties for the manufacture of our product candidates and to conduct clinical trials, and similar events relating to their computer systems could also have a material adverse effect on our business. To the extent that any disruption or security breach were to result in a loss of, or damage to, our data or applications, or inappropriate disclosure of confidential or proprietary information, we could incur liability and the further development and commercialization of our product candidates could be delayed.

Although we take reasonable steps to help protect confidential and other sensitive information from unauthorized access or disclosure, we also could be the target of phishing attacks seeking confidential information regarding our employees. Furthermore, while we have implemented data privacy and security measures in an effort to comply with applicable laws and regulations relating to privacy and data protection, some PHI and other PII or confidential information may be transmitted to us by third parties, who may not implement adequate security and privacy measures, and it is possible that laws, rules and regulations relating to privacy, data protection, or information security may be interpreted and applied in a manner that is inconsistent with our practices or those of third parties who transmit PHI and other PII or confidential information to us.

To the extent we or these third parties are found to have violated such laws, rules or regulations or that any disruption or security breach were to result in a loss of, or damage to, our or our third-party vendors',

collaborators' or other contractors' or consultants' data or applications, or inappropriate disclosure of confidential or proprietary information, we could incur liability including litigation exposure, penalties and fines, we could become the subject of regulatory action or investigation, our competitive position could be harmed and the further development and commercialization of our product candidates could be delayed. Any of the above could have a material adverse effect on our business, financial condition, results of operations or prospects.

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

Our operations, and those of our third-party research institution collaborators, CROs, CMOs, suppliers, and other contractors and consultants, could be subject to earthquakes, power shortages, telecommunications failures, water shortages, floods, hurricanes, typhoons, fires, extreme weather conditions, medical epidemics, and other natural or man-made disasters or business interruptions, for which we are predominantly self-insured. In addition, we rely on our third-party research institution collaborators for conducting research and development of our product candidates, and they may be affected by government shutdowns or withdrawn funding. The occurrence of any of these business disruptions could seriously harm our operations and financial condition and increase our costs and expenses. We rely on third-party manufacturers to produce and process our product candidates on a patient-by-patient basis. Our ability to obtain clinical supplies of our product candidates could be disrupted if the operations of these suppliers are affected by a man-made or natural disaster or other business interruption. All of our operations including our corporate headquarters are located in a single facility in Gaithersburg, Maryland. Damage or extended periods of interruption to our corporate, development or research facilities due to fire, natural disaster, power loss, communications failure, unauthorized entry or other events could cause us to cease or delay development of some or all of our product candidates. Although we maintain property damage and business interruption insurance coverage on these facilities, our insurance might not cover all losses under such circumstances and our business may be seriously harmed by such delays and interruption.

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

We face an inherent risk of product liability as a result of the clinical testing of our product candidates and will face an even greater risk if we commercialize any products. For example, we may be sued if our product candidates cause or are perceived to cause injury or are found to be otherwise unsuitable during clinical testing, manufacturing, marketing or sale. Any such product liability claims may include allegations of defects in manufacturing, defects in design, a failure to warn of dangers inherent in the product, negligence, strict liability or a breach of warranties. Claims could also be asserted under state consumer protection acts. If we cannot successfully defend ourselves against product liability claims, we may incur substantial liabilities or be required to limit commercialization of our product candidates. Even successful defense would require significant financial and management resources. Product liability claims could delay or prevent completion of our development programs. If we succeed in marketing any approved products, these claims could result in an FDA investigation of the safety and effectiveness of our products, our manufacturing processes and facilities (or the manufacturing processes and facilities of our third-party manufacturer) or our marketing programs, a recall of our products or more serious enforcement action, limitations on the approved indications for which they may be used or suspension or withdrawal of approvals. Regardless of the merits or eventual outcome, liability claims may also result in:

- decreased demand for our products;
- injury to our reputation;
- withdrawal of clinical trial participants and inability to continue clinical trials;
- initiation of investigations by regulators;
- costs to defend the related litigation;

- a diversion of management's time and our resources;
- substantial monetary awards to trial participants or patients;
- product recalls, withdrawals or labeling, marketing or promotional restrictions;
- loss of revenue;
- exhaustion of any available insurance and our capital resources;
- the inability to commercialize any product candidate; and
- a decline in our share price.

Our inability to obtain sufficient product liability insurance at an acceptable cost to protect against potential product liability claims could prevent or inhibit the commercialization of products we develop, alone or with collaborators. Although we currently carry $3,000,000 of clinical trial insurance, the amount of such insurance coverage may not be adequate, we may be unable to maintain such insurance, or we may not be able to obtain additional or replacement insurance at a reasonable cost, if at all. Our insurance policies may also have various exclusions, and we may be subject to a product liability claim for which we have no coverage. We may 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 capital to pay such amounts. Even if our agreements with any future corporate collaborators entitle us to indemnification against losses, such indemnification may not be available or adequate should any claim arise.

There is substantial doubt about our ability to continue as a going concern.

As of September 30, 2020, we had $2.0 million of cash and cash equivalents. To date, we have primarily financed our operations with proceeds from sales of our redeemable convertible preferred stock and the issuance of convertible debt. We have incurred recurring losses since our inception, including net losses of $20.5 million for the year ended December 31, 2019 and $21.9 million for the nine months ended September 30, 2020. We expect to continue to generate operating losses for the foreseeable future as we continue to invest significantly in the research and development of our programs. As a result, there is a significant degree of uncertainty as to how long our existing cash and cash equivalents will be sufficient to fund our operations. These conditions raise substantial doubt about our ability to continue as a going concern for a period of at least one year from the date our financial statements are issued, and our independent registered public accounting firm has included an explanatory paragraph relating to our ability to continue as a going concern in its report on our audited financial statements included elsewhere in this prospectus.

We are seeking the anticipated proceeds from this offering to provide additional funding for our operations. Even if the offering is consummated, we may be required to obtain additional funding whether through private or public equity transactions, debt financings or other capital sources, including collaborations with other companies or other strategic transactions and such additional funding may not be available on terms we find acceptable or favorable. There is inherent uncertainty associated with these fundraising activities and they are not considered probable. If we are unable to obtain sufficient capital to continue to advance our programs, we would be forced to delay, reduce or eliminate our research and development programs and any future commercialization efforts. Accordingly, our plans do not alleviate substantial doubt of our ability to continue as a going concern for a period of at least one year after the date our financial statements are issued.

Nevertheless, our financial statements do not include any adjustments that might result from the outcome of this uncertainty. We will need to raise additional capital in this offering and/or otherwise to fund our future operations and remain as a going concern. However, we cannot guarantee that we will be able to obtain sufficient additional funding in this offering or otherwise or that such funding, if available, will be obtainable on terms favorable to us. In the event that we are unable to obtain sufficient additional funding, there can be no assurance that we will be able to continue as a going concern.

Legislation or other changes in U.S. tax law could adversely affect our business and financial condition.

The rules dealing with U.S. federal, state and local income taxation are constantly under review by persons involved in the legislative process and by the Internal Revenue Service and the U.S. Treasury Department. Changes to tax laws (which changes may have retroactive application) could adversely affect us or holders of our common stock. In recent years, many changes have been made to applicable tax laws and changes are likely to continue to occur in the future.

For example, legislation enacted in 2017 informally titled, the Tax Cuts and Jobs Act, or the TCJA, made significant changes to corporate taxation, including the reduction of the corporate tax rate from a top marginal rate of 35% to a flat rate of 21%, the limitation of the tax deduction for net interest expense to 30% of adjusted taxable income (except for certain small businesses), the limitation of the deduction for net operating losses from taxable years beginning after December 31, 2017 to 80% of current year taxable income and the elimination of net operating loss carrybacks generated in taxable years ending after December 31, 2017 (though any such net operating losses may be carried forward indefinitely) and the modification or repeal of many business deductions and credits. In addition, on March 27, 2020, President Trump signed into law the “Coronavirus Aid, Relief, and Economic Security Act” or the CARES Act, which included certain changes in tax law intended to stimulate the U.S. economy in light of the COVID-19 public health emergency, including providing temporary relief from certain aspects of the TCJA that had imposed limitations on the utilization of certain losses, interest expense deductions, and minimum tax credits and provided temporary deferral of certain payroll taxes.

It cannot be predicted whether, when, in what form or with what effective dates new tax laws may be enacted, or regulations and rulings may be enacted, promulgated or issued under existing or new tax laws, which could result in an increase in our or our shareholders’ tax liability or require changes in the manner in which we operate in order to minimize or mitigate any adverse effects of changes in tax law or in the interpretation thereof.

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

Our ability to use our U.S. federal and state net operating losses to offset potential future taxable income and related income taxes that would otherwise be due is dependent upon our generation of future taxable income, and we cannot predict with certainty when, or whether, we will generate sufficient taxable income to use all of our net operating losses.

Unused losses for the tax year beginning before January 1, 2018, and prior tax years will carry forward to offset future taxable income, if any, until such unused losses expire. Unused losses generated in tax years beginning after December 31, 2017, under the TCJA will not expire and may be carried forward indefinitely, and generally may not be carried back to prior taxable years, except that, under the CARES Act, net operating losses generated in 2018, 2019 and 2020 may be carried back five taxable years. Additionally, for taxable years beginning after December 31, 2020, the deductibility of such U.S. federal net operating losses generated in tax years beginning after December 31, 2017, is limited to 80% of our taxable income. In addition, both our current and our future unused losses and other tax attributes may be subject to limitation under Sections 382 and 383 of the Internal Revenue Code of 1986, as amended, or the Code, if we undergo 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. We may have experienced such ownership changes in the past, and we may experience ownership changes in the future as a result of this offering or subsequent shifts in our stock ownership, some of which are outside our control. In addition, at the state level, there may be periods during which the use of net operating loss carryforwards is suspended or otherwise limited, which could accelerate or permanently increase state taxes owed.

Risks Related to Government Regulation

The FDA regulatory approval process is lengthy, time-consuming, and inherently unpredictable, and we may experience significant delays in the clinical development and regulatory approval, if any, of our product candidates.

The research, testing, manufacturing, labeling, approval, selling, import, export, adverse event reporting, record keeping, advertising, promotion, and distribution of drug products, including biologics, are subject to extensive regulation by the FDA and other regulatory authorities in the United States. We are not permitted to market any biological drug product in the United States until we receive a Biologics License from the FDA. We have not previously submitted a BLA to the FDA, or similar approval filings to comparable foreign authorities. A BLA must include extensive preclinical and clinical data and supporting information to establish that the product candidate is safe, pure, potent, and effective for each desired indication. The BLA must also include significant information regarding the chemistry, manufacturing, and controls for the product, and the manufacturing facilities must complete a successful pre-license inspection. We expect the novel nature of our product candidates to create further challenges in obtaining regulatory approval. For example, the FDA has limited experience with commercial development of T cell therapies for cancer. The FDA may also require a panel of experts, referred to as an Advisory Committee, to deliberate on the adequacy of the safety and efficacy data to support licensure. The opinion of the Advisory Committee, although not binding, may have a significant impact on our ability to obtain licensure of the product candidates based on the completed clinical trials. Accordingly, the regulatory approval pathway for our product candidates may be uncertain, complex, expensive, and lengthy, and approval may not be obtained.

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

- obtaining regulatory approval to begin a trial, if applicable;
- the availability of financial resources to begin and complete the planned trials;
- reaching agreement on acceptable terms with prospective CROs and clinical trial sites, the terms of which can be subject to extensive negotiation and may vary significantly among different CROs and trial sites;
- obtaining approval at each clinical trial site by an independent institutional review board, or IRB;
- recruiting suitable patients to participate in a trial in a timely manner;
- having patients complete a trial or return for post-treatment follow-up;
- clinical trial sites deviating from trial protocol, not complying with GCP, or dropping out of a trial;
- addressing any patient safety concerns that arise during the course of a trial;
- addressing any conflicts with new or existing laws or regulations;
- adding new clinical trial sites; or
- manufacturing qualified materials under cGMP for use in clinical trials.

Patient enrollment is a significant factor in the timing of clinical trials and is affected by many factors. See the risk factor above *"—If we encounter difficulties enrolling patients in our clinical trials, our clinical development activities could be delayed or otherwise adversely affected"* for additional information on risks related to patient enrollment. Further, a clinical trial may be suspended or terminated by us, the IRBs for the institutions in which such trials are being conducted, the Data Monitoring Committee for such trial, or the FDA or other regulatory authorities due to a number of factors, including failure to conduct the clinical trial in accordance with regulatory requirements or our clinical protocols, inspection of the clinical trial operations or trial site by the FDA or other regulatory authorities resulting in the imposition of a clinical hold, unforeseen

safety issues or adverse side effects, failure to demonstrate a benefit from using a product candidate, changes in governmental regulations or administrative actions or lack of adequate funding to continue the clinical trial. If we experience termination of, or delays in the completion of, any clinical trial of our product candidates, the commercial prospects for our product candidates will be harmed, and our ability to generate product revenue will be delayed. In addition, any delays in completing our clinical trials will increase our costs, slow down our product development and approval process and jeopardize our ability to commence product sales and generate revenue.

Our third-party research institution collaborators may also experience similar difficulties in completing ongoing clinical trials and conducting future clinical trials of product candidates. Many of the factors that cause, or lead to, a delay in the commencement or completion of clinical trials may also ultimately lead to the denial of regulatory approval of our product candidates.

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

Obtaining and maintaining regulatory approval of our product candidates in one jurisdiction does not guarantee that we will be able to obtain or maintain regulatory approval in any other jurisdiction, but a failure or delay in obtaining regulatory approval in one jurisdiction may have a negative effect on the regulatory approval process in others. For example, even if the FDA grants marketing approval of a product candidate, comparable regulatory authorities in foreign jurisdictions must also approve the manufacturing, marketing and promotion of the product candidate in those countries. Approval procedures vary among jurisdictions and can involve requirements and administrative review periods different from those in the United States, including additional preclinical studies or clinical trials as clinical studies conducted in one jurisdiction may not be accepted by regulatory authorities in other jurisdictions. In many jurisdictions outside the United States, a product candidate must be approved for reimbursement before it can be approved for sale in that jurisdiction. In some cases, the price that we intend to charge for our products is also subject to approval.

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

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

If our product candidates are approved, they will be subject to ongoing regulatory requirements for manufacturing, labeling, packaging, storage, advertising, promotion, sampling, record-keeping, conduct of post-marketing studies, and submission of safety, efficacy, and other post-market information, including both federal and state requirements in the United States and requirements of comparable foreign regulatory authorities.

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 current Good Manufacturing Practices, or cGMP, and in certain cases Good Tissue Practices, or cGTP, regulations. As such, we and our contract manufacturers will be subject to continual review and inspections to assess compliance with cGMP and cGTp and adherence to commitments made in any BLA, other marketing application, and previous responses to inspection observations. Accordingly, we and others with whom we work must continue to expend time, money, and effort in all areas of regulatory compliance, including manufacturing, production, and quality control.

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

Later discovery of previously unknown problems with our product candidates, including adverse events of unanticipated severity or frequency, or with our third-party manufacturers or manufacturing processes, or failure to comply with regulatory requirements, may result in the following among other things:

- restrictions on the manufacturing of the product, the approved manufacturers or the manufacturing process;
- restrictions on the labeling or marketing of a product;
- restrictions on product distribution or use;
- requirements to conduct post-marketing studies or clinical trials;
- withdrawal of the product from the market;
- product recalls;
- warning or untitled letters from the FDA or comparable notice of violations from foreign regulatory authorities;
- refusal of the FDA or other applicable regulatory authority to approve pending applications or
- supplements to approved applications;
- fines, restitution or disgorgement of profits or revenues;
- suspension or withdrawal of marketing approvals;
- suspension of any of our ongoing clinical trials;
- product seizure or detention or refusal to permit the import or export of products; and
- consent decrees, 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.

Non-compliance with European Union requirements regarding safety monitoring or pharmacovigilance can also result in significant financial penalties. Similarly, failure to comply with the European Union’s requirements regarding the protection of personal information can also lead to significant penalties and sanctions.

The policies of the FDA and of other regulatory authorities may change and additional government regulations may be enacted that could prevent, limit or delay regulatory approval of our product candidates. We cannot predict the likelihood, nature or extent of government regulation that may arise from future legislation or administrative action, either in the United States or abroad. If we are slow or unable to adapt to changes in existing requirements or the adoption of new requirements or policies, or if we are not able to maintain regulatory compliance, we may lose any marketing approval that we may have obtained and we may not achieve or sustain profitability.

In addition, if we were able to obtain accelerated approval of any of our product candidates, the FDA would require us to conduct a confirmatory study to verify the predicted clinical benefit and additional safety studies. The results from the confirmatory study may not support the clinical benefit, which would result in the approval being withdrawn. While operating under accelerated approval, we will be subject to certain restrictions that we would not be subject to upon receiving regular approval.

Even if we obtain regulatory approval of our product candidates, the products may not gain market acceptance among physicians, patients, hospitals, cancer treatment centers, and others in the medical community.

The use of modified T cells as a potential cancer treatment is a recent development and may not become broadly accepted by physicians, patients, hospitals, cancer treatment centers, and others in the medical community. For example, certain of the product candidates that we will be developing target a cell surface marker that may be present on cancer cells as well as non-cancerous cells. It is possible that our product candidates may kill these non-cancerous cells, which may result in unacceptable side effects, including death. Additional factors will influence whether our product candidates are accepted in the market, including:

- the clinical indications for which our product candidates are approved;
- physicians, hospitals, cancer treatment centers, and patients considering our product candidates as a safe and effective treatment;
- the potential and perceived advantages of our product candidates over alternative treatments;
- the prevalence and severity of any side effects;
- any restrictions on concomitant us of other medications
- product labeling or product insert requirements of the FDA or other regulatory authorities;
- limitations or warnings contained in the labeling approved by the FDA;
- the size of the market for such drug candidate, based on the size of the patient subsets that we are targeting, in their territories for which we gain regulatory approval and have commercial rights;
- the safety of the drug candidate as demonstrated through broad commercial rights;
- the adequacy of supply of our product candidates;
- the timing of market introduction of our product candidates as well as competitive products;
- the cost of treatment in relation to alternative treatments;
- the amount of upfront costs or training required for physicians to administer our product candidates;
- the availability of adequate coverage, reimbursement, and pricing by third-party payors and government authorities;
- the willingness of patients to pay out-of-pocket in the absence of coverage and reimbursement by third-party payors and government authorities;
- support from patient advocacy groups
- relative convenience and ease of administration, including as compared to alternative treatments and competitive therapies; and
- the effectiveness of our sales and marketing efforts.

In addition, although we are not utilizing embryonic stem cells or replication competent vectors, adverse publicity due to the ethical and social controversies surrounding the therapeutic use of such technologies, and reported side effects from any clinical trials using these technologies or the failure of such trials to demonstrate

that these therapies are safe and effective may limit market acceptance our product candidates. If our product candidates are approved but fail to achieve market acceptance among physicians, patients, hospitals, cancer treatment centers or others in the medical community, we will not be able to generate significant revenue.

Our ability to negotiate, secure and maintain third-party coverage and reimbursement for our product candidates may be affected by political, economic and regulatory developments in the United States, the European Union and other jurisdictions. Governments continue to impose cost containment measures, and third-party payors are increasingly challenging prices charged for medicines and examining their cost effectiveness, in addition to their safety and efficacy. These and other similar developments could significantly limit the degree of market acceptance of any product candidate of ours that receives marketing approval in the future.

Even if our products achieve market acceptance, we may not be able to maintain that market acceptance over time if new products or technologies are introduced that are more favorably received than our products, are more cost effective or render our products obsolete.

We are and will be subject to stringent privacy laws, cybersecurity laws, regulations, policies and contractual obligations related to privacy and security, and changes in such laws, regulations, policies or how they are interpreted or changes in related contractual obligations could adversely affect our business.

We are subject to data privacy and protection laws and regulations that apply to the collection, transmission, processing, storage and use of personally-identifying information including comprehensive regulatory systems in the U.S. and EU, which, among other things, impose certain requirements relating to the privacy, security and transmission of personal information. The legislative and regulatory landscape for privacy and data protection continues to evolve worldwide, and there has been an increasing focus on privacy and data protection issues with the potential to affect our business. Failure to comply with any of these laws and regulations by us or third parties to whom we contract certain types of work (like clinical trials) could result in enforcement action against us or such third parties, including fines, imprisonment of company officials and public censure, claims for damages by affected individuals, damage to our reputation and loss of goodwill, any of which could have a material adverse effect on our business, financial condition, results of operations or prospects.

There are numerous U.S. federal and state laws and regulations related to the privacy and security of personal information. In particular, regulations promulgated pursuant to the US federal Health Insurance Portability and Accountability Act of 1996, or HIPAA, establish privacy and security standards that limit the use and disclosure of individually identifiable health information, or protected health information, and require the implementation of administrative, physical and technological safeguards to protect the privacy of protected health information and ensure the confidentiality, integrity and availability of electronic protected health information. Determining whether protected health information has been handled in compliance with applicable privacy standards and our contractual obligations can be complex and may be subject to changing interpretation.

If we are unable to properly protect the privacy and security of protected health information or other personal, sensitive, or confidential information in our possession, we could be found to have breached our contracts. Further, if we fail to comply with applicable privacy laws, including applicable HIPAA privacy and security standards, we could face significant administrative, civil and criminal penalties. Enforcement activity can also result in financial liability and reputational harm, and responses to such enforcement activity can consume significant internal and outside resources. In addition, state attorneys general are authorized to bring civil actions seeking either injunctions or damages in response to violations that threaten the privacy of state residents. In addition to the risks associated with enforcement activities and potential contractual liabilities, our ongoing efforts to comply with evolving laws and regulations at the federal and state level may be costly and require ongoing modifications to our policies, procedures and systems.

In the EU, we may be subject to the General Data Protection Regulation (GDPR) which went into effect in May 2018 and which imposes obligations on companies that operate in our industry with respect to the

processing of personal data and the cross-border transfer of such data. The GDPR imposes onerous accountability obligations requiring data controllers and processors to maintain a record of their data processing and policies. If our or our partners' or service providers' privacy or data security measures fail to comply with the GDPR requirements, we may be subject to litigation, regulatory investigations, enforcement notices requiring us to change the way we use personal data and/or fines of up to 20 million Euros or up to 4% of the total worldwide annual turnover of the preceding financial year, whichever is higher, as well as compensation claims by affected individuals, negative publicity, reputational harm and a potential loss of business and goodwill.

The GDPR may also impose additional compliance obligations relating to the transfer of data between us and our subsidiaries or other business partners. For example, the European Court of Justice recently invalidated the EU-U.S. Privacy Shield as a basis for transfers of personal data from the EU to the U.S. and raised questions about the continued validity of one of the primary alternatives to the EU-U.S. Privacy Shield, namely the European Commission's Standard Contractual Clauses. Some customers or other service providers may respond to these evolving laws and regulations by asking us to make certain privacy or data-related contractual commitments that we are unable or unwilling to make. This could lead to the loss of current or prospective customers or other business relationships.

While we continue to address the implications of the recent changes to EU data privacy regulations, data privacy remains an evolving landscape at both the domestic and international level, with new regulations coming into effect and continued legal challenges, and our efforts to comply with the evolving data protection rules may be unsuccessful. It is possible that these laws may be interpreted and applied in a manner that is inconsistent with our practices. We must devote significant resources to understanding and complying with this changing landscape. Failure to comply with laws regarding data protection would expose us to risk of enforcement actions taken by data protection authorities in the EU and elsewhere and carries with it the potential for significant penalties if we are found to be non-compliant. Similarly, failure to comply with federal and state laws in the United States regarding privacy and security of personal information could expose us to penalties under such laws. Any such failure to comply with data protection and privacy laws could result in government-imposed fines or orders requiring that we change our practices, claims for damages or other liabilities, regulatory investigations and enforcement action, litigation and significant costs for remediation, any of which could adversely affect our business. Even if we are not determined to have violated these laws, government investigations into these issues typically require the expenditure of significant resources and generate negative publicity, which could harm our business, financial condition, results of operations or prospects.

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

Successful sales of our product candidates, if approved, depend on the availability of adequate coverage and reimbursement from third-party payors. In addition, because our product candidates represent new approaches to treat cancer and other immune-related diseases, we cannot accurately estimate the potential revenue from our product candidates.

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

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

- a covered benefit under its health plan;
- safe, effective and medically necessary;

- appropriate for the specific patient;
- cost-effective; and
- neither experimental nor investigational.

In the United States, no uniform policy of coverage and reimbursement for products exists among third-party payors. As a result, obtaining coverage and reimbursement approval of a product from a government or other third-party payor is a time-consuming and costly process that could require us to provide to each payor supporting scientific, clinical and cost-effectiveness data for the use of our products on a payor-by-payor basis, with no assurance that coverage and adequate reimbursement will be obtained. Even if we obtain coverage for a given product, the resulting reimbursement payment rates might not be adequate for us to achieve or sustain profitability or may require co-payments that patients find unacceptably high. Additionally, third-party payors may not cover, or provide adequate reimbursement for, long-term follow-up evaluations required following the use of our products. Patients are unlikely to use our product candidates unless coverage is provided and reimbursement is adequate to cover a significant portion of the cost of our product candidates. Because our product candidates have a higher cost of goods than conventional therapies, and may require long-term follow up evaluations, the risk that coverage and reimbursement rates may be inadequate for us to achieve profitability may be greater.

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

Healthcare legislative reform measures may have a material adverse effect on our business and results of operations.

Third-party payors, whether domestic or foreign, or governmental or commercial, are developing increasingly sophisticated methods of controlling healthcare costs. In both the United States and certain foreign jurisdictions, there have been a number of legislative and regulatory changes to the health care system that could impact our ability to sell our products profitably. In particular, in 2010, the Patient Protection and the Affordable Care Act, as amended by the Health Care and Education Reconciliation Act (collectively, the “ACA”) was enacted, which, among other things, subjected biologic products to potential competition by lower-cost biosimilars, addressed 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, increased the minimum Medicaid rebates owed by most manufacturers under the Medicaid Drug Rebate Program, extended the Medicaid Drug Rebate program to utilization of prescriptions of individuals enrolled in Medicaid managed care organizations, subjected manufacturers to new annual fees and taxes for certain branded prescription drugs, and provided incentives to programs that increase the federal government’s comparative effectiveness research. The ACA continues to significantly impact the United States’ pharmaceutical industry. There remain executive, judicial and Congressional challenges to certain aspects of the ACA, and as a result certain sections of the ACA have been repealed. In particular, in December of 2018, a Texas U.S. District Court Judge ruled that the ACA is unconstitutional in its entirety because the “individual mandate” was repealed by Congress as part of the TCJA, effective January 1, 2019. On December 18, 2019, the U.S. Court of Appeals for the Fifth Circuit upheld the District Court ruling that the individual mandate was unconstitutional but remanded the case back to the District Court to determine whether other reforms enacted as part of the ACA but not specifically related to the individual mandate or health insurance, including the provisions comprising the BPCIA, could be severed from the rest of the ACA so as not to be declared invalid as well. The United States Supreme Court is currently reviewing this

case, although it is unclear when a decision will be made. It is unclear how such litigation and other efforts to repeal and replace the ACA will impact the ACA and our business. Complying with any new legislation or reversing changes implemented under the ACA could be time-intensive and expensive, resulting in a material adverse effect on our business.

In addition, other legislative changes have been proposed and adopted in the United States since the Affordable Care Act was enacted. In August 2011, the Budget Control Act of 2011, among other things, created measures for spending reductions by Congress. A Joint Select Committee on Deficit Reduction, tasked with recommending a targeted deficit reduction of at least $1.2 trillion for the years 2013 through 2021, was unable to reach required goals, thereby triggering the legislation's automatic reduction to several government programs. This includes aggregate reductions of Medicare payments to providers of 2% per fiscal year, which went into effect in April 2013, and will remain in effect through 2030 unless additional Congressional action is taken. The CARES Act and other COVID-19 relief legislation suspended the 2% Medicare sequester from May 1, 2020 through March 31, 2021. In January 2013, the American Taxpayer Relief Act of 2012, was signed into law, which, among other things, further reduced Medicare payments to several providers, including hospitals and cancer treatment centers, and increased the statute of limitations period for the government to recover overpayments to providers from three to five years.

There have been, and likely will continue to be, legislative and regulatory proposals at the foreign, federal and state levels directed at broadening the availability of healthcare and containing or lowering the cost of healthcare. We cannot predict the initiatives that may be adopted in the future, particularly as a result of the recent presidential election. The continuing efforts of the government, insurance companies, managed care organizations and other payors of healthcare services to contain or reduce costs of healthcare and/or impose price controls may adversely affect:

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

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

Our employees, independent contractors, consultants, commercial partners and vendors may engage in misconduct or other improper activities, including noncompliance with regulatory standards and requirements.

We are exposed to the risk of fraud, misconduct or other illegal activity by our employees, independent contractors, consultants, commercial partners and vendors. Misconduct by these parties could include intentional, reckless and negligent conduct that fails to: comply with applicable laws and regulations of the FDA and other similar foreign regulatory bodies; provide true, complete and accurate information to the FDA and other similar foreign regulatory bodies; comply with manufacturing standards we have established; comply with healthcare fraud and abuse laws in the United States and similar foreign fraudulent misconduct laws; or report financial information or data accurately or to disclose unauthorized activities to us. If we obtain FDA approval of any of our product candidates and begin commercializing those products in the United States, our potential exposure under such laws will increase significantly, and our costs associated with compliance with such laws are also likely to increase. These laws may impact, among other things, our current activities with principal investigators and research patients, as well as proposed and future sales, marketing and education programs. In particular, the

promotion, sales and marketing of healthcare items and services, as well as certain business arrangements in the healthcare industry, are subject to extensive laws designed to prevent fraud, kickbacks, self-dealing and other abusive practices. These laws and regulations may restrict or prohibit a wide range of pricing, discounting, marketing and promotion, structuring and commission(s), certain customer incentive programs and other business arrangements generally. Activities subject to these laws also involve the improper use of information obtained in the course of patient recruitment for clinical trials, which could result in significant regulatory sanctions and cause serious harm to our reputation. It is not always possible to identify and deter misconduct by employees and other parties, and the precautions we take to detect and prevent this activity may not be effective in controlling unknown or unmanaged risks or losses or in protecting us from governmental investigations or other actions or lawsuits stemming from a failure to comply with these laws or regulations. If any such actions are instituted against us, and we are not successful in defending ourselves or asserting our rights, those actions could have a significant impact on our business, including the imposition of significant fines or other sanctions.

Our relationships with prescribers, purchasers, third-party payors and patients will be subject to applicable anti-kickback, fraud and abuse and other health care laws and regulations, which could expose us to criminal sanctions, civil penalties, contractual damages, reputational harm and diminished profits and future earnings.

Although we do not currently have any products on the market, upon commercialization of our drug candidates, if approved, we will be subject to additional health care statutory and regulatory requirements and oversight by federal and state governments in the United States as well as foreign governments in the jurisdictions in which we conduct our business. Physicians, other health care providers and third-party payors will play a primary role in the recommendation, prescription and use of any product candidates for which we obtain marketing approval. Our future arrangements with such third parties may expose us to broadly applicable fraud and abuse and other health care laws and regulations that may constrain our business or financial arrangements and relationships through which we market, sell and distribute any products for which we may obtain marketing approval. Restrictions under applicable domestic and foreign health care laws and regulations include, but are not limited to, the following:

- the U.S. federal Anti-Kickback Statute, which prohibits, among other things, persons from knowingly and willfully soliciting, offering, receiving or providing remuneration, directly or indirectly, in cash or in kind, to induce or reward, or in return for, either the referral of an individual for, or the purchase, order or recommendation of, any good or service, for which payment may be made under a federal health care program 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;
- US federal false claims, false statements and civil monetary penalties laws, including the US False Claims Act, which impose criminal and civil penalties against individuals or entities for knowingly presenting, or causing to be presented, to the federal government, claims for payment that are false or fraudulent or making a false statement to avoid, decrease or conceal an obligation to pay money to the federal government; actions may be brought by the government or a whistleblower and may include an assertion that a claim for payment by federal health care programs for items and services which results from a violation of the federal Anti-Kickback Statue constitutes a false or fraudulent claim for purposes of the False Claims Act;
- HIPAA, which imposes criminal and civil liability for executing a scheme to defraud any health care 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 health care 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;
- analogous state and foreign laws and regulations relating to health care fraud and abuse, such as state anti-kickback and false claims laws, that may apply to sales or marketing arrangements and claims involving health care items or services reimbursed by non-governmental third-party payors, including private insurers;

- the FCPA and other anti-corruption laws and regulations pertaining to our financial relationships and interactions with foreign government officials;
- the US federal physician payment transparency requirements, sometimes referred to as the "Sunshine Act," which requires manufacturers of drugs, devices, biologics and medical supplies that are reimbursable under Medicare, Medicaid, or the Children's Health Insurance Program to report to the Centers for Medicare & Medicaid Services, or CMS, information related to physician payments and other transfers of value to physicians (defined to include doctors, dentists, optometrists, podiatrists and chiropractors) and teaching hospitals as well as the ownership and investment interests of physicians and their immediate family members. Beginning in 2022, applicable manufacturers also will be required to report such information regarding its relationships with physician assistants, nurse practitioners, clinical nurse specialists, certified registered nurse anesthetists and certified nurse midwives during the previous year;
- analogous state and foreign laws that require pharmaceutical companies to track, report and disclose to the government and/or the public information related to payments, gifts, and other transfers of value or remuneration to physicians and other health care providers, marketing activities or expenditures, or product pricing or transparency information, or that require pharmaceutical companies to implement compliance programs that meet certain standards or to restrict or limit interactions between pharmaceutical manufacturers and members of the health care industry;
- the US federal laws that require pharmaceutical manufacturers to report certain calculated product prices to the government or provide certain discounts or rebates to government authorities or private entities, often as a condition of reimbursement under federal health care programs;
- HIPAA, which imposes obligations on certain covered entity health care providers, health plans, and health care clearinghouses and their business associates that perform certain services involving the use or disclosure of individually identifiable health information as well as their covered subcontractors, including mandatory contractual terms, with respect to safeguarding the privacy, security and transmission of individually identifiable health information; and
- state and foreign laws that govern the privacy and security of health information in certain circumstances, including state security breach notification laws, state health information privacy laws and federal and state consumer protection laws, many of which differ from each other in significant ways and often are not preempted by HIPAA, thus complicating compliance efforts.

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

Efforts to ensure that our business arrangements will comply with applicable healthcare laws may involve substantial costs. It is possible that governmental and enforcement authorities will conclude that our business practices may not comply with current or future statutes, regulations or case law interpreting applicable fraud and abuse or other healthcare laws and regulations. If any such actions are instituted against us, and we are not successful in defending ourselves or asserting our rights, those actions could have a significant impact on our business, including the imposition of significant civil, criminal and administrative penalties, damages, disgorgement, monetary fines, imprisonment, possible exclusion from participation in Medicare, Medicaid and other federal healthcare programs, 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. In addition, the approval and commercialization of any of our product candidates outside the United States will also likely subject us to foreign equivalents of the healthcare laws mentioned above, among other foreign laws. If any of the physicians or other health care providers or entities with whom we expect to do business is found to be not in compliance with applicable laws, they may be subject to criminal, civil or administrative sanctions, including exclusions from federal health care programs.

Risks Related to Intellectual Property

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

We are dependent on patents, know-how, and proprietary technology, both our own and licensed from others. Any termination of these licenses, in particular from Johns Hopkins, could result in the loss of significant rights and could harm our ability to commercialize our product candidates. See the sections of this prospectus captioned “Business—Intellectual Property and “Business—Johns Hopkins License Agreement” for additional information regarding our license agreements.

Disputes may also arise between us and our licensors regarding intellectual property subject to a license agreement, including those relating to:

- the scope of rights granted under the license agreement and other interpretation-related issues;
- whether and the extent to which our technology and processes infringe on intellectual property of the licensor that is not subject to the license agreement;
- our right to sublicense patent and other rights to third parties under collaborative development relationships;
- whether we are complying with our diligence obligations with respect to the use of the licensed technology in relation to our development and commercialization of our product candidates; and
- the allocation of ownership of inventions and know-how resulting from the joint creation or use of intellectual property by our licensors and by us and our partners.

If disputes over intellectual property that we have licensed prevent or impair our ability to maintain our current licensing arrangements on acceptable terms, we may be unable to successfully develop and commercialize the affected product candidates. We are generally also subject to all of the same risks with respect to protection of intellectual property that we license as we are for intellectual property that we own, which are described below. If we or our licensors fail to adequately protect this intellectual property, our ability to commercialize our products could suffer.

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

While we have significant control over the filing, prosecution, and maintenance of our patents licensed from Johns Hopkins, our filing, prosecution, and maintenance of these licensed patents is subject to approval of the licensor. We generally have the first right to enforce our patent rights, although our ability to settle such claims often requires the consent of the licensor. If our licensors or any future licensees having rights to file, prosecute, maintain, and defend our patent rights fail to conduct these activities for patents or patent applications covering any of our product candidates, our ability to develop and commercialize those product candidates may be adversely affected and we may not be able to prevent competitors from making, using, or selling competing products. We cannot be certain that such activities by our licensors have been or will be conducted in compliance with applicable laws and regulations or will result in valid and enforceable patents or other intellectual property rights. Pursuant to the terms of such license agreements, the licensors may have the right to control enforcement

of our licensed patents or defense of any claims asserting the invalidity of these patents and, even if we are permitted to pursue such enforcement or defense, we cannot ensure the cooperation of our licensors. We cannot be certain that our licensors will allocate sufficient resources or prioritize their or our enforcement of such patents or defense of such claims to protect our interests in the licensed patents. Even if we are not a party to these legal actions, an adverse outcome could harm our business because it might prevent us from continuing to license intellectual property that we may need to operate our business. In addition, even when we have the right to control patent prosecution of licensed patents and patent applications, enforcement of licensed patents, or defense of claims asserting the invalidity of those patents, we may still be adversely affected or prejudiced by actions or inactions of our licensors and their counsel that took place prior to or after our assuming control.

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

We own or license from third parties certain intellectual property rights necessary to develop our product candidates. The growth of our business may depend in part on our ability to acquire or in-license additional proprietary rights. For example, our programs may involve additional product candidates that may require the use of additional proprietary rights held by third parties. We may be unable to acquire or in-license any relevant third-party intellectual property rights that we identify as necessary or important to our business operations. We may fail to obtain any of these licenses at a reasonable cost or on reasonable terms, if at all, which would harm our business. We may need to cease use of the compositions or methods covered by such third-party intellectual property rights, and may need to seek to develop alternative approaches that do not infringe on such intellectual property rights which may entail additional costs and development delays, even if we were able to develop such alternatives, which may not be feasible. Even if we are able to obtain a license under such intellectual property rights, any such license may be non-exclusive, which may allow our competitors access to the same technologies licensed to us.

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

The licensing and acquisition of third-party intellectual property rights is a competitive practice, and companies that may be more established, or have greater resources than we do, may also be pursuing strategies to license or acquire third-party intellectual property rights that we may consider necessary or attractive in order to commercialize our product candidates. More established companies may have a competitive advantage over us due to their larger size and cash resources or greater clinical development and commercialization capabilities. There can be no assurance that we will be able to successfully complete such negotiations and ultimately acquire the rights to the intellectual property surrounding the additional product candidates that we may seek to acquire.

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

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

- if and when any patents will issue;
- the degree and range of protection any issued patents will afford us against competitors, including whether third parties will find ways to invalidate or otherwise circumvent our patents;

- whether others will apply for or obtain patents claiming aspects similar to those covered by our patents and patent applications; or
- whether we will need to initiate litigation or administrative proceedings to defend our patent rights, which may be costly whether we win or lose.

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

The strength of patents in the biotechnology and pharmaceutical field can be uncertain, and evaluating the scope of such patents involves complex legal and scientific analyses. The patent applications that we own or in-license may fail to result in issued patents with claims that cover our product candidates, methods of making our product candidates, or uses thereof in the United States or in other foreign countries. Even if the patents do successfully issue, third parties may challenge the validity, enforceability, or scope thereof, which may result in such patents being narrowed, invalidated, or held unenforceable. Furthermore, even if they are unchallenged, our patents and patent applications may not adequately protect our intellectual property or prevent others from designing their products to avoid being covered by our claims. If the breadth or strength of protection provided by the patents and patent applications we hold with respect to our product candidates is threatened, this could dissuade companies from collaborating with us to develop, and could threaten our ability to commercialize, our product candidates. Further, if we encounter delays in our clinical trials, the period of time during which we could market our product candidates under patent protection would be reduced. Because patent applications in the United States and most other countries are confidential for a period of time after filing, we cannot be certain that we were the first to file any patent application related to our product candidates. Furthermore, for U.S. applications in which all claims are entitled to a priority date before March 16, 2013, an interference proceeding can be provoked by a third party or instituted by the USPTO to determine who was the first to invent any of the subject matter covered by the patent claims of our applications. For U.S. applications containing a claim not entitled to priority before March 16, 2013, there is a greater level of uncertainty in the patent law in view of the passage of the America Invents Act, which brought into effect significant changes to the U.S. patent laws, including new procedures for challenging pending patent applications and issued patents.

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

In addition to the protection afforded by patents, we seek to rely on trade secret protection and confidentiality agreements to protect proprietary know-how that is not patentable or that we elect not to patent, processes for which patents are difficult to enforce, and any other elements of our product discovery and development processes that involve proprietary know-how, information, or technology that is not covered by patents. Trade secrets, however, may be difficult to protect. We seek to protect our proprietary processes, in part,

by entering into confidentiality agreements with our employees, consultants, outside scientific advisors, contractors, and collaborators. Although we use reasonable efforts to protect our trade secrets, our employees, consultants, outside scientific advisors, contractors, and collaborators might intentionally or inadvertently disclose our trade secret information to competitors. In addition, competitors may otherwise gain access to our trade secrets or independently develop substantially equivalent information and techniques. Furthermore, the laws of some foreign countries do not protect proprietary rights to the same extent or in the same manner as the laws of the United States. As a result, we may encounter significant problems in protecting and defending our intellectual property both in the United States and abroad. If we are unable to prevent unauthorized material disclosure of our intellectual property to third parties, or misappropriation of our intellectual property by third parties, we will not be able to establish or maintain a competitive advantage in our market, which could materially adversely affect our business, operating results, and financial condition.

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

Our commercial success depends in part on our avoiding infringement of the patents and proprietary rights of third parties. There is a substantial amount of litigation involving patents and other intellectual property rights in the biotechnology and pharmaceutical industries, as well as administrative proceedings for challenging patents, including interference, derivation, and reexamination proceedings before the USPTO or oppositions and other comparable proceedings in foreign jurisdictions. Recently, due to changes in U.S. law referred to as patent reform, procedures including inter parties review and post-grant review have been implemented. As stated above, this reform adds uncertainty to the possibility of challenge to our patents in the future.

Numerous U.S. and foreign issued patents and pending patent applications owned by third parties exist in the fields in which we are developing our product candidates. As the biotechnology and pharmaceutical industries expand and more patents are issued, the risk increases that our product candidates may give rise to claims of infringement of the patent rights of others.

Although we have conducted analyses of the patent landscape with respect to our product candidates, and based on these analyses, we believe that we will be able to commercialize our product candidates, third parties may nonetheless assert that we infringe their patents, or that we are otherwise employing their proprietary technology without authorization, and may sue us. While we are aware of at least one third-party U.S. patent that is relevant to our planned products, it will expire prior to our currently planned commercial launch. There may be other third-party patents of which we are currently unaware with claims to compositions, methods of manufacture, or methods of use or treatment that cover our product candidates. Because patent applications can take many years to issue, there may be currently pending patent applications that may later result in issued patents that our product candidates may infringe. In addition, third parties may obtain patents in the future and claim that use of our technologies or the manufacture, use, or sale of our product candidates infringes upon these patents. If any such third-party patents were held by a court of competent jurisdiction to cover our technologies or product candidates, the holders of any such patents may be able to block our ability to commercialize the applicable product candidate unless we obtain a license under the applicable patents, or until such patents expire or are finally determined to be held invalid or unenforceable. Such a license may not be available on commercially reasonable terms or at all. If we are unable to obtain a necessary license to a third-party patent on commercially reasonable terms, our ability to commercialize our product candidates may be impaired or delayed, which could in turn significantly harm our business.

Third parties asserting their patent rights against us may seek and obtain injunctive or other equitable relief, which could effectively block our ability to further develop and commercialize our product candidates. Defense of these claims, regardless of their merit, would involve substantial litigation expense and would be a substantial diversion of management and other employee resources from our business, and may impact our reputation. In the event of a successful claim of infringement against us, we may have to pay substantial damages, including treble

damages and attorneys' fees for willful infringement, obtain one or more licenses from third parties, pay royalties, or redesign our infringing products, which may be impossible or require substantial time and monetary expenditure. In that event, we would be unable to further develop and commercialize our product candidates, which could harm our business significantly.

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

Filing, prosecuting, maintaining and defending patents on product candidates in all countries throughout the world would be prohibitively expensive, and our intellectual property rights in some countries outside the United States can have a different scope and strength than do those in the United States. To date, in addition to the United States, we have filed patent applications in Australia, Brazil, Canada, China, Europe (via European Patent Office, or EPO), Hong Kong, India, Israel, Japan, Russian Federation, South Korea, Mexico, and Singapore. In addition, the laws of some foreign countries, such as China, Brazil, Russia, and India, 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 against importation of infringing products is challenging or legal remedies are insufficient. These products may compete with our products and our patents or other intellectual property rights may not be effective or adequate to prevent them from competing.

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

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

Competitors may infringe our patents or the patents of our licensors. To cease such infringement or unauthorized use, we may be required to file patent infringement claims, which can be expensive and time-consuming. In addition, in an infringement proceeding or a declaratory judgment action against us, a court may decide that one or more of our patents is not valid or is unenforceable, or may refuse to stop the other party from using the technology at issue on the grounds that our patents do not cover the technology in question. An adverse result in any litigation or defense proceeding could put one or more of our patents at risk of being invalidated, held unenforceable, or interpreted narrowly and could put our patent applications at risk of not issuing. Defense of these claims, regardless of their merit, would involve substantial litigation expense and would be a substantial diversion of employee resources from our business.

Interference or derivation proceedings provoked by third parties or brought by the USPTO may be necessary to determine the priority of inventions with respect to, or the correct inventorship of, our patents or patent applications or those of our licensors. An unfavorable outcome could result in a loss of our current patent rights

and could require us to cease using the related technology or to attempt to license rights to it from the prevailing party. Our business could be harmed if the prevailing party does not offer us a license on commercially reasonable terms. Litigation, interference, or derivation proceedings may result in a decision adverse to our interests and, even if we are successful, may result in substantial costs and distract our management and other employees.

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

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

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

Changes in U.S. patent law could diminish the value of patents in general, thereby impairing our ability to protect our products.

As is the case with other biopharmaceutical companies, our success is heavily dependent on intellectual property, particularly patents. Obtaining and enforcing patents in the biopharmaceutical industry involves, both technological and legal complexity, and is therefore costly, time-consuming, and inherently uncertain. In addition, the United States has recently enacted and is currently implementing wide-ranging patent reform legislation. Recent U.S. Supreme Court rulings have narrowed the scope of patent protection available in certain circumstances and weakened the rights of patent owners in certain situations. In addition to increasing uncertainty with regard to our ability to obtain patents in the future, this combination of events has created uncertainty with respect to the value of patents once obtained. Depending on decisions by the U.S. Congress, the federal courts, and the USPTO, the laws and regulations governing patents could change in unpredictable ways that would weaken our ability to obtain new patents or to enforce our existing patents and patents that we might obtain in the future. For example, in, *Assoc. for Molecular Pathology v. Myriad Genetics, Inc.*, the U.S. Supreme Court held that certain claims to naturally-occurring substances are not patentable. Although we do not believe that any of the patents owned or licensed by us will be found invalid based on this decision, we cannot predict how future decisions by the courts, the U.S. Congress or the USPTO may impact the value of our patents.

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

We have received confidential and proprietary information from third parties. In addition, we employ individuals who were previously employed at other biotechnology or pharmaceutical companies. We may be

subject to claims that we or our employees, consultants, or independent contractors have inadvertently or otherwise used or disclosed confidential information of these third parties or our employees' former employers. Litigation may be necessary to defend against these claims. Even if we are successful in defending against these claims, litigation could result in substantial cost and be a distraction to our management and employees.

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

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

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

Patents have a limited lifespan. In the United States and most foreign jurisdictions, the natural expiration of a patent is generally 20 years after its first effective filing date. Although various extensions may be available, the life of a patent, and the protection it affords, is limited. Even if patents covering our product candidates are obtained, once the patent life has expired for a product, we may be open to competition from biosimilars. Our issued patents will expire on dates ranging from 2034 to 2035, subject to any patent extensions that may be available for such patents. If patents are issued on our pending patent applications, the resulting patents are projected to expire on dates ranging from 2034 to 2039. In addition, although upon issuance in the United States a patent's life can be increased based on certain delays caused by the USPTO, this increase can be reduced or eliminated based on certain delays caused by the patent applicant during patent prosecution. If we do not have sufficient patent life to protect our products, our business and results of operations will be adversely affected.

We may face competition from biosimilars, which may have a material adverse impact on the future commercial prospects of our product candidates.

Even if we are successful in achieving regulatory approval to commercialize a product candidate faster than our competitors, we may face competition from biosimilars. The Patient Protection and Affordable Care Act, which was signed into law in March 2010, included a subtitle called the Biologics Price Competition and Innovation Act of 2009, or the BPCIA. The BPCIA established a regulatory scheme authorizing the FDA to approve biosimilars and interchangeable biosimilars. While certain biosimilar products have been approved by the FDA for use in the United States, none of these have been cell therapy products and none have been interchangeable biosimilars. The FDA has issued several guidance documents outlining an approach to review and approval of biosimilars. Additional guidances are expected to be finalized by the FDA in the near term.

Under the BPCIA, a manufacturer may submit an application for licensure of a biologic product that is "biosimilar to" or "interchangeable with" a previously approved biological product or "reference product." In order for the FDA to approve a biosimilar product, it must find that the product is "highly similar" to the reference product notwithstanding minor differences in clinically inactive components and that there are no clinically meaningful differences between the reference product and proposed biosimilar product in terms of safety, purity, and potency. For the FDA to approve a biosimilar product as interchangeable with a reference

product, the agency must find that the biosimilar product can be expected to produce the same clinical results as the reference product, and, for products administered multiple times, that the biologic and the reference biologic may be switched after one has been previously administered without increasing safety risks or risks of diminished efficacy relative to exclusive use of the reference biologic.

Under the BPCIA, an application for a biosimilar product may not be submitted to the FDA until four years following the date of approval of the reference product. The FDA may not approve a biosimilar product until 12 years from the date on which the reference product was approved. Even if a product is considered to be a reference product eligible for exclusivity, another company could market a competing version of that product if the FDA approves a full BLA for such product containing the sponsor's own non-clinical data and data from adequate and well-controlled clinical trials to demonstrate the safety, purity, and potency of their product. The BPCIA also created certain exclusivity periods for biosimilars approved as interchangeable products. At this juncture, it is unclear whether products deemed "interchangeable" by the FDA will, in fact, be readily substituted by pharmacies, which are governed by state pharmacy law.

If competitors are able to obtain marketing approval for biosimilars referencing our products, our products may become subject to competition from such biosimilars, with the attendant competitive pressure and consequences.

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

Although we are not currently experiencing any claims challenging the inventorship of our patents or ownership of our intellectual property, we may in the future be subject to claims that former employees, collaborators, or other third parties have an interest in our patents or other intellectual property as an inventor or co-inventor. For example, we may have inventorship disputes arise from conflicting obligations of consultants or others who are involved in developing our product candidates. Litigation may be necessary to defend against these and other claims challenging inventorship. If we fail in defending any such claims, in addition to paying monetary damages, we may lose valuable intellectual property rights, such as exclusive ownership of, or right to use, valuable intellectual property. Such an outcome could have a material adverse effect on our business. Even if we are successful in defending against such claims, litigation could result in substantial costs and be a distraction to management and other employees.

Risks Related to the Commercialization of Our Product Candidates

Our product candidates have never been manufactured on a commercial scale, and there are risks associated with scaling up manufacturing to commercial scale.

Our product candidates have never been manufactured on a commercial scale, and there are risks associated with scaling up manufacturing to commercial scale including, among others, cost overruns, potential problems with process scale-up, process reproducibility, stability issues, lot consistency and timely availability of raw materials. There is no assurance that our manufacturers will be successful in establishing a larger-scale commercial manufacturing process for NEXI-001, NEXI-002 or other product candidates that achieves our objectives for manufacturing capacity and cost of goods. Even if we could otherwise obtain regulatory approval for any product candidate, there is no assurance that our manufacturers will be able to manufacture the approved product to specifications acceptable to the FDA or other regulatory authorities, to produce it in sufficient quantities to meet the requirements for the potential launch of the product or to meet potential future demand. If our manufacturers are unable to produce sufficient quantities of the approved product for commercialization, our commercialization efforts would be impaired, which would have an adverse effect on our business, financial condition, results of operations and growth prospects.

Biologics carry unique risks and uncertainties, which could have a negative impact on future results of operations.

The successful discovery, development, manufacturing and sale of biologics is a long, expensive and uncertain process. There are unique risks and uncertainties with biologics. For example, access to and supply of necessary biological materials, such as cell lines, may be limited and governmental regulations restrict access to and regulate the transport and use of such materials. In addition, the development, manufacturing and sale of biologics is subject to regulations that are often more complex and extensive than the regulations applicable to other pharmaceutical products. Manufacturing biologics, especially in large quantities, is often complex and may require the use of innovative technologies. Such manufacturing also requires facilities specifically designed and validated for this purpose and sophisticated quality assurance and quality control procedures. Biologics are also frequently costly to manufacture because production inputs are derived from living animal or plant material, and some biologics cannot be made synthetically. Failure to successfully discover, develop, manufacture and sell our biological product candidates would adversely impact our business and future results of operations.

Our product candidates for which we intend to seek approval may face generic or biosimilar competition sooner than anticipated.

Even if we are successful in achieving regulatory approval to commercialize a product candidate ahead of our competitors, our product candidates may face competition from biosimilar products. In the United States, our AIM technology-based product candidates are expected to be regulated by the FDA as biological products and we intend to seek approval for these product candidates pursuant to the BLA pathway. The Biologics Price Competition and Innovation Act of 2009, or BPCIA, created an abbreviated pathway for FDA approval of biosimilar and interchangeable biological products based on a previously licensed reference product. Under the BPCIA, an application for a biosimilar biological product cannot be approved by the FDA until 12 years after the original reference biological 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. While it is uncertain when such processes intended to implement BPCIA may be fully adopted by the FDA, any such processes could have a material adverse effect on the future commercial prospects for our product candidates.

We believe that any of our product candidates approved as a biological product under a BLA should qualify for the 12-year period of exclusivity available to reference biological products. However, there is a risk that this exclusivity could be shortened due to congressional action or otherwise, or that the FDA will not consider our product candidates to be reference biological products pursuant to its interpretation of the exclusivity provisions of the BPCIA for competing products, potentially creating the opportunity for generic follow-on biosimilar competition sooner than anticipated. 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-biological products is not yet clear, and will depend on a number of marketplace and regulatory factors that are still developing including whether a future competitor seeks an interchangeability designation for a biosimilar of one of our products. Under the BPCIA as well as state pharmacy laws, only interchangeable biosimilar products are considered substitutable for the reference biological product without the intervention of the health care provider who prescribed the original biological product. However, as with all prescribing decisions made in the context of a patient-provider relationship and a patient’s specific medical needs, health care providers are not restricted from prescribing biosimilar products in an off-label manner. In addition, a competitor could decide to forego the abbreviated approval pathway available for biosimilar products and to submit a full BLA for product licensure after completing its own preclinical studies and clinical trials. In such a situation, any exclusivity to which we may be eligible under the BPCIA would not prevent the competitor from marketing its biological product as soon as it is approved.

In Europe, the European Commission has granted marketing authorizations for several biosimilar products pursuant to a set of general and product class-specific guidelines for biosimilar approvals issued over the past

few years. In addition, companies may be developing biosimilar products in other countries that could compete with our products, if approved.

If competitors are able to obtain marketing approval for biosimilars referencing our product candidates, if approved, our future products may become subject to competition from such biosimilars, whether or not they are designated as interchangeable, 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 product candidates may have received approval.

Even if we are able to commercialize any of our product candidates, such products may become subject to unfavorable pricing regulations, third-party reimbursement practices or health care reform initiatives, which would harm our business.

The regulations that govern marketing approvals, pricing, coverage and reimbursement for new drug and biological products vary widely from country to country. Current and future legislation may change the approval requirements in ways that could involve additional costs and cause delays in obtaining approvals. Some countries require approval of the sale price of a drug before it can be marketed. In many countries, the pricing review period begins after marketing or product marketing approval is granted and, in some markets, prescription pharmaceutical pricing remains subject to continuing governmental control even after initial approval is granted. As a result, we may obtain marketing approval for a product in a particular country, but then be subject to price regulations that delay our commercial launch of the product, possibly for lengthy time periods, and negatively impact the revenues we are able to generate from the sale of the product in that country. Adverse pricing limitations may hinder our ability to recoup our investment in one or more product candidates, even if our product candidates obtain marketing approval.

Our ability to commercialize any product candidates successfully also will depend in part on the extent to which coverage and reimbursement for these product candidates and related treatments will be available from government authorities, private health insurers and other organizations. In the United States, reimbursement varies from payor to payor. Reimbursement agencies in Europe may be more conservative than federal health care programs or private health plans in the United States. For example, a number of cancer drugs are generally covered and paid for in the United States, but have not been approved for reimbursement in certain European countries. A primary trend in the US health care industry and elsewhere is cost containment. Government authorities and third-party payors have attempted to control costs by limiting coverage and the amount of payments for particular products. For example, payors may limit coverage to specific drug or biological products on an approved list, also known as a formulary, which might not include all of the FDA-approved drugs or biologics for a particular indication. Payors may require use of alternative therapies or a demonstration that a product is medically necessary for a particular patient before use of a product will be covered. Additionally, payors may seek to control utilization by imposing prior authorization requirements.

Increasingly, third-party payors are requiring that drug companies provide them with predetermined discounts from list prices and are challenging the prices charged for products. We cannot be sure that coverage will be available for any product candidate that we commercialize and, if coverage is available, what the level of reimbursement will be. Reimbursement may impact the demand for, or the price of, any product candidate for which we obtain marketing approval. Patients are unlikely to use our products, if they are approved for marketing, unless coverage is provided and reimbursement is adequate to cover a significant portion of the cost of such products. If reimbursement is not available or is available only to limited levels, we may not be able to successfully commercialize any product candidate for which we obtain marketing approval.

There may be significant delays in obtaining coverage and reimbursement for newly approved drugs and biologics, and coverage may be more limited than the purposes for which the drug is approved by the FDA or comparable foreign regulatory authorities. Moreover, eligibility for reimbursement does not imply that any drug will be paid for in all cases or at a rate that covers our costs, including research, development, manufacture, sale

and distribution. Interim reimbursement levels for new drugs, if applicable, may also not be sufficient to cover our costs and may not be made permanent. Reimbursement rates may vary according to the use of the drug and the clinical setting in which it is used, may be based on reimbursement levels already set for lower cost drugs and may be incorporated into existing payments for other services. Net prices for drugs may be reduced by mandatory discounts or rebates required by federal health care programs or private payors and by any future relaxation of laws that presently restrict imports of drugs from countries where they may be sold at lower prices than in the United States. In the United States, third-party payors often rely upon Medicare coverage policy and payment limitations in setting their own reimbursement policies. In the European Union, reference pricing systems and other measures may lead to cost containment and reduced prices. Our inability to promptly obtain coverage and profitable payment rates from both government-funded and private payors for any approved products that we develop could have a material adverse effect on our operating results, our ability to raise capital needed to commercialize products and our overall financial condition.

Further, there have been, and may continue to be, legislative and regulatory proposals at the US federal and state levels and in foreign jurisdictions directed at broadening the availability and containing or lowering the cost of healthcare including plans announced by the Trump Administration to reform the US pharmaceutical pricing system significantly through rulemaking and executive orders. In addition, existing legislation aimed at patient affordability in the United States such as the Affordable Care Act may be repealed or replaced. The continuing efforts of the government, insurance companies, managed care organizations and other third-party payors to contain or reduce costs of healthcare may adversely affect our ability to set prices for our products that would allow us to achieve or sustain profitability. In addition, governments may impose price controls on any of our products that obtain marketing approval, which may adversely affect our future profitability.

In some foreign countries, particularly the member states of the European Union, the pricing of prescription pharmaceuticals is subject to governmental control. In these countries, pricing negotiations with governmental authorities can be a long and expensive process after the receipt of marketing approval for a product candidate. In addition, there can be considerable pressure by governments and other stakeholders on prices and reimbursement levels, including as part of cost containment measures. Political, economic and regulatory developments may further complicate pricing negotiations, and pricing negotiations may continue after reimbursement has been obtained. Reference pricing used by various EU member states and parallel distribution, or arbitrage between low-priced and high-priced member states, can further reduce prices. In some countries, we may be required to conduct additional clinical trials that compare the cost-effectiveness of our product candidates to other available therapies in order to obtain reimbursement or pricing approval. Publication of discounts by third-party payors or authorities may lead to further pressure on prices or reimbursement levels within the country of publication and other countries. If reimbursement of our products is unavailable or limited in scope or amount in a particular country, or if pricing is set at unsatisfactory levels, we may be unable to achieve or sustain profitability for sales of any of our product candidates that are approved for marketing in that country and our business could be adversely affected.

We have no experience selling, marketing or distributing products and currently have no internal marketing and sales force. If we are unable to establish effective marketing and sales capabilities or enter into agreements with third parties to market and sell our product candidates, we may not be able to effectively market and sell our product candidates, if approved, or generate product revenues.

We currently have no sales, marketing or distribution capabilities and have no experience as a company in the sale or marketing of pharmaceutical products. There can be no assurance that we will be able to market and sell our products in the United States or overseas. In order to commercialize any product candidates, we must build on a territory-by-territory basis 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. Therefore, with respect to the commercialization of all or certain of our product candidates, we may choose to collaborate, either globally or on a territory-by-territory basis, 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 so, our success will depend, in part, on our ability to enter into and maintain collaborative relationships for such capabilities, such collaborators' strategic interest in the products under development and such collaborators' ability to successfully market and sell any such products.

If we are unable to enter into such arrangements when needed on acceptable terms or at all, we may not be able to successfully commercialize any of our product candidates that receive regulatory approval, or any such commercialization may experience delays or limitations. Further, to the extent that we depend on third parties for marketing and distribution, any revenues we receive will depend upon the efforts of such third parties, and there can be no assurance that such efforts will be successful.

To the extent that we decide not to, or are unable to, enter into collaborative arrangements with respect to the sales and marketing of our products, we may in the future need to establish an internal sales and marketing team with technical expertise and supporting distribution capabilities to commercialize our product candidates, which could be expensive, time-consuming and requiring significant attention of our executive officers to manage. Further, we may not have sufficient resources to allocate to the sales and marketing of our products.

Any failure or delay in the development of sales, marketing and distribution capabilities, through collaboration with one or more third parties or through internal efforts, would adversely impact the commercialization of any of our products that we obtain approval to market. As a result, our future product revenue will suffer and we may incur significant additional losses.

Risks Related to Our Common Stock and This Offering

There has been no prior public market for our common stock, the stock price of our common stock may be volatile or may decline regardless of our operating performance, an active trading market for our common stock may not develop and you may not be able to resell your shares at or above the initial public offering price.

Prior to this offering there has been no public market for shares of our common stock. You may not be able to sell your shares quickly or at the market price if trading in shares of our common stock is not active. The initial public offering price for our common stock will be determined through negotiations with the underwriters, and the negotiated price may not be indicative of the market price of the common stock after the offering. Although we have applied to list our common stock on The Nasdaq Global Market, an active or liquid market in our common stock may not develop upon the completion of this offering or, if it does develop, it may not be sustainable. As a result of these and other factors, you may be unable to resell your shares of our common stock at or above the initial public offering price.

Further, an inactive market may also impair our ability to raise capital by selling shares of our common stock and may impair our ability to enter into strategic collaborations or acquire companies or products by using our shares of common stock as consideration.

The price of our stock may be volatile, and you could lose all or part of your investment.

The trading price of our common stock following this offering is likely to be highly volatile and could be subject to wide fluctuations in response to various factors, some of which are beyond our control, including limited trading volume. In addition to the factors discussed in this "Risk Factors" section and elsewhere in this prospectus, these factors include:

- the commencement, enrollment, completion or results of our current Phase I/II clinical trials of NEXI-001 and NEXI-002;
- any delay in identifying and advancing a clinical candidate for our other programs;
- any delay in our regulatory filings for NEXI-001, NEXI-002 or our future product candidates and any adverse development or perceived adverse development with respect to the applicable regulatory

authority’s review of such filings, including without limitation the FDA’s issuance of a “refusal to file” letter or a request for additional information;

- adverse results or delays, suspensions or terminations in future preclinical studies or clinical trials;
- our decision to initiate a clinical trial, not to initiate a clinical trial or to terminate an existing clinical trial;
- adverse regulatory decisions, including failure to receive regulatory approval of NEXI-001, NEXI-002 or any other product candidate or the failure of a regulatory authority to accept data from preclinical studies or clinical trials conducted in other countries;
- changes in laws or regulations applicable to NEXI-001, NEXI-002 or any other product candidate, including but not limited to clinical trial requirements for approvals;
- adverse developments concerning our manufacturers;
- our inability to obtain adequate product supply for any approved product or inability to do so at acceptable prices;
- our inability to establish collaborations, if needed;
- our failure to commercialize our product candidates, if approved;
- additions or departures of key scientific or management personnel;
- unanticipated serious safety concerns related to the use of NEXI-001, NEXI-002 or any other product candidate;
- introduction of new products or services offered by us or our competitors;
- announcements of significant acquisitions, strategic partnerships, joint ventures or capital commitments by us or our competitors;
- our ability to effectively manage our growth;
- actual or anticipated variations in quarterly operating results;
- our cash position;
- our failure to meet the estimates and projections of the investment community or that we may otherwise provide to the public;
- publication of research reports about us or our industry, or product candidates in particular, or positive or negative recommendations or withdrawal of research coverage by securities analysts;
- changes in the market valuations of similar companies;
- changes in the structure of the healthcare payment systems;
- overall performance of the equity markets;
- sales of our common stock by us or our stockholders in the future;
- trading volume of our common stock;
- changes in accounting practices;
- ineffectiveness of our internal controls;
- disputes or other developments relating to proprietary rights, including patents, litigation matters and our ability to obtain patent protection for our technologies;
- significant lawsuits, including patent or stockholder litigation;

- general political and economic conditions; and
- other events or factors, many of which are beyond our control.

In addition, the stock market in general, and the market for biopharmaceutical companies in particular, have experienced extreme price and volume fluctuations that have often been unrelated or disproportionate to the operating performance of these companies, including as a result of the COVID-19 pandemic. Broad market and industry factors may negatively affect the market price of our common stock, regardless of our actual operating performance. If the market price of our common stock after this offering does not exceed the initial public offering price, you may not realize any return on your investment in us and may lose some or all of your investment. In the past, securities class action litigation has often been instituted against companies following periods of volatility in the market price of a company's securities. This type of litigation, if instituted, could result in substantial costs and a diversion of management's attention and resources.

We do not intend to pay dividends on our common stock so any returns will be limited to the value of our stock.

We currently anticipate that we will retain future earnings for the development, operation and expansion of our business and do not anticipate declaring or paying any cash dividends for the foreseeable future. Furthermore, future debt or other financing arrangements may contain terms prohibiting or limiting the amount of dividends that may be declared or paid on our common stock. Any return to stockholders will therefore be limited to the appreciation of their stock.

Our executive officers, directors and their affiliates and our principal stockholders own a significant percentage of our stock and will be able to exert significant control over matters subject to stockholder approval.

Based on shares outstanding as of , 2020 and immediately following the completion of this offering, our executive officers, directors and their affiliates and our principal stockholders will beneficially hold, in the aggregate, approximately % of our outstanding voting stock, excluding any shares purchased in this offering. These stockholders, acting together, would be able to significantly influence all matters requiring stockholder approval. These stockholders acquired their shares of common stock (including shares of common stock issuable upon the conversion of preferred stock) for less than the price of the shares of common stock being acquired in this offering, and these stockholders may have interests, with respect to their common stock, that are different from those of investors in this offering and the concentration of voting power among these stockholders may have an adverse effect on the price of our common stock. This concentration of ownership control may adversely affect the market price of our common stock by:

- delaying, deferring or preventing a change in control;
- entrenching our management and the board of directors;
- impeding a merger, consolidation, takeover or other business combination involving us that other stockholders may desire; and/or
- discouraging a potential acquirer from making a tender offer or otherwise attempting to obtain control of us.

See the "Principal Stockholders" section of this prospectus for more information regarding the ownership of our outstanding common stock by our executive officers, directors, principal stockholders and their affiliates.

If you purchase our common stock in this offering, you will incur immediate and substantial dilution in the book value of your shares.

The initial public offering price will be substantially higher than the pro forma as adjusted net tangible book value per share of our common stock after this offering. Investors purchasing common stock in this offering will

pay a price per share that substantially exceeds the pro forma as adjusted net tangible book value per share after this offering. As a result, investors purchasing common stock in this offering will incur immediate dilution of $ per share, based on the initial public offering price of $ per share, representing the difference between our pro forma as adjusted net tangible book value per share after giving effect to this offering and the initial public offering price. Further, investors purchasing common stock in this offering will contribute approximately % of the total amount invested by stockholders since our inception, but will own only approximately % of the shares of common stock outstanding after this offering.

This dilution is due to our investors who purchased shares prior to this offering having paid substantially less when they purchased their shares than the price offered to the public in this offering. To the extent outstanding options are exercised, there will be further dilution to new investors. As a result of the dilution to investors purchasing shares in this offering, investors may receive significantly less than the purchase price paid in this offering, if anything, in the event of our liquidation. For a further description of the dilution that you will experience immediately after this offering, see the section entitled "Dilution."

We are an emerging growth company and a smaller reporting company, and we cannot be certain if the reduced reporting requirements applicable to emerging growth companies will make our common stock less attractive to investors.

We are an emerging growth company, or EGC, as defined in the Jumpstart Our Business Startups Act, or the JOBS Act, enacted in April 2012. For as long as we continue to be an EGC, we may take advantage of exemptions from various reporting requirements that are applicable to other public companies that are not EGCs, including not being required to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act of 2002, as amended, or the Sarbanes-Oxley Act, reduced disclosure obligations regarding executive compensation in this prospectus and our periodic reports and proxy statements and exemptions from the requirements of holding nonbinding advisory votes on executive compensation and stockholder approval of any golden parachute payments not previously approved. We could be an EGC for up to five years following the year in which we complete this offering, although circumstances could cause us to lose that status earlier. We will remain an EGC until the earlier of (a) the last day of the fiscal year (i) following the fifth anniversary of the completion of this offering, (ii) in which we have total annual gross revenue of at least $1.07 billion or (iii) in which we are deemed to be a large accelerated filer, which requires the market value of our common stock that is held by non-affiliates to exceed $700.0 million as of the prior June 30th, and (b) the date on which we have issued more than $1.0 billion in non-convertible debt during the prior three-year period.

We are also a "smaller reporting company," meaning that the market value of our stock held by non-affiliates plus the proposed aggregate amount of gross proceeds to us as a result of this offering is less than $700.0 million and our annual revenue is less than $100.0 million during the most recently completed fiscal year. We may continue to be a smaller reporting company after this offering if either (1) the market value of our stock held by non-affiliates is less than $250.0 million or (2) our annual revenue is less than $100.0 million during the most recently completed fiscal year and the market value of our stock held by non-affiliates is less than $700.0 million. If we are a smaller reporting company at the time we cease to be an emerging growth company, we may continue to rely on exemptions from certain disclosure requirements that are available to smaller reporting companies. Specifically, as a smaller reporting company we may choose to present only the two most recent fiscal years of audited financial statements in our Annual Report on Form 10-K and, similar to emerging growth companies, smaller reporting companies have reduced disclosure obligations regarding executive compensation.

We may choose to take advantage of some, but not all, of the available exemptions. We have taken advantage of reduced reporting burdens in this prospectus. In particular, we have not included all of the executive compensation information that would be required if we were not an EGC. We cannot predict whether investors will find our common stock less attractive if we rely on certain or all of 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.

Under the JOBS Act, EGCs can also delay adopting new or revised accounting standards until such time as those standards apply to private companies, which may make our financial statements less comparable to companies that comply with new or revised accounting pronouncements as of public company effective dates.

We have identified a material weakness in our internal control over financial reporting related to our control environment. If we do not remediate the material weakness in our internal control over financial reporting, or if we fail to establish and maintain effective internal control, we may not be able to accurately report our financial results, which may cause investors to lose confidence in our reported financial information and may lead to a decline in the market price of our stock.

As a public company, we will be required to maintain internal control over financial reporting and to report any material weaknesses in such internal controls. Pursuant to Section 404 of the Sarbanes-Oxley Act, or Section 404, we will first be required to furnish a report by our management on our internal control over financial reporting for the year ending December 31, 2021. However, while we remain an emerging growth company, we will not be required to include an attestation report on internal control over financial reporting issued by our independent registered public accounting firm. To achieve compliance with Section 404 within the prescribed period, we will be engaged in a process to document and evaluate our internal control over financial reporting, which is both costly and challenging. In this regard, we will need to continue to dedicate internal resources, potentially engage outside consultants and adopt a detailed work plan to assess and document the adequacy of internal control over financial reporting, continue steps to improve control processes as appropriate, validate through testing that controls are functioning as documented and implement a continuous reporting and improvement process for internal control over financial reporting. Despite our efforts, there is a risk that we will not be able to conclude, within the prescribed timeframe or at all, that our internal control over financial reporting is effective as required by Section 404. If we identify one or more material weaknesses, it could result in an adverse reaction in the financial markets due to a loss of confidence in the reliability of our financial statements. A material weakness is a deficiency, or combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of our annual or interim financial statements will not be prevented, or detected and corrected on a timely basis.

In preparation for our initial public offering, we identified a material weakness in our internal control over financial reporting related to our control environment. More specifically, we have determined that our financial statement close process includes significant control gaps mainly driven by the small size of our accounting and finance staff and, a related significant lack of appropriate segregation of duties. We also determined that we have not maintained sufficient staffing or written policies and procedures for accounting and financial reporting, which contributed to the lack of a formalized process or controls for management's timely review and approval of financial information. Over the next several months, we plan to implement a number of measures to address the material weakness we have identified. We have recently hired additional accounting personnel with appropriate GAAP technical accounting expertise. We are also designing additional controls around identification, documentation and application of technical accounting guidance with particular emphasis on complex and non-routine transactions. These controls are expected to include the implementation of additional supervision and review activities by qualified personnel, and the adoption of additional policies and procedures related to accounting and financial reporting. We intend to complete the implementation of our remediation plan during 2021. In addition, we have engaged a third-party provider to help us assess and improve our internal controls in preparation for compliance with the Sarbanes-Oxley Act. However, we cannot assure you that we will be successful in remediating the material weakness we identified or that our internal control over financial reporting, as modified, will enable us to identify or avoid material weaknesses in the future.

We cannot assure you that management will be successful in retaining appropriate personnel; that newly engaged staff or outside consultants will be successful in identifying material weaknesses in the future; or that appropriate personnel will be identified and retained prior to these deficiencies resulting in material and adverse effects on our business.

Any failure to remediate the material weakness we identified or develop or maintain effective controls, or any difficulties encountered in their implementation or improvement, could harm our operating results or cause us to fail to meet our reporting obligations and may result in a restatement of our financial statements for prior periods. Any failure to remediate the material weakness we identified or implement and maintain effective internal control over financial reporting could also adversely affect the results of management reports and independent registered public accounting firm audits of our internal control over financial reporting that we will eventually be required to include in our periodic reports that will be filed with the SEC. Ineffective disclosure controls and procedures and ineffective internal control over financial reporting could also cause investors to lose confidence in our reported financial and other information, which would likely have a negative effect on the market price of our common stock.

Even if we are successful in remediating our material weaknesses, any disclosure controls and procedures or internal controls and procedures, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met. These inherent limitations include the realities that judgments in decision-making can be faulty, and that breakdowns can occur because of simple error or mistake. Additionally, controls can be circumvented by the individual acts of some persons, by collusion of two or more people or by an unauthorized override of the controls. Accordingly, because of the inherent limitations in our control system, misstatements or insufficient disclosures due to error or fraud may occur and not be detected.

Substantial amounts of our outstanding shares may be sold into the market when lock-up or market standoff periods end. If there are substantial sales of shares of our common stock, the price of our common stock could decline.

If our existing stockholders sell, or indicate an intention to sell, substantial amounts of our common stock in the public market after the lock-up and other legal restrictions on resale discussed in this prospectus lapse, the trading price of our common stock could decline. Based on shares of common stock outstanding as of   , 2020, upon the completion of this offering we will have outstanding a total of   shares of common stock. Of these shares, only the shares of common stock sold in this offering by us, plus any shares sold upon exercise of the underwriters' option to purchase additional shares, will be freely tradable without restriction in the public market immediately following this offering.

The lock-up agreements pertaining to this offering will expire 180 days from the date of this prospectus, subject to earlier release of all or a portion of the shares subject to such agreements by the representatives of the underwriters in this offering in their sole discretion. After the lock-up agreements expire, based upon the number of shares of common stock, on an as-converted basis, outstanding as of   , 2020, up to an additional   shares of common stock will be eligible for sale in the public market. Approximately   % of these additional shares are beneficially held by directors, executive officers and their affiliates and will be subject to certain limitations of Rule 144 under the Securities Act of 1933, as amended, or the Securities Act.

In addition, shares of common stock that are either subject to outstanding options or reserved for future issuance under our existing equity compensation plans will become eligible for sale in the public market to the extent permitted by the provisions of various vesting schedules, the lock-up agreements and Rule 144 and Rule 701 under the Securities Act. If these additional shares of common stock are sold, or if it is perceived that they will be sold, in the public market, the trading price of our common stock could decline. Additionally, the number of shares of our common stock reserved for issuance under our 2021 Stock Option and Incentive Plan, or the 2021 Plan, will automatically increase on January 1 of each year, beginning on January 1, 2022, by   % of the total number of shares of our capital stock outstanding on December 31 of the preceding calendar year, or a lesser number of shares determined by our board of directors or compensation committee. Unless our board of directors elects not to increase the number of shares available for future grant each year, our stockholders may experience additional dilution.

After this offering, the holders of shares of our common stock will be entitled to rights with respect to the registration of their shares under the Securities Act as provided under the terms of an investors' rights agreement between us and the holders of our redeemable convertible preferred stock, subject to the 180-day lock-up agreements described above. See "Description of Capital Stock—Registration Rights." Registration of these shares under the Securities Act would result in the shares becoming freely tradable without restriction under the Securities Act, except for shares held by affiliates, as defined in Rule 144 under the Securities Act. Any sales of securities by these stockholders could have a material adverse effect on the trading price of our common stock.

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

We expect to use the net proceeds from the transaction (1) to advance NEXI-001 and NEXI-002 through our Phase I/II clinical trials, (2) to further develop any additional product candidates that we select, (3) to expand our internal research and development capabilities, (4) to establish manufacturing capabilities, and (5) for working capital and other general corporate purposes. We may also use a portion of the net proceeds to acquire, license and invest in complementary products, technologies or businesses; however, we currently have no agreements or commitments to complete any such transaction. However, within the scope of our plan, and in light of the various risks to our business that are set forth in this section, our management will have broad discretion over the use of proceeds from this offering, and we could spend the proceeds from this offering in ways our stockholders may not agree with or that do not yield a favorable return, if at all. If we do not invest or apply the proceeds of this offering in ways that improve our operating results, we may fail to achieve expected financial results, which could cause our stock price to decline.

We cannot specify with certainty all of the particular uses for the net proceeds to be received upon the completion of this offering. In addition, the amount, allocation and timing of our actual expenditures will depend upon numerous factors, many of which are beyond our control. Accordingly, we will have broad discretion in using these proceeds. In addition, until the net proceeds are used, they may be placed in investments that do not produce significant income or that may lose value.

Anti-takeover provisions under our charter documents and Delaware law could delay or prevent a change of control which could limit the market price of our common stock and may prevent or frustrate attempts by our stockholders to replace or remove our current management.

Our amended and restated certificate of incorporation and amended and restated bylaws, which are to become effective upon the completion of this offering, contain provisions that could delay or prevent a change of control of our company or changes in our board of directors that our stockholders might consider favorable. Some of these provisions include:

- a board of directors divided into three classes serving staggered three-year terms, such that not all members of the board will be elected at one time;
- a prohibition on stockholder action through written consent, which requires that all stockholder actions be taken at a meeting of our stockholders;
- a requirement that special meetings of stockholders be called only by the board of directors acting pursuant to a resolution approved by the affirmative vote of a majority of the directors then in office;
- advance notice requirements for stockholder proposals and nominations for election to our board of directors;
- a requirement that no member of our board of directors may be removed from office by our stockholders except for cause and, in addition to any other vote required by law, upon the approval of not less than two-thirds of all outstanding shares of our voting stock then entitled to vote in the election of directors;

- a requirement of approval of not less than two-thirds of all outstanding shares of our voting stock to amend any bylaws by stockholder action or to amend specific provisions of our certificate of incorporation; and
- the authority of the board of directors to issue convertible preferred stock on terms determined by the board of directors without stockholder approval and which convertible preferred stock may include rights superior to the rights of the holders of common stock.

In addition, because we are incorporated in Delaware, we are governed by the provisions of Section 203 of the General Corporation Law of the State of Delaware, which may prohibit certain business combinations with stockholders owning 15% or more of our outstanding voting stock. These anti-takeover provisions and other provisions in our amended and restated certificate of incorporation and amended and restated bylaws could make it more difficult for stockholders or potential acquirers to obtain control of our board of directors or initiate actions that are opposed by the then-current board of directors and could also delay or impede a merger, tender offer or proxy contest involving our company. These provisions could also discourage proxy contests and make it more difficult for you and other stockholders to elect directors of your choosing or cause us to take other corporate actions you desire. Any delay or prevention of a change of control transaction or changes in our board of directors could cause the market price of our common stock to decline.

If securities or industry analysts do not publish research or publish inaccurate or unfavorable research about our business, our stock price and trading volume could decline.

The trading market for our common stock will depend in part on the research and reports that securities or industry analysts publish about us or our business. Securities and industry analysts do not currently, and may never, publish research on our company. If no securities or industry analysts commence coverage of our company, the trading price for our stock would likely be negatively impacted. In the event securities or industry analysts initiate coverage, if one or more of the analysts who covers us downgrades our stock or publishes inaccurate or unfavorable research about our business, our stock price may decline. If one or more of these analysts ceases coverage of our company or fails to publish reports on us regularly, demand for our stock could decrease, which might cause our stock price and trading volume to decline.

Our bylaws to be effective upon the consummation of this offering designate certain courts as the sole and exclusive forum for certain types of actions and proceedings that may be initiated by our stockholders, which could limit our stockholders' ability to obtain a favorable judicial forum for disputes with us or our directors, officers, or employees.

Our bylaws that will become effective upon the completion of this offering provide that, unless we consent in writing to an alternative forum, the Court of Chancery of the State of Delaware will be the sole and exclusive forum for any state law claims for (i) any derivative action or proceeding brought on our behalf, (ii) any action asserting a claim of breach of fiduciary duty owed by any of our directors, officers and employees to us or our stockholders, (iii) any action asserting a claim arising pursuant to any provision of the DGCL, our amended and restated certificate of incorporation or our bylaws (in each case, as they may be amended from time to time) or (iv) any action asserting a claim that is governed by the internal affairs doctrine, in each case subject to the Court of Chancery having personal jurisdiction over the indispensable parties named as defendants therein; provided, however, that this exclusive forum provision will not apply to any causes of action arising under Exchange Act. Our bylaws further provide that, unless we consent in writing to an alternative forum, the United States District Court for the District of Maryland will be the exclusive forum for resolving any complaint asserting a cause of action arising under the Securities Act. We have chosen the United States District Court for the District of Maryland as the exclusive forum for such Securities Act causes of action because our principal executive offices are located in Gaithersburg, Maryland. In addition, our amended and restated bylaws will provide that any person or entity purchasing or otherwise acquiring any interest in shares of our common stock is deemed to have notice of and consented to the foregoing provisions. We recognize that the forum selection clause in our bylaws may

impose additional litigation costs on stockholders in pursuing any such claims, particularly if the stockholders do not reside in or near the State of Delaware or the State of Maryland, as applicable. Additionally, the forum selection clause in our bylaws may limit our stockholders' ability to bring a claim in a forum that they find favorable for disputes with us or our directors, officers or employees, which may discourage such lawsuits against us and our directors, officers and employees even though an action, if successful, might benefit our stockholders. The Court of Chancery of the State of Delaware or the United States District Court for the District of Maryland may also reach different judgments or results than would other courts, including courts where a stockholder considering an action may be located or would otherwise choose to bring the action, and such judgments may be more or less favorable to us than our stockholders.

Because the applicability of the exclusive forum provision is limited to the extent permitted by applicable law, we do not intend that the exclusive forum provision would apply to suits brought to enforce any duty or liability created by the Exchange Act or any other claim for which the federal courts have exclusive jurisdiction. We also acknowledge that Section 22 of the Securities Act creates concurrent jurisdiction for federal and state courts over all suits brought to enforce any duty or liability created by the Securities Act or the rules and regulations thereunder and that there is uncertainty as to whether a court would enforce an exclusive forum provision for actions arising under the Securities Act.

Our disclosure controls and procedures may not prevent or detect all errors or acts of fraud.

Upon completion of this offering, we will become subject to certain reporting requirements of the Exchange Act. Our disclosure controls and procedures are designed to reasonably assure that information required to be disclosed by us in reports we file or submit under the Exchange Act is accumulated and communicated to management, recorded, processed, summarized and reported within the time periods specified in the rules and even if we are successful in remediating our material weakness, any disclosure controls and procedures or internal controls and procedures, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met. These inherent limitations include the realities that judgments in decision-making can be faulty, and that breakdowns can occur because of simple error or mistake. Additionally, controls can be circumvented by the individual acts of some persons, by collusion of two or more people or by an unauthorized override of the controls. Accordingly, because of the inherent limitations in our control system, misstatements or insufficient disclosures due to error or fraud may occur and not be detected.

General Risk Factors

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

As a public company, we will incur significant legal, accounting and other expenses that we did not incur as a private company. We will be subject to the reporting requirements of the Securities Exchange Act of 1934, as amended, or the Exchange Act, which will require, among other things, that we file with the SEC annual, quarterly and current reports with respect to our business and financial condition. In addition, the Sarbanes-Oxley Act, as well as rules subsequently adopted by the SEC and The Nasdaq Global Market to implement provisions of the Sarbanes-Oxley Act, impose significant requirements on public companies, including requiring establishment and maintenance of effective disclosure and financial reporting controls and changes in corporate governance practices. Further, in July 2010, the Dodd-Frank Wall Street Reform and Consumer Protection Act, or the Dodd-Frank Act, was enacted. There are significant corporate governance and executive compensation related provisions in the Dodd-Frank Act that require the SEC to adopt additional rules and regulations in these areas such as "say on pay" and proxy access. Recent legislation permits EGCs to implement many of these requirements over a longer period and up to five years from the pricing of this offering. Stockholder activism, the current political environment and the current high level of government intervention and regulatory reform may lead to substantial new regulations and disclosure obligations, which may lead to additional compliance costs and impact the manner in which we operate our business in ways we cannot currently anticipate.

We expect the rules and regulations applicable to public companies to substantially increase our legal and financial compliance costs and to make some activities more time-consuming and costly. If these requirements divert the attention of our management and personnel from other business concerns, they could have an adverse effect on our business. The increased costs will decrease our net income or increase our net loss, and may require us to reduce costs in other areas of our business or increase the prices of our products or services. For example, we expect these rules and regulations to make it more difficult and more expensive for us to obtain director and officer liability insurance and we may be required to incur substantial costs to maintain the same or similar coverage. We cannot predict or estimate the amount or timing of additional costs we may incur to respond to these requirements. The impact of these requirements could also make it more difficult for us to attract and retain qualified persons to serve on our board of directors, our board committees or as executive officers.

If we fail to maintain an effective system of internal control over financial reporting, we may not be able to accurately report our financial results or prevent fraud. As a result, stockholders could lose confidence in our financial and other public reporting, which would harm our business and the trading price of our common stock.

Effective internal controls over financial reporting are necessary for us to provide reliable financial reports and, together with adequate disclosure controls and procedures, are designed to prevent fraud. Any failure to implement required new or improved controls, or difficulties encountered in their implementation could cause us to fail to meet our reporting obligations. In addition, any testing by us conducted in connection with Section 404, or any subsequent testing by our independent registered public accounting firm, may reveal deficiencies in our internal controls over financial reporting that are deemed to be material weaknesses or that may require prospective or retroactive changes to our financial statements or identify other areas for further attention or improvement. Inferior internal controls could also cause investors to lose confidence in our reported financial information, which could have a negative effect on the trading price of our stock.

We will be required to disclose changes made in our internal controls and procedures on a quarterly basis and our management will be required to assess the effectiveness of these controls annually. However, for as long as we are an EGC, our independent registered public accounting firm will not be required to attest to the effectiveness of our internal controls over financial reporting pursuant to Section 404. We could be an EGC for up to five years. An independent assessment of the effectiveness of our internal controls over financial reporting could detect problems that our management's assessment might not. Undetected material weaknesses in our internal controls over financial reporting could lead to restatements of our financial statements and require us to incur the expense of remediation.

If securities or industry analysts do not publish research or publish inaccurate or unfavorable research about our business, our stock price and trading volume could decline.

The trading market for our common stock will depend in part on the research and reports that securities or industry analysts publish about us or our business. Securities and industry analysts do not currently, and may never, publish research on our company. If no securities or industry analysts commence coverage of our company, the trading price for our stock would likely be negatively impacted. In the event securities or industry analysts initiate coverage, if one or more of the analysts who covers us downgrades our stock or publishes inaccurate or unfavorable research about our business, our stock price may decline. If one or more of these analysts ceases coverage of our company or fails to publish reports on us regularly, demand for our stock could decrease, which might cause our stock price and trading volume to decline.

Our issuance of additional capital stock in connection with potential future financings, acquisitions, investments, our stock incentive plans or otherwise will dilute all other stockholders.

We expect to issue additional capital stock in the future that will result in dilution to all other stockholders. We expect to grant equity awards to employees, directors and consultants under our stock incentive plans. We may also raise capital through equity financings in the future. As part of our business strategy, we may acquire or make investments in complementary companies, products or technologies and issue equity securities to pay for any such acquisition or investment. Any such issuances of additional capital stock may cause stockholders to experience significant dilution of their ownership interests and the per share value of our common stock to decline.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus contains forward-looking statements that involve risks and uncertainties. All statements other than statements of historical facts contained in this prospectus are forward-looking statements. In some cases, you can identify forward-looking statements by words such as “anticipate,” “believe,” “contemplate,” “continue,” “could,” “estimate,” “expect,” “intend,” “may,” “plan,” “potential,” “predict,” “project,” “seek,” “should,” “target,” “will,” “would,” or the negative of these words or other comparable terminology. These forward-looking statements include, but are not limited to, statements about:

- our use of the net proceeds from this offering;
- our ability to obtain and maintain regulatory approval of NEXI-001 and NEXI-002 and/or our other product candidates;
- our ability to successfully commercialize and market NEXI-001 and NEXI-002 and/or our other product candidates, if approved;
- our ability to contract with third-party suppliers, manufacturers and other service providers and their ability to perform adequately;
- the potential market size, opportunity and growth potential for NEXI-001 and NEXI-002 and/or our other product candidates, if approved;
- our ability to build our own sales and marketing capabilities, or seek collaborative partners, to commercialize NEXI-001 and NEXI-002 and/or our other product candidates, if approved;
- our ability to obtain funding for our operations;
- the initiation, timing, progress and results of our preclinical studies and clinical trials, and our research and development programs;
- the timing of anticipated regulatory filings;
- the timing of availability of data from our clinical trials;
- the impact of the ongoing COVID-19 pandemic and our response to it;
- our future expenses, capital requirements, need for additional financing and the period over which we believe that the net proceeds from this offering, together with our existing cash and cash equivalents, will be sufficient to fund our operating expenses and capital expenditure requirements;
- our ability to retain the continued service of our key professionals and to identify, hire and retain additional qualified professionals;
- our ability to advance product candidates into, and successfully complete, clinical trials;
- our ability to recruit and enroll suitable patients in our clinical trials;
- the timing or likelihood of the accomplishment of various scientific, clinical, regulatory and other product development objectives;
- the pricing and reimbursement of our product candidates, if approved;
- the rate and degree of market acceptance of our product candidates, if approved;
- the implementation of our business model and strategic plans for our business, product candidates and technology;
- the scope of protection we are able to establish and maintain for intellectual property rights covering our product candidates and technology;
- developments relating to our competitors and our industry;

- the accuracy of our estimates regarding expenses, capital requirements and needs for additional financing;
- the development of major public health concerns, including the novel coronavirus outbreak or other pandemics arising globally, and the future impact of it and COVID-19 on our clinical trials, business operations and funding requirements; and
- our financial performance.

These forward-looking statements are subject to a number of risks, uncertainties and assumptions, including those described in the “Risk Factors” section and elsewhere in this prospectus. Moreover, we operate in a very competitive and rapidly changing environment, and new risks emerge from time to time. It is not possible for our management to predict all risks, nor can we assess the impact of all factors on our business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward-looking statements we may make. In light of these risks, uncertainties and assumptions, the forward-looking events and circumstances discussed in this prospectus may not occur and actual results could differ materially and adversely from those anticipated or implied in the forward-looking statements.

You should not rely upon forward-looking statements as predictions of future events. Although we believe that the expectations reflected in the forward-looking statements are reasonable as of the date of this prospectus, we cannot guarantee that the future results, levels of activity, performance or events and circumstances reflected in the forward-looking statements will be achieved or occur. We undertake no obligation to update publicly any forward-looking statements for any reason after the date of this prospectus to conform these statements to new information, actual results or to changes in our expectations, except as required by law.

You should read this prospectus and the documents that we reference in this prospectus and have filed with the SEC, as exhibits to the registration statement of which this prospectus is a part with the understanding that our actual future results, levels of activity, performance, and events and circumstances may be materially different from what we expect.

USE OF PROCEEDS

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

Each $1.00 increase or decrease in the assumed initial public offering price of $ per share, which is the midpoint of the range set forth on the cover page of this prospectus, would increase or decrease the net proceeds to us from this offering by $ million, assuming that the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same. We may also increase or decrease the number of shares we are offering. Each increase or decrease of 1.0 million in the number of shares we are offering at the assumed initial public offering price would increase or decrease the net proceeds to us from this offering by $ million.

We intend to use the net proceeds from this offering, as follows:

- approximately $ million to $ million to advance the clinical development of NEXI-001, including to complete the dose escalation and expansion cohorts of our ongoing Phase I/II clinical trial in patients with acute myeloid leukemia.
- approximately $ million to $ million to advance the clinical development of NEXI-002, including to complete the dose escalation and expansion cohorts of our ongoing Phase I/II clinical trial in patients with multiple myeloma.
- approximately $ million to $ million to advance process development and manufacturing activities to prepare the NEXI-001 and NEXI-002 programs for potential future registrational trials, as well as ongoing protein and nanoparticle manufacturing for the rest of our pipeline;
- approximately $ million to $ million for further development of our preclinical programs towards IND filings and/or into clinical trials, as well as continued optimization of our AIM platform in new modailities and disease areas; and
- any remaining amounts to fund working capital and general corporate purposes.

Based on our planned use of the net proceeds, we estimate such funds, together with our existing cash and cash equivalents, will be sufficient for us to fund our operating expenses and capital expenditure requirements through the half of 2022. We have based this estimate on assumptions that may prove to be wrong, and we could use our available capital resources sooner than we expect.

Although we currently anticipate that we will use the net proceeds from this offering as described above, there may be circumstances where a reallocation of funds is necessary. Due to the uncertainties inherent in the product development process, it is difficult to estimate with certainty the exact amounts of the net proceeds from this offering that may be used for the above purposes. The amounts and timing of our actual expenditures will depend upon numerous factors, including our sales and marketing and commercialization efforts, demand for our products, if approved, our operating costs and the other factors described in the "Risk Factors" section of this prospectus. Accordingly, our management will have broad discretion in applying the net proceeds from this offering. In addition, we might decide to postpone or not pursue clinical trials or preclinical activities if the net proceeds from this offering and the other sources of cash are less than expected. An investor will not have the opportunity to evaluate the economic, financial or other information on which we base our decisions on how to use the proceeds.

Pending their use as described above, we plan to invest the net proceeds in short-term, interest-bearing obligations, investment-grade instruments, certificates of deposit or guaranteed obligations of the U.S. government.

DIVIDEND POLICY

We have never declared or paid cash dividends on our capital stock. We currently intend to retain all available funds and future earnings, if any, for use in the operation of our business and do not anticipate paying any cash dividends on our common stock in the foreseeable future. Investors should not purchase our common stock with the expectation of receiving cash dividends.

CAPITALIZATION

The following table sets forth our cash and cash equivalents and capitalization as of September 30, 2020 as follows:

- on an actual basis;
- on a pro forma basis to reflect (i) the filing and effectiveness of our amended and restated certificate of incorporation immediately prior to the completion of this offering, (ii) the automatic conversion of all outstanding shares of our preferred stock as of September 30, 2020 into an aggregate of 196,493,935 shares of our common stock upon the completion of this offering, including the shares of preferred stock issuable upon the automatic conversion of all of our outstanding convertible promissory notes upon the listing of our common stock on the Nasdaq Global Market assuming the listing had occurred on September 30, 2020; and
- on a pro forma as adjusted basis to additionally reflect the issuance and sale by us of shares of our common stock in this offering, at an assumed initial public offering price of $ per share, the midpoint of the estimated price range set forth on the cover page of this prospectus, after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us.

You should read this information together with our audited financial statements and related notes and our unaudited interim condensed financial statements and related notes appearing elsewhere in this prospectus and the information set forth in the “Selected Financial Data” and “Management’s Discussion and Analysis of Financial Condition and Results of Operations” sections of this prospectus.

	As of September 30, 2020		
	Actual	**Pro forma**	**Pro forma as adjusted(1)**
	(in thousands, except share and per share data)		
Cash and cash equivalents	$ 1,980	$	$
Convertible notes	$ 9,742	$ -	$ -
Series A Preferred Stock, $0.0001 par value: 121,735,303 shares authorized, actual, 121,735,303 shares issued and outstanding, actual; no shares authorized, issued or outstanding, pro forma and pro forma as adjusted	35,047	-	-
Series A-2 Preferred Stock, $0.0001 par value: 28,384,899 shares authorized, actual, 22,047,361 shares issued and outstanding, actual; no shares authorized, issued or outstanding, pro forma and pro forma as adjusted	7,686	-	-
Series A-3 Preferred Stock, $0.0001 par value: 34,061,879 shares authorized, actual, 31,209,734 shares issued and outstanding, actual; no shares authorized, issued or outstanding, pro forma and pro forma as adjusted	10,888	-	-
Stockholders (deficit) equity:			
Preferred stock, $0.0001 par value; no shares authorized, issued or outstanding, actual; shares authorized, no shares issued or outstanding, pro forma and pro forma as adjusted	-	-	-
Common stock, $0.0001 par value: 246,180,160 shares authorized, actual, 21,666,623 shares issued and outstanding, actual; shares authorized, pro forma, shares issued and outstanding, pro forma; shares authorized, pro forma as adjusted; shares issued and outstanding, pro forma as adjusted;	2		
Additional paid-in capital	6,714		
Accumulated deficit	(69,571)		
Total stockholders’ (deficit) equity	(62,855)		
Total capitalization	$ 508	$	$

(1) Our capitalization following the completion of this offering will depend on the actual initial public offering price, the timing of the listing of our common stock on the Nasdaq Global Market, and other terms of the offering determined at pricing. The pro forma as adjusted information discussed above is illustrative only. A $1.00 increase (decrease) in the assumed initial public offering price of $ per share, the midpoint of the estimated price range set forth on the cover page of this prospectus, would increase (decrease) the pro forma as adjusted amount of each cash and cash equivalents, additional paid-in capital, total stockholders' equity and total capitalization by $ million, assuming the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same and after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us. We may also increase or decrease the number of shares we are offering. Each increase (decrease) of 1,000,000 shares offered by us would increase (decrease) the pro forma as adjusted amount of each of cash and cash equivalents, additional paid-in-capital, total stockholders' equity and total capitalization on a pro forma as adjusted basis by $ million, assuming the assumed initial public offering price of $ per share, the midpoint of the estimated price range set forth on the cover page of this prospectus, remains the same, and after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us. In addition, for every month following September 30, 2020 that elapses prior to the completion of this offering, accrued interest on the convertible notes will increase by approximately $ and accordingly the number of shares of common stock to be outstanding after this offering will increase by shares.

The number of shares of our common stock outstanding as of September 30, 2020 excludes the following:

- 38,664,737 shares of our common stock issuable upon the exercise of outstanding stock options as of September 30, 2020, having a weighted-average exercise price of $0.20 per share;
- shares of common stock reserved for issuance pursuant to future awards under our 2021 Equity Incentive Plan, as amended, or the 2021 Plan;
- 1,578,692 shares of common stock reserved for issuance pursuant to future awards under our 2018 Equity Incentive Plan, as amended, or the 2018 Plan; and
- 46,112 shares of common stock reserved for issuance pursuant to future awards under our 2017 Equity Incentive Plan, as amended, or the 2017 Plan.

DILUTION

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

As of September 30, 2020, our historical net tangible book value deficit was $(62.9) million, or $(2.90) per share of common stock. Our historical net tangible book value deficit per share is equal to our total tangible assets, less total liabilities and preferred stock, divided by the number of outstanding shares of our common stock as of September 30, 2020.

As of September 30, 2020, the pro forma net tangible book value of our common stock was million, or $ per share of common stock, after giving effect to the automatic conversion of our outstanding preferred stock into 196,493,935 shares of our common stock upon the completion of this offering, including the shares of preferred stock issuable upon the automatic conversion of all of our outstanding convertible promissory notes upon the listing of our common stock on the Nasdaq Global Market assuming the listing had occurred on September 30, 2020.

After giving further effect to the sale of shares of common stock in this offering, at an assumed initial public offering price of $ per share, the midpoint of the estimated price range set forth on the cover page of this prospectus, after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us, our pro forma as adjusted net tangible book value as of September 30, 2020, would have been $ million, or $ per share of common stock. This represents an immediate increase in pro forma as adjusted net tangible book value of $ per share to our existing stockholders and an immediate dilution of $ per share to investors participating in this offering.

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

Assumed initial public offering price per share of our common stock		$
Historical net tangible book value deficit per share of our common stock as of September 30, 2020, before giving effect to this offering	$ (2.90)	
Increase per share attributable to the conversion of outstanding preferred stock and convertible promissory notes		
Pro forma net tangible book value per share as of September 30, 2020, before giving effect to this offering		
Increase in pro forma net tangible book value per share attributable to new investors participating in this offering		
Pro forma as adjusted net tangible book value per share of our common stock after giving effect to this offering		
Dilution per share of common stock to new investors participating in this offering		$

The information discussed above is illustrative only, and the dilution to investors in connection with this offering will depend on the actual initial public offering price and other terms of this offering determined at pricing. A $1.00 increase (decrease) in the assumed initial public offering price of $ per share, the midpoint of the estimated price range set forth on the cover page of this prospectus, would increase (decrease) the pro forma as adjusted net tangible book value by $ per share and the dilution to new investors by $ per share, assuming the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same, and after deducting the estimated underwriting discounts and commissions and estimated expenses payable by us. We may also increase or decrease the number of shares we are offering. An increase of 1,000,000 shares offered by us would increase the pro forma as adjusted net tangible book value by $ per share and decrease the dilution to new investors by $ per share, assuming the assumed initial public offering price of $ per

share, the midpoint of the estimated price range set forth on the cover page of this prospectus, remains the same and after deducting the estimated underwriting discounts and commissions and estimated expenses payable by us. Similarly, a decrease of 1,000,000 shares offered by us would decrease the pro forma as adjusted net tangible book value by $ per share and increase the dilution to new investors by $ per share, assuming the assumed initial public offering price of $ per share, the midpoint of the estimated price range set forth on the cover page of this prospectus, remains the same and after deducting the estimated underwriting discounts and commissions and estimated expenses payable by us.

If the underwriters exercise their option to purchase additional shares in full, the pro forma as adjusted net tangible book value as of September 30, 2020, will increase to $ million, or $ per share, representing an increase to existing stockholders of $ per share, and there will be an immediate dilution of $ per share to new investors.

The following table summarizes as of September 30, 2020, on the pro forma as adjusted basis as described above, the differences between the number of shares of common stock purchased from us, the total consideration and the average price per share paid by existing stockholders (giving effect to the automatic conversion of all of our preferred stock into 196,493,935 shares of our common stock upon the completion of this offering, including the shares of preferred stock issuable upon the automatic conversion of all of our outstanding convertible promissory notes upon the listing of our common stock on the Nasdaq Global Market assuming the listing had occurred on September 30, 2020) and by investors participating in this offering, before deducting the estimated underwriting discounts and commissions and estimated offering expenses, at an assumed initial public offering price of $ per share, the midpoint of the estimated price range set forth on the cover page of this prospectus.

	Shares Purchased		**Total Consideration**		**Weighted Average Price per Share**
	Number	**Percent**	**Amount**	**Percent**	
Existing stockholders		%	$	%	$
Investors participating in this offering					
Total		100%	$	100%	

Each $1.00 increase (decrease) in the assumed initial public offering price of $ per share, the midpoint of the estimated price range set forth on the cover page of this prospectus, would increase (decrease) the total consideration paid by new investors by $ million, and increase (decrease) the percentage of total consideration paid by new investors by %, assuming that the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same. Similarly, each increase (decrease) of 1,000,000 shares in the number of shares of common stock offered by us would increase (decrease) the total consideration paid by new investors by $ million and increase (decrease) the percentage of total consideration paid by new investors by % assuming that the assumed initial public offering price of $ per share, the midpoint of the estimated price range set forth on the cover page of this prospectus, remains the same.

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

The number of shares of common stock to be outstanding after this offering is based on 218,160,558 shares of common stock outstanding as of September 30, 2020, after giving effect to the automatic conversion of all of our outstanding shares of preferred stock into an aggregate of 196,493,935 shares of our common stock upon the completion of this offering, including the shares of preferred stock issuable upon the automatic conversion of all

of our outstanding convertible promissory notes upon the listing of our common stock on the Nasdaq Global Market assuming the listing had occurred on September 30, 2020, and excludes the following:

- 38,664,737 shares of our common stock issuable upon the exercise of outstanding stock options as of September 30, 2020, having a weighted-average exercise price of $0.20 per share;
- shares of common stock reserved for issuance pursuant to future awards under our 2021 Equity Incentive Plan, as amended, or the 2021 Plan;
- 1,578,692 shares of common stock reserved for issuance pursuant to future awards under our 2018 Equity Incentive Plan, as amended, or the 2018 Plan; and
- 46,112 shares of common stock reserved for issuance pursuant to future awards under our 2017 Equity Incentive Plan, as amended, or the 2017 Plan.

To the extent that any options are exercised, new options or other securities are issued under our equity incentive plans, or we issue additional shares of common stock in the future, there will be further dilution to investors participating in this offering. In addition, we may choose to raise additional capital because of market conditions or strategic considerations, even if we believe that we have sufficient funds for our current or future operating plans. If we raise additional capital through the sale of equity or convertible debt securities, the issuance of such securities would or could result in further dilution to our stockholders.

Table of Contents

SELECTED FINANCIAL DATA

We have derived the following selected statement of operations data for the years ended December 31, 2018 and 2019 and the balance sheet data as of December 31, 2018 and 2019 from our audited financial statements appearing elsewhere in this prospectus. We have derived the statement of operations data for the nine months ended September 30, 2019 and 2020 and the balance sheet data as of September 30, 2020 from our unaudited interim condensed financial statements appearing elsewhere in this prospectus, which have been prepared on the same basis as the audited financial statements. In the opinion of management, the unaudited interim condensed financial statements reflect all adjustments, consisting only of normal recurring adjustments, necessary for a fair statement of the financial information in those statements. You should read the following selected financial data together with our audited financial statements and the related notes and our unaudited interim condensed financial statements and the related notes appearing elsewhere in this prospectus and the "Management's Discussion and Analysis of Financial Condition and Results of Operations" section of this prospectus. The selected financial data contained in this section are not intended to replace our financial statements and the related notes. Our historical results are not necessarily indicative of the results that may be expected in any future period and our operating results for the nine months ended September 30, 2020 are not necessarily indicative of the results that may be expected for the full year ending December 31, 2020 or any other interim periods or any future year or period.

	Year Ended December 31,		Nine Months Ended September 30,	
	2018	2019	2019	2020
	(in thousands, except share and per share data)			
Statement of Operations Data:				
Operating expenses:				
Research and development	$ 7,999	$ 15,172	$ 11,473	$ 13,395
General and administrative	5,244	5,714	4,245	7,406
Total operating expenses	13,243	20,886	15,718	20,801
Loss from operations	(13,243)	(20,886)	(15,718)	(20,801)
Other income (expense):				
Interest income	274	254	228	21
Interest expense	(2)	(7)	(7)	(744)
Change in fair value of derivative liability	-	-	-	(397)
Other	137	92	72	66
Total other income (expense)	409	339	293	(1,054)
Net loss	(12,834)	(20,547)	(15,425)	(21,855)
Accumulated dividends on Redeemable Convertible Preferred Stock	(2,072)	(2,660)	(1,945)	(2,456)
Net loss attributable to common stockholders	$ (14,907)	$ (23,207)	$ (17,370)	$ (24,311)
Net loss	$ (12,834)	$ (20,547)	$ (15,425)	$ (21,855)
Unrealized gain (loss) on available-for-sale marketable securities, net of tax	(29)	30	31	-
Comprehensive loss	$ (12,863)	$ (20,517)	$ (15,394)	$ (21,855)
Net loss per share—basic and diluted	$ (0.77)	$ (1.08)	$ (0.81)	$ (1.12)
Weighted average common shares outstanding—basic and diluted	19,377,217	21,416,665	21,348,440	21,662,672
Pro forma weighted average common shares outstanding, basic and diluted (unaudited)				
Pro forma net loss per share—basic and diluted (unaudited)				

(1) See Note 3 to our financial statements and Note 3 to our unaudited interim condensed financial statements appearing elsewhere in this prospectus for details on the calculation of basic and diluted net loss per share and unaudited pro forma basic and diluted net loss per share.

	As of December 31,		As of September 30,
	2018	2019	2020
		(in thousands)	
Balance Sheet Data:			
Cash and cash equivalents	$ 426	$ 9,129	$ 1,980
Total assets	14,142	13,718	6,694
Working capital (deficit)(1)	9,331	8,012	(11,254)
Total liabilities	3,332	3,107	15,928
Redeemable convertible preferred stock	35,047	53,621	53,621
Total stockholders' deficit	(24,237)	(43,010)	(62,855)

(1) We define working capital deficit as current assets less current liabilities. See our audited financial statements and related notes and our unaudited interim condensed financial statements and related notes appearing elsewhere in this prospectus for further details regarding our current assets and current liabilities.

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

Overview

We are a clinical-stage biotechnology company developing a novel approach to immunotherapy designed to employ the body's own T cells to generate a specific, potent and durable immune response that mimics natural biology. Our mission is to create therapies with curative potential for patients with cancer and other life-threatening immune-mediated diseases. Currently, we have two product candidates in human trials: NEXI-001 in acute myeloid leukemia, or AML, and NEXI-002 in multiple myeloma, or MM.

We were incorporated under the laws of the State of Delaware on June 7, 2011. In June 2011, we exclusively licensed the core AIM technology from The Johns Hopkins University, or Johns Hopkins. See "Business—Johns Hopkins License Agreement" for information about this license.

To date, we have devoted substantially all of our resources to organizing and staffing our company, business planning, raising capital, identifying and developing product candidates, enhancing our intellectual property portfolio, undertaking research, conducting preclinical studies and clinical trials, and securing manufacturing for our development programs. We do not have any products approved for sale and have not generated any revenue from product sales. We have funded our operations primarily through the private placement of convertible preferred stock and convertible notes.

We have incurred significant operating losses since our inception, which are mainly attributed to research and development costs and employee payroll expense included in general and administrative expenses. Our net loss was $20.5 million for the year ended December 31, 2019 and $21.9 million for the nine months ended September 30, 2020. As of September 30, 2020, we had an accumulated deficit of $69.6 million. Our operating losses may fluctuate significantly from quarter-to-quarter and year-to-year as a result of several factors, including the timing of our preclinical studies and clinical trials and our expenditures related to other research and development activities. We expect to continue to incur operating losses for the foreseeable future. We anticipate these losses will increase substantially as we advance our product candidates through preclinical and clinical development, develop additional product candidates and seek regulatory approvals for our product candidates. We do not expect to generate any revenues from product sales unless and until we successfully complete development and obtain regulatory approval for one or more product candidates. In addition, if we obtain marketing approval for any product candidate, we expect to incur pre-commercialization expenses and significant commercialization expenses related to marketing, sales, manufacturing and distribution. We may also incur expenses in connection with the in-licensing of additional product candidates. Furthermore, upon completion of this offering, we expect to incur additional costs associated with operating as a public company, including significant legal, accounting, investor relations, compliance and other expenses that we did not incur as a private company.

As a result, we will need substantial additional funding to support our continuing operations and pursue our growth strategy. Until such time as we can generate significant revenue from sales of our product candidates, if ever, we expect to finance our cash needs through public or private equity offerings, debt financings, collaborations and licensing arrangements or other capital sources. However, we may be unable to raise

additional funds or enter into such other arrangements when needed on favorable terms or at all. Our failure to raise capital or enter into such other arrangements as and when needed would have a negative impact on our financial condition and could force us to delay, limit, reduce or terminate our product development or future commercialization efforts or grant rights to develop and market our product candidates that we would otherwise prefer to develop and market ourselves.

Because of the numerous risks and uncertainties associated with pharmaceutical product development, we are unable to accurately predict the timing or amount of increased expenses or when or if we will be able to achieve or maintain profitability. Even if we are able to generate product sales, we may not become profitable. If we fail to become profitable or are unable to sustain profitability on a continuing basis, we may be unable to continue our operations at planned levels and be forced to reduce or terminate our operations.

As of September 30, 2020, we had cash and cash equivalents of $2.0 million. See "—Liquidity and Capital Resources" below.

Components of our Results of Operations

Revenue

We have not generated any revenue since our inception and do not expect to generate any revenue from the sale of products in the near future, if at all.

Research and Development Expenses

To date, our research and development expenses, have related primarily to development of NEXI-001 and NEXI-002, preclinical studies and other preclinical activities related to our portfolio. Research and development expenses are recognized as incurred and payments made prior to the receipt of goods or services to be used in research and development are capitalized until the goods or services are received. Research and development expenses also include the accrual of minimum royalties under our Johns Hopkins license.

Research and development expenses include:

- salaries, payroll taxes, employee benefits and stock-based compensation charges for those individuals involved in research and development efforts;
- external research and development expenses incurred under agreements with contract research organizations, or CROs, and consultants to conduct our preclinical, toxicology and other preclinical studies;
- laboratory supplies;
- costs related to manufacturing product candidates, including fees paid to third-party manufacturers and raw material suppliers;
- license fees and research funding; and
- facilities, depreciation and other allocated expenses, which include direct and allocated expenses for rent, maintenance of facilities, insurance, equipment and other supplies.

Clinical trial costs are a significant component of research and development expenses and include costs associated with third-party contractors. We outsource a substantial portion of our clinical trial activities, utilizing external entities such as CROs, independent clinical investigators and other third-party service providers to assist us with the execution of our clinical trials. We also expect to incur additional expenses related to milestone and royalty payments payable to Johns Hopkins.

We plan to substantially increase our research and development expenses for the foreseeable future as we continue the development of our product candidates and seek to discover and develop new product candidates. Due to the inherently unpredictable nature of preclinical and clinical development, we cannot determine with certainty the timing of the initiation, duration or costs of future clinical trials and preclinical studies of product candidates. Clinical and preclinical development timelines, the probability of success and the amount of development costs can differ materially from expectations. We anticipate that we will make determinations as to which product candidates and development programs to pursue and how much funding to direct to each product candidate or program on an ongoing basis in response to the results of ongoing and future preclinical studies and clinical trials, regulatory developments and our ongoing assessments as to each product candidate's commercial potential. In addition, we cannot forecast which product candidates may be subject to future collaborations, when such arrangements will be secured, if at all, and to what degree such arrangements would affect our development plans and capital requirements.

Our future clinical development costs may vary significantly based on factors such as:

- per-patient trial costs;
- the number of trials required for regulatory approval;
- the number of sites included in the trials;
- the countries in which the trials are conducted;
- the length of time required to enroll eligible patients;
- the number of patients that participate in the trials;
- the number of doses that patients receive;
- the drop-out or discontinuation rates of patients;
- potential additional safety monitoring requested by regulatory agencies;
- the duration of patient participation in the trials and follow-up;
- the phase of development of the product candidate; and
- the efficacy and safety profile of the product candidate.

General and Administrative Expenses

General and administrative expenses consist primarily of salaries and employee-related costs, including stock-based compensation, for personnel in our executive, finance and other administrative functions. Other significant costs include facility related costs, legal fees relating to intellectual property and corporate matters, professional fees for accounting and consulting services and insurance costs. We anticipate that our general and administrative expenses will increase in the future to support our continued research and development activities, pre-commercialization and, if any product candidates receive marketing approval, commercialization activities. We also anticipate increased expenses related to audit, legal, regulatory and tax-related services associated with maintaining compliance with exchange listing and SEC requirements, director and officer insurance premiums and investor relations costs associated with operating as a public company.

Interest Income

Interest income consists of interest earned on our cash equivalents during the period.

Interest Expense

Interest expense consists of interest accrued on the convertible notes and interest recognized upon the amortization of the beneficial conversion feature, debt issuance costs and bifurcated derivative liability.

Change in Fair Value of Derivative Liability

The change in fair value of derivative liability consists entirely of the mark-to-market adjustment of the bifurcated derivative liability related to the convertible notes.

Results of Operations

Comparisons for the Years Ended December 31, 2018 and December 31, 2019

The following table summarizes our results of operations for each period presented:

	Year Ended December 31,		
	2018	2019	Change
	(in thousands)		
Operating expenses:			
Research and development	$ 7,999	$ 15,172	$ 7,173
General and administrative	5,244	5,714	470
Total operating expenses	13,243	20,886	7,643
Loss from operations	(13,243)	(20,886)	(7,643)
Other income:			
Interest income	274	254	(20)
Interest expense	(2)	(7)	(5)
Other income, net	137	92	(45)
Total other income	409	339	(70)
Net loss	$(12,834)	$(20,547)	$(7,713)

Research and Development Expenses. Research and development expenses were $8.0 million and $15.2 million for the years ended December 31, 2018 and 2019, respectively. The increase of $7.2 million was due primarily to increases of $1.7 million for salary and benefits resulting from increased headcount, increases in consulting expenses of $1.1 million for regulatory related activities, increases of $3.0 million for preclinical and manufacturing development work, as well as increases of $1.1 million on clinical trial expenses and $0.3 million for supplies. We have not historically tracked internal research and development expenses by product candidate.

General and Administrative Expenses. General and administrative expenses were $5.2 million and $5.7 million for the years ended December 31, 2018 and 2019, respectively. The increase of $0.5 million was due primarily to increases of $0.5 million in professional services related to corporate and patent related legal fees, $0.3 million for facility related charges and $0.2 million in stock based compensation charges expenses, offset by a $0.5 million decrease in salary related charges due to a severance accrual recorded in 2018.

Interest Income. Interest income was $0.3 million and $0.3 million for the years ended December 31, 2018 and 2019, respectively and consisted of interest earned on our available-for-sale marketable securities during the period.

Comparisons for the Nine Months Ended September 30, 2019 and September 30, 2020

The following table summarizes our results of operations for each period presented:

	Nine Months Ended September 30,		
	2019	2020	Change
	(in thousands)		
Operating expenses:			
Research and development	$ 11,473	$ 13,395	$ 1,922
General and administrative	4,245	7,406	3,161
Total operating expenses	15,718	20,801	5,083
Loss from operations	(15,718)	(20,801)	(5,083)
Other income:			
Interest income	228	21	(207)
Interest expense	(7)	(744)	(737)
Change in fair value of derivative liability	-	(397)	(397)
Other income	72	66	(6)
Total other income	293	(1,054)	(1,347)
Net loss	$ (15,425)	$ (21,855)	$ (6,430)

Research and Development Expenses. Research and development expenses were $11.5 million and $13.4 million for the nine months ended September 30, 2019 and 2020, respectively. The increase of $1.9 million was due primarily to increases of $2.9 million for clinical trial related expenses, and an increase of $1.0 million for salary and related expenses resulting from increased headcount, partially offset by decreases of $0.6 million in regulatory consulting fees and a decrease of $1.4 million in preclinical research and manufacturing expenses. We have not historically tracked internal research and development expenses by product candidate.

General and Administrative Expenses. General and administrative expenses were $4.2 million and $7.4 million for the nine months ended September 30, 2019 and 2020, respectively. The increase of $3.2 million was due primarily to increases of $2.4 million in professional fees for legal and accounting and a $0.8 million increase in salary and related expenses due to increased headcount.

Interest Income. Interest income was $0.2 million and $0.0 million for the nine months ended September 30, 2019 and 2020 and consisted of interest earned on our available-for-sale securities during the period. The decrease of $0.2 million was due primarily to the lower average balances during 2020.

Interest Expense. Interest expense was $0.0 million and $0.7 million for the nine months ended September 30, 2019 and 2020. The increase was due to an issuance of convertible debt during 2020.

Change in fair value of derivative liability. The change in fair value of derivative liability was $0.0 and $0.4 million for the nine months ended September 30, 2019 and 2020, respectively. The increase reflected the issuance of convertible debt during 2020 and the related, separately valued derivative.

Liquidity and Capital Resources

We have incurred net losses and negative cash flows from operations since our inception and anticipate we will continue to incur net losses for the foreseeable future. We incurred net losses of $12.8 million, $20.5 million and $21.9 million for the years ended December 31, 2018 and 2019 and the nine months ended September 30, 2020, respectively, and used $11.1 million, $19.4 million and $19.2 million of cash from our operating activities for the years ended December 31, 2018 and 2019 and the nine months ended September 30, 2020, respectively. As of September 30, 2020, we had an accumulated deficit of $69.6 million.

As of September 30, 2020, we had cash and cash equivalents of $2.0 million.

Sources of Liquidity

To date, we have financed our operations principally through private placements of our convertible preferred stock and our convertible promissory notes.

Series A Preferred Stock Financing

In December 2017 and July 2018, we issued an aggregate of 121,735,503 shares of our Series A Redeemable Convertible Preferred Stock at a purchase price of $0.2951 per share for aggregate consideration of $25.0 million plus conversion of convertible notes.

In January 2019 and February 2019, we issued an aggregate of 22,047,361 shares of our Series A-2 Preferred Stock at a purchase price of $0.3523 per share for aggregate consideration of $7.8 million.

In November 2019 and December 2019, we issued an aggregate of 31,209,734 shares of our Series A-3 Preferred Stock at a purchase price of $0.3523 per share for aggregate consideration of $11.0 million.

Convertible Note Financing

From April 2020 through September 30, 2020, we issued $10,918,286 aggregate principal amount of convertible notes, which bear interest at the rate of 6% per annum and mature in April 2021.

Subsequent to September 30, 2020 and through the date of this prospectus, we issued an additional $11,106,500 aggregate principal amount of convertible notes, which bear interest at the rate of 6% per annum and mature in April 2021.

Paycheck Protection Program Loan

On April 23, 2020, we entered into an unsecured loan agreement with JPMorgan Chase Bank, or Chase, under the terms of which Chase loaned us $843,619, or the PPP Loan, pursuant to the Paycheck Protection Program, or PPP, under the Coronavirus Aid, Relief, and Economic Security Act, or CARES Act. In accordance with the requirements of the CARES Act, we have used the proceeds primarily for payroll costs and other eligible expenses. The PPP Loan has a maturity date of April 23, 2022 and accrues interest at an annual rate of 0.98%. Interest and principal payments are deferred for the first six months of the loan. Thereafter, monthly interest and principal payments are due until the loan is fully satisfied. The promissory note evidencing the PPP Loan contains customary events of default resulting from, among other things, default in the payments. The use of loan proceeds must be for payroll costs, payment of interest on covered mortgage obligations, rent and utility costs over either an eight-week or 24-week period, at our option, following our receipt of the loan proceeds. We elected to use the proceeds over a 24-week period. We treat the PPP loan as debt under ASC 470, *Debt*. The CARES Act and the PPP provide a mechanism for forgiveness of up to the full amount borrowed. We intend to apply for forgiveness for the full amount of the PPP Loan, in which case we would not be required to repay the principal amount or accrued interest. There can be no assurance that we will obtain forgiveness of the PPP Loan in whole or in part.

Cash Flows

The following table sets forth a summary of the net cash flow activity for each period presented:

	Year Ended December 31,		Nine Months Ended September 30,	
	2018	2019	2019	2020
	(in thousands)			
Net cash provided by (used in):				
Operating activities	$(11,118)	$(19,416)	$(14,380)	$(19,213)
Investing activities	(12,642)	9,421	6,814	448
Financing activities	9,180	18,765	7,853	11,616
Net increase (decrease) in cash	$(14,580)	$ 8,770	$ 287	$ (7,149)

Operating Activities

Net cash used in operating activities was $14.4 million and $19.2 million for the nine months ended September 30, 2019 and 2020, respectively. The increase is cash usage resulted from the increase in net loss of $7.1 million from the increase in spending on our clinical programs and infrastructure growth adjusted for non-cash expenses and changes in working capital.

Net cash used in operating activities was $11.1 million and $19.4 million for the years ended December 31, 2018 and 2019, respectively. The increase in cash usage resulted from an increase in net loss of $7.7 million caused by increased spending on protein development and regulatory consulting expenses to prepare for IND filings and commencement of clinical trials, adjusted for non-cash expenses and changes in working capital.

Investing Activities

Net cash used in investing activities was primarily due to the net purchase of available-for-sale securities during 2018 and the net sales or maturities of available-for-sale securities in 2019 and 2020. In addition, there were purchases of property and equipment of $0.9 million during 2018, $1.2 million during 2019, and $0.6 million during the nine months ended September 30, 2020 primarily for laboratory equipment.

Financing Activities

Net cash provided by financing activities was $7.9 million for the nine months ended September 30, 2019, primarily due to proceeds from the sale of available –for-sale securities. Net cash provided by financing activities was $11.6 million for the nine months ended September 30, 2020, primarily due to the issuance of convertible debt, of $10.9 million and the receipt of a PPP loan for $0.8 million.

Funding Requirements

We believe that our existing cash and cash equivalents, together with the estimated net proceeds from this offering, will be sufficient to meet our anticipated cash requirements through   . However, our forecast of the period of time through which our financial resources will be adequate to support our operations is a forward-looking statement that involves risks and uncertainties, and actual results could vary materially. We have based this estimate on assumptions that may prove to be wrong, and we could deplete our capital resources sooner than we expect.

Our future capital requirements will depend on many factors, including:

- the initiation, progress, timing, costs and results of drug discovery, preclinical studies and clinical trials of NEXI-001 and NEXI-002 and any other future product candidates;
- the number and characteristics of product candidates that we pursue;
- the outcome, timing and costs of seeking regulatory approvals;
- the cost of manufacturing NEXI-001 and NEXI-002 and future product candidates for clinical trials in preparation for marketing approval and in preparation for commercialization;
- the costs associated with hiring additional personnel and consultants as our preclinical and clinical activities increase;
- the emergence of competing therapies and other adverse market developments;
- the ability to establish and maintain strategic licensing or other arrangements and the financial terms of such agreements;
- the costs involved in preparing, filing, prosecuting, maintaining, expanding, defending and enforcing patent claims, including litigation costs and the outcome of such litigation;

- the extent to which we in-license or acquire other products and technologies; and
- the costs of operating as a public company.

Until such time, if ever, as we can generate substantial product revenues to support our capital requirements, we expect to finance our cash needs through a combination of public or private equity offerings, debt financings, collaborations and licensing arrangements or other capital sources. To the extent that we raise additional capital through the sale of equity or convertible debt securities, the ownership interest of our stockholders will be or could be diluted, and the terms of these securities may include liquidation or other preferences that adversely affect the rights of our common stockholders. Debt financing and equity financing, if available, may involve agreements that include covenants limiting or restricting our ability to take specific actions, such as incurring additional debt, making capital expenditures or declaring dividends. If we raise funds through collaborations, or other similar arrangements with third parties, we may need to relinquish valuable rights to our product candidates, future revenue streams or research programs or may have to grant licenses on terms that may not be favorable to us and/or may reduce the value of our common stock. If we are unable to raise additional funds through equity or debt financings as and when needed, we may be required to delay, limit, reduce or terminate our product development or future commercialization efforts or grant rights to develop and market our product candidates even if we would otherwise prefer to develop and market such product candidates ourselves.

Contractual Obligations and Commitments

The following table summarizes our contractual obligations at September 30, 2020 (in thousands):

	Payments Due by Period				
	Total	Less than 1 Year	1-3 Years	3-5 Years	More than 5 Years
			(in thousands)		
Operating lease obligations	$704	$ 99	$605	$ -	$ -
Total	$704	$ 99	$605	$ -	$ -

We enter into contracts in the normal course of business with CROs, clinical supply manufacturers and vendors for preclinical studies, research supplies and other services and products for operating purposes. These contracts generally provide for termination after a notice period, and, therefore, are cancelable contracts and not included in the table above.

We have also entered into the Johns Hopkins Agreement. We have annual minimum royalties of $100,000 under this agreement but we have not included this and other future payments under this agreement in the table of contractual obligations above since obligations under this agreement are contingent upon future events such as our achievement of specified development, regulatory and commercial milestones, or royalties on net product sales. As of September 30, 2020, we were unable to estimate the timing or likelihood of achieving these milestones or generating future product sales.

Critical Accounting Policies and Significant Judgments and Estimates

Our management's discussion and analysis of our financial condition and results of operations is based on our financial statements, which have been prepared in accordance with U.S. generally accepted accounting principles. The preparation of these financial statements requires us to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues and expenses and the disclosure of contingent assets and liabilities in our financial statements. On an ongoing basis, we evaluate our estimates and judgments, including those related to accrued expenses and stock-based compensation. We base our estimates on historical experience, known trends and events, and various other factors that we believe to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Our actual results may differ from these estimates under different assumptions or conditions.

While our significant accounting policies are described in more detail in Note 3 to our financial statements appearing elsewhere in this prospectus, we believe the following accounting policies and estimates to be most critical to the preparation of our financial statements.

Accrued Research and Development Expenses

As part of the process of preparing our financial statements, we are required to estimate our accrued expenses as of each balance sheet date. This process involves reviewing open contracts and purchase orders, communicating with our personnel to identify services that have been performed on our behalf and estimating the level of service performed and the associated cost incurred for the service when we have not yet been invoiced or otherwise notified of the actual cost. We make estimates of our accrued expenses as of each balance sheet date based on facts and circumstances known to us at that time. We periodically confirm the accuracy of our estimates with the service providers and make adjustments, if necessary. The significant estimates in our accrued research and development expenses include the costs incurred for services performed by our vendors in connection with research and development activities for which we have not yet been invoiced.

We base our expenses related to research and development activities on our estimates of the services received and efforts expended pursuant to quotes and contracts with vendors that conduct research and development on our behalf. The financial terms of these agreements are subject to negotiation, vary from contract-to-contract and may result in uneven payment flows. There may be instances in which payments made to our vendors will exceed the level of services provided and result in a prepayment of the research and development expense. In accruing service fees, we estimate the time period over which services will be performed and the level of effort to be expended in each period. If the actual timing of the performance of services or the level of effort varies from our estimate, we adjust the accrual or prepaid expense accordingly. Advance payments for goods and services that will be used in future research and development activities are expensed when the activity has been performed or when the goods have been received rather than when the payment is made.

Although we do not expect our estimates to be materially different from amounts actually incurred, if our estimates of the status and timing of services performed differ from the actual status and timing of services performed, it could result in us reporting amounts that are too high or too low in any particular period. To date, there have been no material differences between our estimates of such expenses and the amounts actually incurred.

Derivative Financial Instruments

In connection with our issuance of the convertible notes due April 2021, we assessed all terms and features of the convertible notes to identify any potential embedded features that would require bifurcation. As part of this analysis, we assessed the economic characteristics and risks of the convertible notes including the conversion, put and call features. We bifurcated the share-settled redemption features and recorded them as a derivative liability in our balance sheet.

The derivative instruments are re-measured at the end of each reporting period with changes in fair value recorded in the statements of operations in other income (expense) as a change in fair value of the derivative liability. We utilize a valuation specialist in determining the fair value of the derivative liability. The fair value assessment incorporates management’s assumptions for probabilities of conversion occurrence through maturity, stock price, stock volatility, credit spread, risk-free interest rates and the stock dividend yield.

Stock-Based Compensation Expense

Stock-based compensation expense represents the cost of the grant date fair value of equity awards recognized over the requisite service period of the awards (usually the vesting period) on a straight-line basis. We

estimate the fair value of equity awards using the Black-Scholes option pricing model and recognize forfeitures as they occur. Estimating the fair value of equity awards as of the grant date using valuation models, such as the Black-Scholes option pricing model, is affected by assumptions regarding a number of variables, including the risk-free interest rate, the expected stock price volatility, the expected term of stock options, the expected dividend yield and the fair value of the underlying common stock on the date of grant. Changes in the assumptions can materially affect the fair value and ultimately how much stock-based compensation expense is recognized. These inputs are subjective and generally require significant analysis and judgment to develop. See Note 12 to our audited financial statements and unaudited interim financial statements included elsewhere in this prospectus for information concerning certain of the specific assumptions we used in applying the Black-Scholes option pricing model to determine the estimated fair value of our stock options granted in the year ended December 31, 2019 and the nine months ended September 30, 2019 and 2020.

As of September 30, 2020, there was $2.4 million of total unrecognized compensation expense related to the unvested stock options, which is expected to be recognized as expense over a weighted average period of approximately 2.6 years. The intrinsic value of all outstanding stock options as of September 30, 2020 was $ million, based on the estimated public offering price of $ per share, which is the midpoint of the estimated offering price range set forth on the cover page of this prospectus, of which $ million related to vested options and $ million related to unvested options.

Common stock valuations

We are required to estimate the fair value of the common stock underlying our equity awards when performing fair value calculations. The fair value of the common stock underlying our equity awards was determined on each grant date by our board of directors, taking into account input from management and independent third-party valuation analyses. All options to purchase shares of our common stock are intended to be granted with an exercise price per share no less than the fair value per share of our common stock underlying those options on the date of grant, based on the information known to us on the date of grant. In the absence of a public trading market for our common stock, on each grant date we develop an estimate of the fair value of our common stock in order to determine an exercise price for the option grants. Our determinations of the fair value of our common stock were made using methodologies, approaches and assumptions consistent with the American Institute of Certified Public Accountants Accounting and Valuation Guide: *Valuation of Privately Held Company Equity Securities Issued as Compensation*, or the Practice Aid.

Our board of directors considered various objective and subjective factors, along with input from management, to determine the fair value of our common stock, including:

- valuations of our common stock performed with the assistance of independent third-party valuation specialists;
- current and potential strategic relationships and licenses;
- our stage of development and business strategy, including the status of research and development efforts of our product candidates, and the material risks related to our business and industry;
- our results of operations and financial position, including our levels of available capital resources;
- the valuation of publicly traded companies in the life sciences and biotechnology sectors, as well as recently completed mergers and acquisitions of peer companies;
- the lack of marketability of our common stock as a private company;
- the prices of preferred stock sold to investors in arm’s length transactions and the rights, preferences and privileges of our preferred stock relative to those of our common stock;
- the likelihood of achieving a liquidity event for the holders of our common stock, such as an initial public offering or a sale of our company, given prevailing market conditions;

- trends and developments in our industry; and
- external market conditions affecting the life sciences and biotechnology industry sectors.

The Practice Aid prescribes several valuation approaches for setting the value of an enterprise, such as the cost, income and market approaches, and various methodologies for allocating the value of an enterprise to its common stock. The cost approach establishes the value of an enterprise based on the cost of reproducing or replacing the property less depreciation and functional or economic obsolescence, if present. The income approach establishes the value of an enterprise based on the present value of future cash flows that are reasonably reflective of our future operations, discounting to the present value with an appropriate risk-adjusted discount rate or capitalization rate. The market approach is based on the assumption that the value of an asset is equal to the value of a substitute asset with the same characteristics. Each valuation methodology was considered in our valuations.

The various methods for allocating the enterprise value across our classes and series of capital stock to determine the fair value of our common stock in accordance with the Practice Aid include the following:

Option Pricing Method, or OPM. Under the OPM, shares are valued by creating a series of call options with exercise prices based on the liquidation preferences and conversion terms of each equity class. The values of the preferred and common stock are inferred by analyzing these options.

Probability-Weighted Expected Return Method, or PWERM. The PWERM is a scenario-based analysis that estimates the value per share based on the probability-weighted present value of expected future investment returns, considering each of the possible outcomes available to us, as well as the economic and control rights of each equity class.

In determining the fair value of our common stock underlying stock option grants for the year ended December 31, 2019 and the nine months ended September 30, 2019, we estimated the enterprise value of our business using the back-solve method and the OPM to allocate enterprise value. The back-solve method is a market approach that assigns an implied enterprise value based on the most recent round of funding or investment and allows for the incorporation of the implied future benefits and risks of the investment decision assigned by an outside investor. We believed the OPM was the most appropriate method given the expectation of various potential liquidity outcomes and the difficulty of selecting and supporting appropriate enterprise values given our early stage of development.

Following the completion of this offering, the fair value of our common stock will be based on the closing price as reported on the date of grant on the primary stock exchange on which our common stock is traded.

Options Granted

The following table sets forth, by grant date, the number of shares subject to options granted from January 1, 2019 through September 30, 2020, the per share exercise price of the options, the fair value of common stock per share on each grant date, and the per share estimated fair value of the options:

Grant Date	Number of Shares Subject to Options Granted	Per Share Exercise Price of Options	Fair Value per Share on Grant Date	Per Share Estimated Fair Value of Options
03/19/2019	2,695,874	$ 0.25	$ 0.25	$ 0.19
03/19/2019	2,606,330	$ 0.25	$ 0.25	$ 0.20
04/23/2019	218,133	$ 0.25	$ 0.25	$ 0.20
06/18/2019	997,786	$ 0.25	$ 0.25	$ 0.20
07/18/2019	940,000	$ 0.25	$ 0.25	$ 0.16
09/26/2019	304,000	$ 0.25	$ 0.25	$ 0.20
03/05/2020	4,083,870	$ 0.30	$ 0.30	$ 0.23
03/05/2020	5,687,772	$ 0.30	$ 0.30	$ 0.24

Net Operating Loss and Research and Development Carryforwards and Other Income Tax Information

At September 30, 2020, and December 31, 2019, we had net operating loss carryforwards for income tax purposes of approximately $61.2 million and $42.0 million which are available to offset future federal taxable income, if any. At September 30, 2020 and December 31, 2019, we also had federal research and development tax credit carryforwards of $291,000 and $291,000, respectively, available to potentially offset future federal income taxes. Of the federal NOL, $10.5 million was generated prior to 2018 and will be expiring between 2035 and 2037, while the remaining $31.5 million will be carried forward indefinitely. The state NOL will expire in increments between 2035 and 2037. The federal research and development tax credit carryforwards, if not utilized, will expire beginning in 2037.

However, the deductibility of such net operating losses and tax credits may be limited. Under Section 382 and 383 of the Internal Revenue Code of 1986, as amended, and corresponding provisions of state law, if a corporation undergoes an "ownership change," which generally occurs if the percentage of the corporation's stock owned by 5% stockholders increases by more than 50% over a three-year period, the corporation's ability to use its pre-change NOL carryforwards and other pre-change tax attributes to offset its post-change income may be limited.

We have not determined if we have experienced Section 382 and Section 383 ownership changes in the past and if a portion of its NOL and tax credit carryforwards are subject to an annual limitation under Section 382 and 383. In addition, we may experience ownership changes in the future as a result of subsequent shifts in our stock ownership, some of which may be outside of its control. If we determine that an ownership change has occurred and its ability to use our historical NOL and tax credit carryforwards is materially limited, it would harm our future operating results by effectively increasing our future tax obligations. Our tax returns for all years from 2011 remain subject to examination by Federal and the State of Maryland taxing authorities.

Emerging Growth Company and Smaller Reporting Company Status

We are an "emerging growth company" as defined in the Jumpstart Our Business Startups Act of 2012, as amended, or the JOBS Act. Under the JOBS Act, companies have extended transition periods available for complying with new or revised accounting standards. We have elected this exemption to delay adopting new or revised accounting standards.

We will remain an emerging growth company until the earlier of (1) December 31, 2026, (2) the last day of the fiscal year in which we have total annual gross revenues of at least $1.07 billion, (3) the date on which we are deemed to be a “large accelerated filer” as defined in Rule 12b-2 under the Exchange Act, 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. An emerging growth company may take advantage of specified reduced reporting requirements and is relieved of certain other significant requirements that are otherwise generally applicable to public companies. As an emerging growth company,

- we may present only two years of audited financial statements, plus unaudited condensed financial statements for any interim period, and related Management’s Discussion and Analysis of Financial Condition and Results of Operations in this prospectus;
- we may avail ourselves of the exemption from the requirement to obtain an attestation and report from our auditors on the assessment of our internal control over financial reporting pursuant to the Sarbanes-Oxley Act;
- we may provide reduced disclosure about our executive compensation arrangements; and
- we may not require stockholder non-binding advisory votes on executive compensation or golden parachute arrangements.

We have elected to take advantage of certain of the reduced disclosure obligations in the registration statement of which this prospectus is a part and may elect to take advantage of other reduced reporting requirements in future filings. As a result, the information that we provide to our stockholders may be different than you might receive from other public reporting companies in which you hold equity interests.

We are also a “smaller reporting company,” meaning that the market value of our stock held by non-affiliates plus the proposed aggregate amount of gross proceeds to us as a result of this offering is less than $700.0 million and our annual revenue is less than $100.0 million during the most recently completed fiscal year. We may continue to be a smaller reporting company after this offering if either (1) the market value of our stock held by nonaffiliates is less than $250.0 million or (2) our annual revenue is less than $100.0 million during the most recently completed fiscal year and the market value of our stock held by non-affiliates is less than $700.0 million. If we are a smaller reporting company at the time we cease to be an emerging growth company, we may continue to rely on exemptions from certain disclosure requirements that are available to smaller reporting companies. Specifically, as a smaller reporting company we may choose to present only the two most recent fiscal years of audited financial statements in our Annual Report on Form 10-K and, similar to emerging growth companies, smaller reporting companies have reduced disclosure obligations regarding executive compensation.

Recently Issued and Adopted Accounting Pronouncements

A description of recently issued and adopted accounting pronouncements that may potentially impact our financial position and results of operations is disclosed in Note 3 to our financial statements appearing at the end of this prospectus.

Off-Balance Sheet Arrangements

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

Quantitative and Qualitative Disclosures about Market Risk

We are exposed to market risks in the ordinary course of our business. These risks primarily include interest rate risks, foreign currency exchange risks and inflation risks. Periodically, we maintain deposits in accredited financial institutions in excess of federally insured limits. We deposit our cash in financial institutions that we believe have high credit quality and have not experienced any losses on such accounts and do not believe we are exposed to any unusual credit risk beyond the normal credit risk associated with commercial banking relationships.

Interest Rate Risk

Our cash consists of cash in readily-available checking accounts and short-term money market fund investments. Such interest-earning instruments carry a degree of interest rate risk; however, historical fluctuations in interest income have not been significant.

Foreign Currency Exchange Risk

All of our employees and our operations are currently located in the United States. We have, from time-to-time, engaged in contracts with contractors or other vendors in a currency other than the U.S. dollar. To date, we have had minimal exposure to fluctuations in foreign currency exchange rates as the time period between the date that transactions are initiated and the date of payment or receipt of payment is generally of short duration. Accordingly, we believe we do not have a material exposure to foreign currency risk.

Inflation Risk

Inflation generally affects us by increasing our cost of labor and research and development contract costs. We do not believe inflation has had a material effect on our results of operations during the periods presented.

Internal Control Over Financial Reporting

In preparation for our initial public offering, we identified a material weakness in our internal control over financial reporting related to our control environment. Specifically, we have determined that we have not maintained adequate formal accounting policies, processes and controls related to complex transactions as a result of a lack of finance and accounting staff with the appropriate GAAP technical expertise needed to identify, evaluate and account for complex and non-routine transactions. We also determined that we have not maintained sufficient staffing or written policies and procedures for accounting and financial reporting, which contributed to the lack of a formalized process or controls for management's timely review and approval of financial information. A material weakness is a deficiency, or combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of our annual or interim financial statements will not be prevented, or detected and corrected on a timely basis.

More specifically, we have determined that our financial statement close process includes significant control gaps mainly driven by the small size of our accounting and finance staff and, as a result, a significant lack of appropriate segregation of duties. We also determined that we have not maintained sufficient staffing or written policies and procedures for accounting and financial reporting, which contributed to the lack of a formalized process or controls for management's timely review and approval of financial information.

The process of designing and implementing an effective accounting and financial reporting system is a continuous effort that requires us to anticipate and react to changes in our business and the economic and regulatory environments and to expend significant resources to maintain an accounting and financial reporting system that is adequate to satisfy our reporting obligations. As we continue to evaluate and take actions to improve our internal control over financial reporting, we may determine to take additional actions to address control deficiencies or determine to modify certain of the remediation measures described above. We cannot assure you that the measures we have taken to date, or any measures we may take in the future, will be sufficient to remediate the material weakness we have identified or avoid potential future material weaknesses.

BUSINESS

Overview

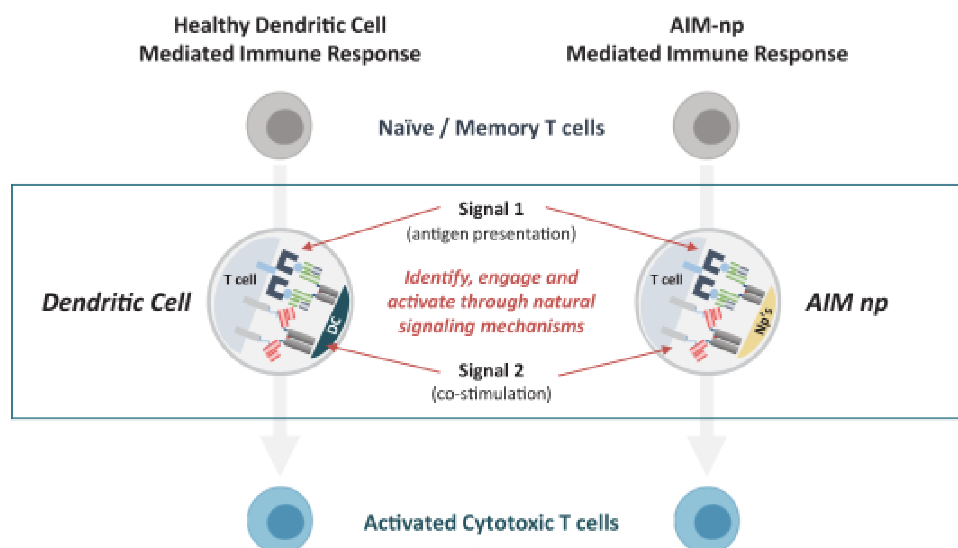
We are a clinical-stage biotechnology company developing a novel approach to immunotherapy designed to employ the body's own T cells to generate a specific, potent and durable immune response that mimics natural biology. Our mission is to create therapies with curative potential for patients with cancer and other life-threatening immune-mediated diseases. Currently, we have two product candidates in human trials: NEXI-001 in acute myeloid leukemia, or AML, and NEXI-002 in multiple myeloma, or MM.

The backbone of our approach is our proprietary Artificial Immune Modulation, or AIM™, nanoparticle technology platform. The AIM technology enables us to construct nanoparticles that function as synthetic dendritic cells capable of directing a specific T cell-mediated immune response. Like natural dendritic cells, the AIM nanoparticles employ natural signaling proteins to deliver specific instructions to specific T cells directing a desired immune response. Importantly, unlike other cell therapy approaches, this is accomplished without any genetic manipulation of the T cell, thereby creating T cell products designed to maintain natural target identification, engagement and killing mechanisms.

By mimicking natural T cell biology, our T cell product candidates are designed to combine the attributes of cellular *precision*, *potency* and *persistence* with reduced potential for undesired toxicities. We believe this is a significant advantage of the AIM platform and our therapeutic product candidates compared to other T cell therapies. The following graphic summarizes the key features of the AIM platform.

At the center of the immune response are T cells, often referred to as the "foot soldiers" of the immune system. Whenever healthy cells are under attack, either by a virus, bacteria or cancer, the immune system calls on the T cell to identify, engage and kill the specific invader or diseased cells. Importantly, natural T cells have the ability to distinguish between diseased and healthy cells. However, T cells need very specific sets of instructions to function effectively. In healthy individuals, these specific instructions are normally delivered to the T cells by dendritic cells, which are also referred to as professional antigen-presenting cells. Dendritic cells provide these instructions through key signaling proteins. However, cancer cells often compromise the function of dendritic cells and the instructions they deliver to T cells.

Our AIM nanoparticle technology is designed to bypass the dendritic cells and deliver the right kind of instructions directly to T cells using natural biology. In essence, we create nano-sized synthetic dendritic cells. These nano-sized synthetic dendritic cells are designed to deliver precise instructions to a specific set of targeted T cells, and these instructions will be different depending on the therapeutic goal. Translating this to cancer, each infusion, or product, contains populations of T cells that can identify and attack multiple tumor-specific antigen targets on a tumor cell. In preclinical studies, we observed that AIM-activated T cells were potent, were able to effectively distinguish between tumor cells and healthy cells, and should potential for long term persistence. As the graphic below illustrates, our AIM nanoparticles emulate natural dendritic cells by delivering immune-specific instructions through two key humanized signaling proteins.



Our two clinical stage product candidates, NEXI-001 and NEXI-002, are adoptive T cell therapies, or ACTs, that contain populations of naturally-occurring CD8+ T cells that recognize a defined set of disease-relevant antigen targets. NEXI-001 is a donor-derived, or allogeneic, ACT in a Phase I/II clinical trial for the treatment of patients with relapsed AML after allogeneic stem cell transplantation, or allo-HSCT. NEXI-002 is a patient-derived, or autologous, ACT in a Phase I/II clinical trial for the treatment of MM patients that have failed at least three prior lines of therapy. In December 2020, initial safety, tolerability and immunologic data from our NEXI-001 trial was shared as an oral presentation during the 62nd American Society of Hematology (ASH) Annual Meeting. These preliminary data showed that single infusions of NEXI-001 T cells in the first three patients treated were well-tolerated. and we observed initial indicators of immunologic response after NEXI-001 T cell infusion in each of the three patients dosed, including (i) lymphocyte reconstitution to pre-lymphodepletion baseline levels at timepoints early within the expected range, and an earlier-than-expected recovery of the CD4+ T cell compartments; (ii) the presence, proliferation and persistence of NEXI-001 antigen-specific T cells as measured in peripheral blood; (iii) clonal expansion of NEXI-001 T cells in both peripheral blood and bone marrow; and (iv) the persistence of T cell subtypes present in NEXI-001 product candidates over time, as measured in peripheral blood. It is important to note that we are early in the safety evaluation and dose-finding part of the Phase I/II trial, and that these results are derived from the first three patients only and are not statistically significant. We expect to announce initial data for most patients in both the NEXI-001 and NEXI-002 clinical trials by the end of 2021.

Assuming successful final results from these Phase I/II clinical trials, we expect to discuss with the U.S. Federal Drug Administration, or the FDA, plans to progress both programs into registrational trials designed to

support potential approval of both product candidates in the United States. In parallel, we plan to explore partnering opportunities for late-stage development and commercialization in these indications.

The modular design of the AIM platform allows us to construct new AIM nanoparticle product candidates for clinical evaluation across a range of other disease areas and indications. Given the ability of the platform to substitute antigens, we plan to use new AIM nanoparticle constructs to develop new product candidates for additional blood tumor indications, and to expand our development efforts toward solid tumor indications. We are also developing new AIM nanoparticle constructs and modalities for potential clinical evaluation in new disease areas outside of oncology, including autoimmune disorders and infectious diseases.

We were founded in 2011, with the exclusive licensing of the core AIM technology from The Johns Hopkins University, or Johns Hopkins. In 2017, attracted by the promise of this technology, Dr. Sol Barer, the co-founder and former Chairman and Chief Executive Officer of Celgene Corporation, and the current Chairman of Teva Pharmaceutical Industries Ltd., led the acquisition and recapitalization of our company. This recapitalization included significant investments from Dr. Barer, ArrowMark Partners and other experienced biotechnology investors. Dr. Barer currently serves as Chairman of our board of directors, and has recruited a management team whose members have decades of experience in the biotechnology industry. Our President and Chief Executive Officer, Scott Carmer, is a 35-year veteran of the industry, having played key roles in prior product development and commercialization efforts as a senior executive at MedImmune, LLC, Genentech, Inc., Amgen Inc. and GlaxoSmithKline plc. Kristi Jones, our Chief Operating Officer, brings over 30 years of leadership in product development, business and strategy roles at Genentech, MedImmune and AstraZeneca PLC. Dr. Jerome (Jerry) Zeldis, M.D., Ph.D., our Executive Vice President of Research & Development brings his experience as the former Chief Executive Officer and Chief Medical Officer of Celgene Global Health. Our Chief Financial Officer, John Trainer, joined us after nearly 15 years in various senior financial, operational, strategic and transactional roles at MedImmune and AstraZeneca. Mathias Oelke, our scientific co-founder, transitioned from his faculty position with Johns Hopkins to his current position as our Senior Vice President for preclinical immune therapy and platform development.

Our Pipeline

We are evaluating product candidates in clinical trials, NEXI-001 in patients with AML and NEXI-002 in patients with MM. We are actively dosing patients in both Phase I/II trials and expect to complete enrollment for both trials in 2021, with initial data on most patients in both trials expected by the end of 2021. As Phase I/II trials, the trials consist of two parts. In the first part of the trials, the initial safety evaluation phase, will assess the safety and tolerability of NEXI-001 or NEXI-002 T cells In the second part of the trials, the expansion phase, we will further define safety and will also evaluate the initial efficacy of each product candidate at the dose and regimen established in the safety evaluation phase. We are currently in the safety evaluation phase of both trials. Based on analysis of initial data, we also anticipate filing with the FDA to request Breakthrough Therapy Designation and regenerative medicine advanced therapy, or RMAT, designation for both our NEXI-001 and NEXI-002 product candidates.

Our next adoptive cell therapy product candidate is planned to be positioned in solid tumors. We have observed in non-clinical studies the generation of melanoma-specific T cells from Stage III/IV melanoma patients as well as the activity and persistence of AIM ACT-generated T cells directed against the MART-1 antigen in melanoma tumor-bearing mice. We have also expanded HPV-specific T cells *in vitro* to support potential clinical evaluation in a variety of virally-mediated solid tumors.

In addition to our programs using the AIM ACT adoptive cell therapy modality, we are also developing a next-generation off-the-shelf injectable modality, which we refer to as AIM INJ. The AIM INJ modality is designed to enable AIM nanoparticles to engage CD8+ T cells directly inside the body without the need for *ex vivo* expansion manufacturing, which we believe will result in a greater ease of administration and a less complex

and less expensive manufacturing process. The key technical difference between the two modalities is the material used to manufacture the nanoparticle core: AIM ACT uses a superparamagnetic iron oxide-based nanoparticle core, or SPIO core, whereas each AIM INJ product incorporates a nanoparticle core made from bio-degradable polymers, polylactide-co-glycolide and polyethylene glycol, or PLGA-PEG. Importantly, the two modalities share the exact same signaling protein constructs and protein conjugation chemistry, which we believe will facilitate rapid development of new products.

The following table summarizes our AIM pipeline.

THERAPY TYPE	NAME	INDICATION/ DISEASE AREA	DISCOVERY	PRECLINICAL	PHASE I	PHASE II	PHASE III
ADOPTIVE CELL THERAPY MODALITY (AIM ACT)							
Donor-derived T cells	NEXI-001*	AML / MDS[1] (r/r post allo-HSCT)					
Patient-derived T cells	NEXI-002*	Multiple Myeloma (r/r ≥3 prior lines of therapy)					
Patient-derived T cells		Solid Tumor					
INJECTABLE MODALITY (AIM INJ)							
Injectable AIM-np		Solid Tumor					
Injectable AIM-np		Autoimmune Diseases					
Injectable AIM-np		Infectious Diseases					

[1] Myelodysplastic Syndrome, or MDS, is the precursor of AML

* Phase I/II Trial

We have completed non-clinical work to advance the AIM INJ modality towards a potential IND filing, including preparing appropriate IND-enabling experiments in support of a planned clinical program focusing on solid tumors. Subject to regulatory feedback and an IND filing, we anticipate a second clinical program that would target autoimmune disease and which would be the first AIM product candidate to suppress, rather than activate, T cell function. In support of this potential program, we have generated and published pre-clinical data in which observe that AIM nanoparticles to engaged and suppress auto-reactive T cells.

Additionally, we are developing the AIM platform for potential clinic application in patients suffering from specific infectious disease. In non-clinical studies, we have been able to expand CD8+ T cells directed against viral antigens including Epstein-Barr virus (EBV), CMV, and HPV.

Our Approach

Our approach to immunotherapy employs the body's own T cells and is designed to generate a specific, potent and durable immune response that mimics natural biology. We believe the key attributes of this platform are:

- ***Precision:*** Delivering specific sets of instructions to specific T cell populations that direct a specific T cell function;
- ***Potency:*** Direct T cells to attack multiple disease relevant antigen targets through naturally occurring identification, engagement and killing mechanisms, with reduced potential for undesired toxicities; and

- ***Persistence:*** Maintain T cell sub-types that support self-renewal, proliferation, immunologic memory and long-term T cell survival.

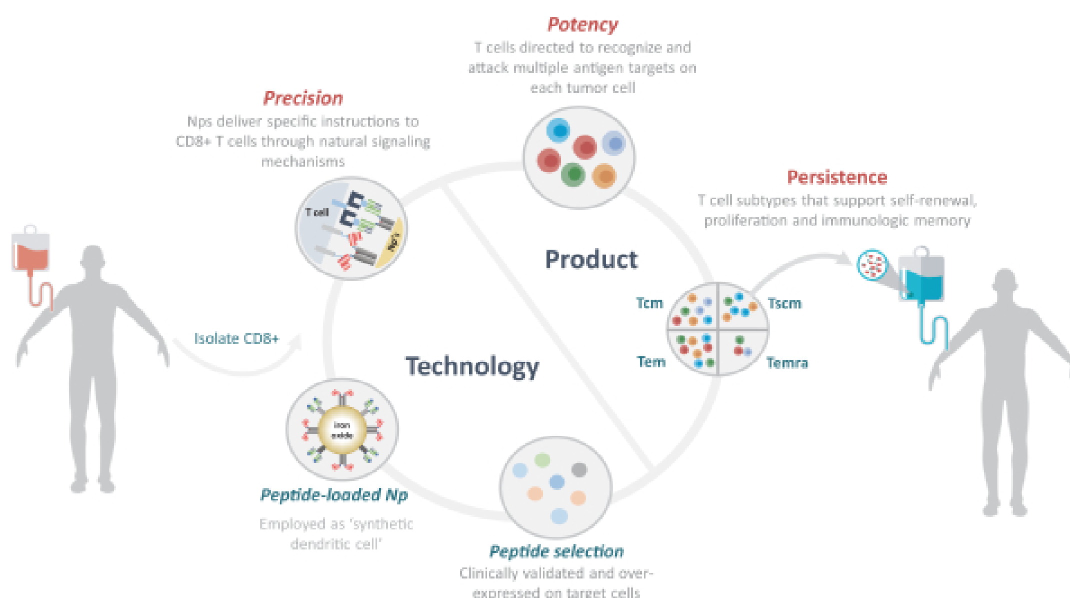
Importantly, our AIM technology is used to select and amplify the antigen-specific function of naturally occurring T cells, and does not require or employ genetic engineering or genetic manipulation of T cells to accomplish this as a treatment strategy. This is a critical point of differentiation relative to most other targeted T cell therapies in development.

By utilizing natural T cells, the AIM technology is similar to other therapeutic approaches that are using naturally occurring, but unselected, tumor-infiltrating lymphocytes, or TILs. Current TIL therapies have generated impressive clinical responses in difficult-to-treat patient populations, including patients with relapsed/refractory solid tumors like melanoma and cervical cancer. However, TIL products contain a significant range of variability from one product to another, including preferred ratios of CD8+ and CD4+ T cells, optimal T cell phenotypes, and known T cell tumor-specificity. Given currently-employed TIL isolation and product manufacturing processes, it is not possible for current TIL therapies to control for any one of these important product attributes. Because our AIM technology uses synthetic dendritic cells designed to deliver specific instructions directly to specific populations of T cells, combined with a well-controlled manufacturing process, we believe we can produce product candidates with highly consistent *in vitro* characteristics that are associated with clinical responses: CD8+ T cells, T stem cell-like and memory subtypes, and antigen-specific recognition. We view this as a novel approach designed to deliver T cell therapies with pharmaceutical precision, and believe it represents an improved, more rational, more reproducible and more controllable process to consistently produce products with known anti-tumor properties when compared to other cellular approaches.

Genetically engineered T cell approaches, such as chimeric antigen receptor T cells, or CAR Ts, or engineered T cell receptor, or TCR, technologies are very precise in their engineering, but have the key limitation of single antigen targeting, and have been associated with life-threatening side effects and limited durability. The manufacturing processes currently used for the *in vitro* activation and expansion of engineered T cell products results in T cell products that contain high proportions of terminally differentiated and exhausted T cell subtypes, with limited potential for *in vivo* persistence.

A theoretical advantage of engineered T cell products is enhanced anti-tumor potency, achieved through the transduction of high affinity and/or affinity-enhanced TCRs or through re-engineering the entire TCR complex. We have conducted *in vitro* experiments to compare the potency of both TCR-engineered and CAR T-transduced products with our AIM-activated T cell products. In tumor cell-line killing assays designed to assess the activity of our AIM-activated T cells with that of TCR and CAR T products, our AIM-activated T cells showed killing potency comparable to both genetically engineered modalities.

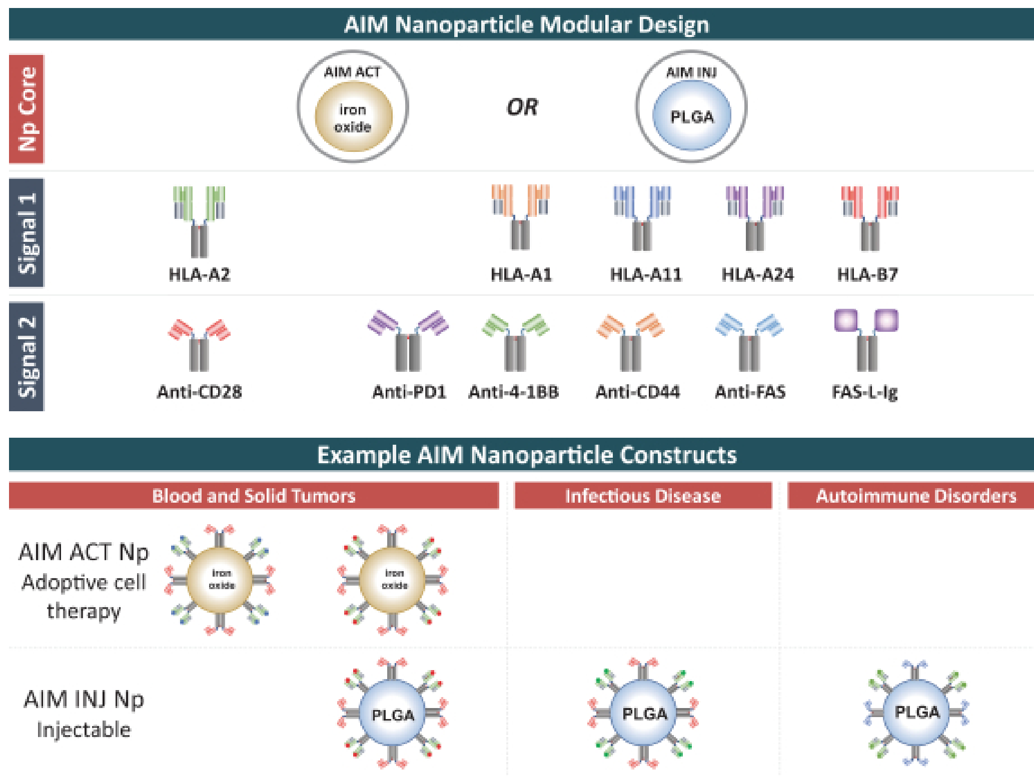
The chart below summarizes key differences that separate our technology from other cellular immunotherapy approaches.



In addition to these core principles of differentiation, we believe the modular design of the AIM platform facilitates the rapid design of new product candidates based on synergies derived from interchangeable components, specifically antigen peptides, signaling proteins and core material, as well as shared methods for nanoparticle construction, protein conjugation, peptide loading, and a platform manufacturing system for T cell therapy products. Specifically, we can customize and load new sets of antigen targets and signaling proteins to efficiently create new products for new indications and new therapy areas. This will help us to grow our pipeline, either for development internally or via partnerships and collaborations. We intend to leverage these synergies to expand into additional cancer indications, including in solid tumors, and also into new disease areas like autoimmune disorders and infectious diseases, using both the AIM ACT and AIM INJ modalities, as appropriate.

Because our AIM-activated T cells maintain natural target identification, engagement and killing mechanisms, the AIM technology is HLA-restricted, meaning we must match the human leukocyte antigen, or HLA, allele subtype of a patient to that of the HLA protein on our AIM nanoparticle. For our current clinical trials, we are using the HLA-A*02:01, or HLA-A2, alleles, which is expressed in 40% to 45% of the U.S. population. The modular design of the AIM platform is designed to address this limitation going forward, and we are in the process of developing several other HLA alleles to accomplish this objective. We expect additional HLA alelles will include the following: HLA-A-1, HLA-A-11, HLA-A-24 and HLA-B.7. Our plan is to introduce these new HLA alleles into future clinical programs, with a goal to increase access to the majority of the indicated patient populations. All amended or future studies will require regulatory approval. While we plan to develop other HLA alleles, based on current regulatory feedback, we do not believe that including additional HLA populations are required for regulatory approval or to qualify for priority or fast track designations in the United States.

The AIM platform is depicted in the graphic below, with our two clinical-stage product candidates shown utilizing HLA-A2 (Signal 1) in combination with anti-CD28 (Signal 2). In particular, the proteins shown as the potential Signal 2 (co-stimulatory) options can be used for applications in other disease areas, incorporating either the activation or suppression instructions required to achieve a desired therapeutic goal.



Our AIM technology is designed to enable the development of T cell products that combine therapeutic precision, potency and persistence, and with reduced potential for unwanted toxicities. We believe this combination of attributes differentiates the AIM technology from other approaches to T cell therapy. Additionally, we believe the modular design of the AIM platform enables the opportunity for rapid product development in multiple therapeutic areas. We could choose to develop future products alone, or to pursue strategic partnerships through licensing or other collaboration agreements. We believe this approach presents several, and meaningful, opportunities to realize the promise of the AIM technology platform.

Our Strategy

Our mission is to create therapies with curative potential for patients with cancer and other life-threatening immune-mediated diseases. We believe that in the long term, our AIM technology has the potential to be a core component of many immunotherapy combinations used to treat a variety of immune-mediated diseases. Our ultimate goal is to develop and bring to patients, independently or working with partners, a portfolio of off-the-shelf T cell products with specific application to a wide range of cancers, autoimmune disorders and infectious diseases.

Key elements of our strategy include:

- ***Advance NEXI-001 and NEXI-002 to registrational trials.*** Our initial focus is on developing therapies for the treatment of hematologic malignancies where there are existing clinical and regulatory precedents as well as a broad clinical and preclinical dataset for comparison of risk/benefit effectiveness. Our first two product candidates, NEXI-001 for patients with AML and NEXI-002 for patients with MM, are both targeted at diseases with a successful history of cell therapy research, late-stage clinical development and product registration by others. We believe this will facilitate our ability to understand the performance of our product candidates relative to other products targeting similar patient populations.
- ***Expand AIM ACT into solid tumors.*** We are expanding our pipeline into solid tumor indications. We expect our first product candidate targeting solid tumors to use a non-proprietary set of antigen peptides commonly over-expressed on a set of solid tumors, based on our existing preclinical work in solid tumor models. Given the large number of potential antigen combinations in solid tumors, we expect licensing and partnerships to be a core element of our strategy as we establish the broader applicability of our AIM technology.
- ***Accelerate development of our AIM INJ modality.*** We believe that one of the most significant advantages presented by our AIM technology is the potential for an injectable form of the AIM nanoparticle. We expect that a key step in developing this technology will be to leverage experience and insight from our AIM ACT tumor product candidates into an injectable modality, which would be available as an off-the-shelf immunotherapy.
- ***Leverage partnerships to drive new product development in autoimmune disorders and infectious diseases.*** The AIM INJ modality will be constructed to deliver either “suppressive” or “apoptotic” co-stimulation signals directly to auto-reactive T cell populations, which is critical for addressing autoimmune disorders. In addition to autoimmune disorders, we believe that there may be significant opportunities to address virally-mediated infectious diseases via either the AIM ACT or AIM INJ modality. We also believe that the AIM technology may be applicable to the treatment of, and preparation for, future virally-mediated epidemics and pandemics. While we believe that our AIM technology platform is well-suited to address these new therapeutic opportunities, we expect that we would partner with experienced biopharmaceutical companies with deep capabilities in these areas to advance new therapies in these potential indications.

While we intend to establish our own internal capabilities to develop and commercialize our product candidates, we will also explore strategic collaborations or partnerships that may accelerate our development timelines, broaden the therapeutic reach of our AIM technology platforms and maximize the full potential of both the AIM ACT and AIM INJ modalities.

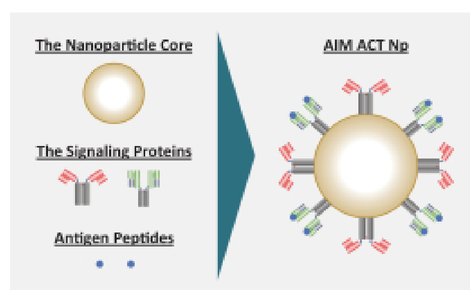
Our AIM Technology Platform

Our AIM technology platform, which consists of AIM nanoparticles and our proprietary manufacturing process, represents a novel approach with the potential to deliver cell therapy with pharmaceutical precision.

The AIM technology was originally developed in Professor Jonathan Schneck's Immunology and Cancer Immunotherapy Laboratory at Johns Hopkins. We exclusively licensed the rights to the technology from Johns Hopkins in 2011 and have been further developing and refining the platform since that time.

The AIM Nanoparticle

The backbone of the AIM technology is the AIM nanoparticle, or np, which is comprised of a core nano-sized bead onto which specific humanized signaling proteins are conjugated. As illustrated by the below graphic, the AIM nanoparticle acts as a synthetic dendritic cell, delivering specific instructions to specific sets of T cells that direct a specific T cell function.



The nanoparticle core. The AIM nanoparticle core is constructed from one of two unique materials depending on the modality. The AIM ACT modality uses a SPIO core to produce the AIM adoptive T cell therapy. The AIM INJ modality uses a biocompatible PLGA-PEG core. These core materials are used by other companies for other clinical applications as well as in FDA-approved products.

The signaling proteins. For both the AIM ACT and AIM INJ modalities, two specific humanized proteins are conjugated to the core nanoparticle to create the AIM nanoparticles. These AIM nanoparticles have been designed to mimic the core functions of healthy dendritic cells by engaging the two key signaling receptors on CD8+ T cells, which are referred to as Signal 1 and Signal 2. Signal 1, the antigen presentation signal, is delivered by a human HLA fusion protein, which is subsequently loaded with antigenic peptides of interest. Signal 2, the co-stimulatory signal, provides specific activation or suppression instructions either to induce proliferation and expansion of the activated cytotoxic T cells or to suppress or kill the auto-reactive T cells. In the case of NEXI-001 and NEXI-002, Signal 1 is a fully human HLA-A*02:01 hinge dimer and Signal 2 is a humanized anti-CD28 antibody. The anti-CD28 antibody engages the CD28 receptor on T cells, which is a known activation signal for naïve and memory T cells. The AIM nanoparticles have been designed to optimize the ratio and density of both signaling proteins regardless of which modality is employed.

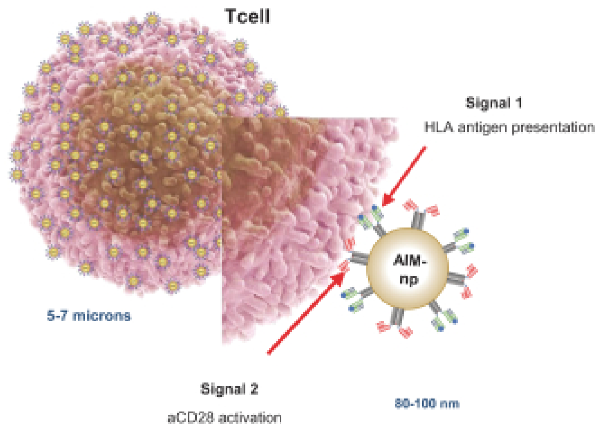
The AIM peptide-loaded nanoparticle. The HLA molecules on each nanoparticle are loaded with one of the selected disease relevant antigen peptides. For our oncology-focused product candidates, Signal 1 antigen peptides are selected based on the following criteria:

- evidence from published literature of over-expression of the selected antigen peptide on both tumor cells and tumor stem cells;
- demonstration that the selected antigen peptides elicit an immunologic response from CD8+ T cells;
- evidence that the selected antigen peptides are critical to maintain an oncogenic phenotype, for example that the antigens play a critical role in tumor cell survival;
- evidence from published literature to support that the antigen peptides selected generate both an immunologic and clinical response in the indicated patient population; and

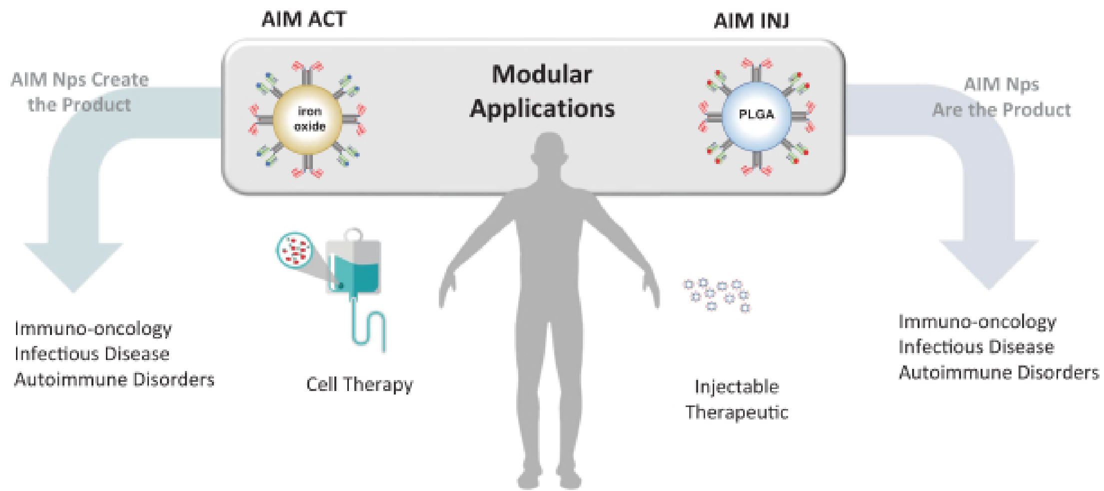
- evidence of target-specific activity and lack of allo-reactivity, with no overlap in expression on normal human tissues, as confirmed by *in silico* and in vitro experiments.

To produce our NEXI product candidates, aliquots of individually loaded AIM nanoparticles are combined to create the final mix of peptide-loaded nanoparticles selected for each indication. This mix of nanoparticles are used to produce T cells capable of targeting multiple tumor-relevant antigens regardless of modality, whether AIM ACT or AIM INJ. In NEXI-001 and NEXI-002, we are targeting five antigen peptides simultaneously. However, we have successfully tested higher numbers of antigen peptides in pre-clinical studies and may choose to include more than five peptide targets in future NEXI product candidates.

The graphic below illustrates how AIM nanoparticles have been designed to deliver precise instructions to T cells via natural signaling mechanisms that mimic healthy dendritic cell function. The core nanoparticles are "decorated" with two specific immune signaling proteins that imitate cell-cell interactions with targeted T cells. The T cells accept instructions as if delivered from a healthy dendritic cell. The AIM nanoparticles "coat" the T cells of interest, which are those antigen receptors specific to our peptide loaded AIM nanoparticles and expressing CD28 on their surface.



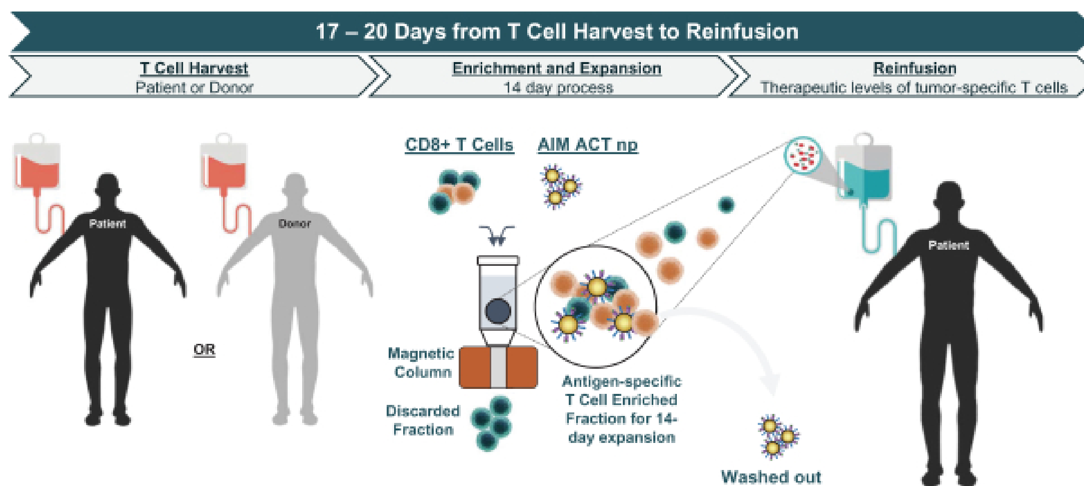
We are using the AIM technology platform to identify, activate and expand tumor antigen-specific T cells *ex vivo* using AIM ACT and *in vivo* using AIM INJ. The following graphic illustrates these two modalities.



AIM ACT Modality

Our AIM ACT product candidates are produced using our AIM ACT nanoparticles combined with our proprietary manufacturing process, which utilizes our enrichment and expansion, or E+E, system. AIM ACT delivers T cell products with consistent composition and quality, each containing high proportions of antigen-specific CD8+ T cells that maintain T cell subtypes that support anti-tumor potency, self-renewal, immunologic memory and long-term persistence.

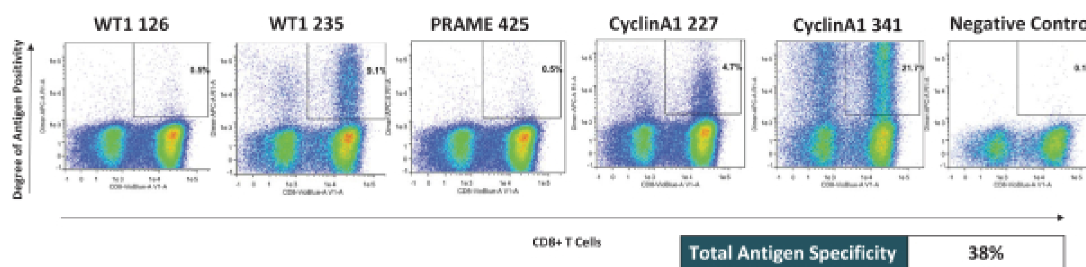
As a first step in the E+E system, CD8+ T cells are isolated from other peripheral blood mononuclear cells, or PBMCs. Aliquots of individual antigen peptide-loaded AIM nanoparticles are then introduced into culture with the CD8+ T cells and run through a magnetic column. The magnetic properties of the SPIO core enable the magnetic field to separate, or "enrich", antigen-specific CD8+ T cells from those that are not specific to the antigen peptides of interest. The enriched culture is transferred to an expansion chamber where we introduce a proprietary blend of cytokines and growth factors to drive the "expansion" of antigen-specific T cell populations over a 14-day period. After the T cells are harvested, the solution is washed to remove the AIM nanoparticles and free proteins, transferred into an infusion bag, frozen and shipped to each respective patient treatment facility, where the final product is then thawed and infused into the patient. The entire E+E manufacturing process takes 14 days from start to finish. See "— Manufacturing" below for more information with respect to our manufacturing process. The graphic below summarizes the process of harvesting T cells, enriching and expanding the T cells, and infusing the T cell product.



AIM ACT T cell Characterization

The following *in vitro* data characterize the AIM ACT T cells expanded through our E+E system and evidence the ability of the AIM platform to consistently produce high quality T cells with a powerful combination of anti-tumor attributes. The experiments highlighted below were conducted using T cells equivalent to NEXI-001.

Precision: In non-clinical studies, AIM nanoparticles have delivered precise activation and proliferation signals directly to antigen-specific CD8+ T cells. The AIM-expanded AML antigen specific T cells recognized and attacked multiple AML antigen targets on both leukemic tumor blasts and leukemic stem cells. To evaluate the precision of our products, we have conducted a number of *ex vivo* studies. In these studies, we use multimer staining of blood product that has been processed through our E+E system to identify CD8+ T cells that are specific to the antigens of interest. The results of one of these tests are below. The first five graphs each show a different antigen of interest, with the sixth graph showing a negative control. On each graph, the number of CD8+ T cells is plotted on the x-axis and the antigen specificity is plotted on the y-axis. The cells highlighted in the upper-right box are the cells with the desired specificity. In this example, 38% of the CD8+ T cells were specific to one or more of the antigens of interest.



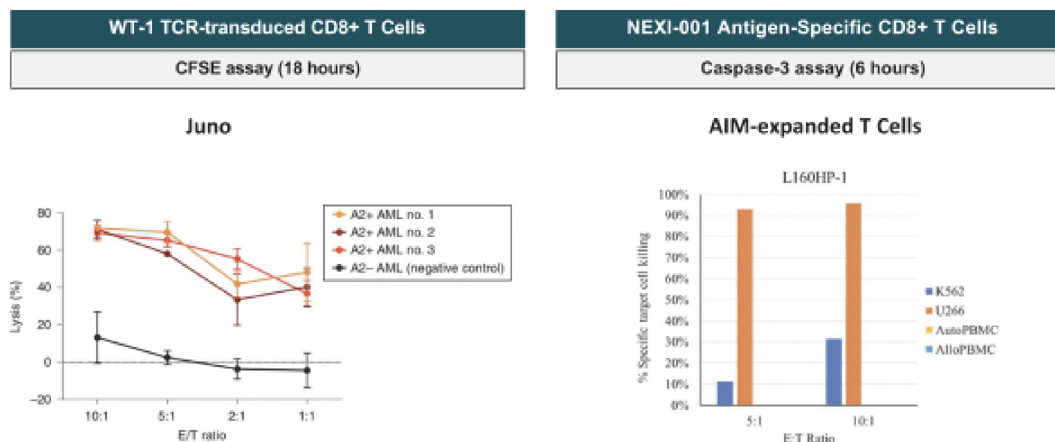
The example above is representative of our results across multiple product runs. In our experience, when the E+E system is used for the NEXI-001 product, it can consistently deliver total antigen specificity ranging from around 35% to 45%.

Potency: In non-clinical studies, AIM-expanded T cells have exhibited *ex vivo* killing potency that is comparable to genetically modified T cells, while effectively distinguishing healthy cells from tumor cells, which resulted in target-specific killing. In contrast to genetically modified T cells, which rely on artificial or high-affinity T Cell Receptor, or TCR, interactions for target recognition, engagement and killing, our AIM T cells consist of non-engineered T cells with a broad range of naturally occurring TCR affinities. As an endogenous T cell product, these T cells have undergone the body’s natural process of central tolerance and rely on the natural mechanism of functional avidity for target recognition, engagement and killing. As such, overexpression of a specific antigen target is required for cellular recognition, active engagement and elimination.

The two graphs below show a non-clinical comparison of the tumor cell killing activity of WT-1 transduced CD8+ T cells on the left and AIM-expanded CD8+ T cells on the right. The first graph is derived from data published from a study sponsored by Juno Therapeutics, Inc., now part of the Bristol-Myers Squibb Company. The data shown quantifies the potency of TCRC4, a WT-1126 TCR-transduced CD8+ T cell product, against three independent HLA A2+ primary leukemia blast cell targets and one HLA A2- primary leukemia blast cell target (characterized by staining for CD45, CD34, CD38, CD117, CD15, CD90, CD96, CD123 and HLA-DR and quantified with flow count beads) at effector-to-leukemia cell (target) ratios of 10-to-1, 5-to-1, 2-to-1 and 1-to-1. These experiments resulted in tumor cell lysis between 60% and 70% at effector-to-target ratios comparable to those used in the AIM-expanded T cell experiments. The second graph quantifies the killing potency of AIM-expanded CD8+ T cells when cultured with a tumor cell line that expresses the antigens targeted by the AIM CD8+ T cells. In this experiment, our AIM-expanded T cells are tested for killing potency against the HLA A2+ U266 tumor cell line. Healthy human PBMCs were incorporated as negative controls, and used to analyze target specific killing and potential off-target toxicity. A secondary HLA-A2- tumor cell line, K562, was also used to further assess target-specific killing. As mentioned, all cell lines included were demonstrated to express some or all of the NEXI-001 targeted antigens as measured by Q-RTPCR, but only the U266 tumor cell line presented the targeted peptides in the context of HLA-A2, similar to the primary leukemia blast cell targets.

These two models are not identical and these results are not head-to-head comparisons. While both experiments incubated the effector CD8+ T cells with the target cells of interest and used the same effector-to-

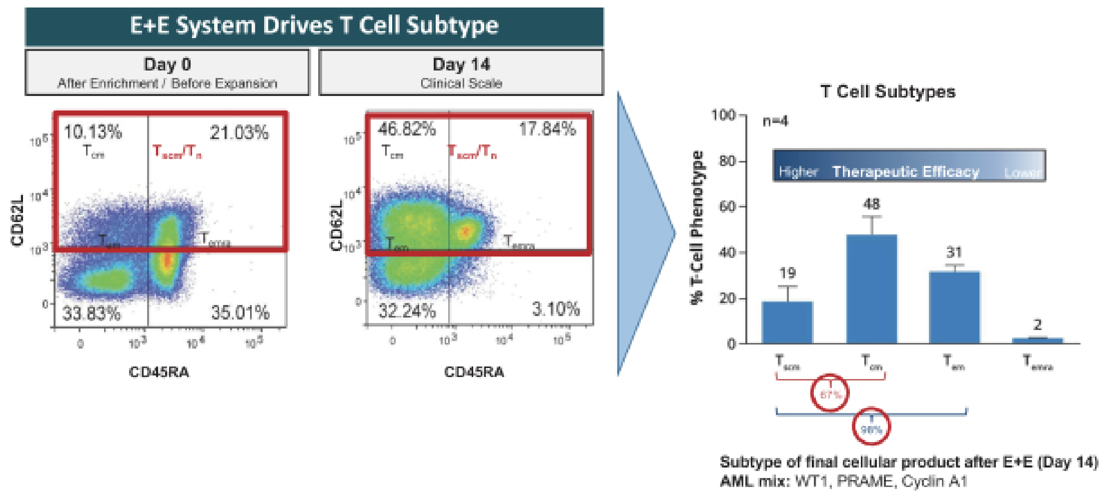
target ratios and the same fluorescent dye staining to identify target cells for analysis, there are two key differences between the models. First, the Juno experiments used primary leukemia blast cells, whereas the AIM-expanded T cell experiments used tumor cells lines. Second, the Juno experiments determined the absolute number of leukemia cells at timepoint 0 and after 18 hours, and calculated the percentage killing by the difference between those two numbers, while we determined the killing percentage by quantifying the caspase-positive target cells, which is an early indicator of cell death, at timepoints 0 and 4 hours and compared the two values. Although these models are not identical and these results are not a head-to-head comparison of cell therapy products, the results do show that at effector T cell-to-tumor cell ratios of 10-to-1 and 5-to-1, the potency of the AIM-expanded T cells was in a similar range to the data published by Juno. Importantly, no killing of the healthy blood cells by the AIM-expanded T cells was observed. The AIM-expanded T cells appear to have effectively identified, engaged and killed tumor cells without exhibiting any activity against healthy cells, all of which expressed the NEXI-001 target antigens at normal levels.



Persistence: The AIM technology platform has been optimized to produce T cell product candidates that contain T cell subtypes that support long-term immunologic memory and survival. These subtypes include T stem cell-like memory, or Tscm, cells, which have self-renewal capabilities; T central memory, or Tcm, cells, which support T cell proliferation and immunologic memory; and T effector memory, or Tem, cells, which contribute effector functions required for tumor cell killing. The final T cell products also have very low populations of less desired subtypes such as terminally differentiated effector memory, or Temra, cells, which are terminally differentiated cells that persist for days or weeks only; and T naïve, or Tn, cells which have allo-reactive potential.

In order to confirm that AIM-expanded T cells contain these important subtypes, we conducted studies in which the cells were stained with specific antibodies, anti-CD45RA and anti-CD62L, which will stain different T cell phenotypes differently, and analyzed before and after the AIM manufacturing expansion process using fluorescence activated cell sorting. The data in the plot charts below show the differences in proportions of these subtypes at Day 0 of the E+E process and at the Day 14 harvest using healthy donor blood. Desired subtypes are highlighted in the red boxes, and contain the Tscm and Tcm cell populations, which represent the “younger, more fit” and less-differentiated T cells, while the T cells in the lower left and right quadrants, the Tem and Temra cells, represent more differentiated and exhausted subtypes. The data show how the E+E process results in a much different mix of T cell subtypes. While the majority of T cells at Day 0 are more differentiated subtypes (Tem and Temra), at Day 14 the majority of T cells are the desired subtypes (Tscm, distinguished from Tn cells by an extra staining step using CD95, and Tcm), and the proportion of Tn cells has been significantly reduced to almost negligible levels.

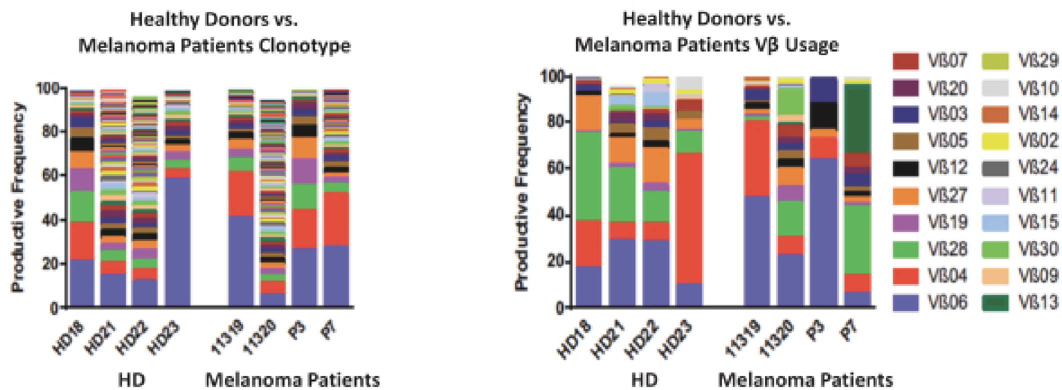
The bar graph below to the right shows the consistency of these results across four E+E runs. The mean proportion of the desirable Tscm and Tcm cells was 67% and the proportion of Tscm, Tcm and Tem cells was 98%, with only 2% of Temra cells. We have optimized the E+E system to deliver these key T cell subtypes in every AIM-expanded T cell product, and to produce similar results when using peripheral blood from either healthy donors or patients.



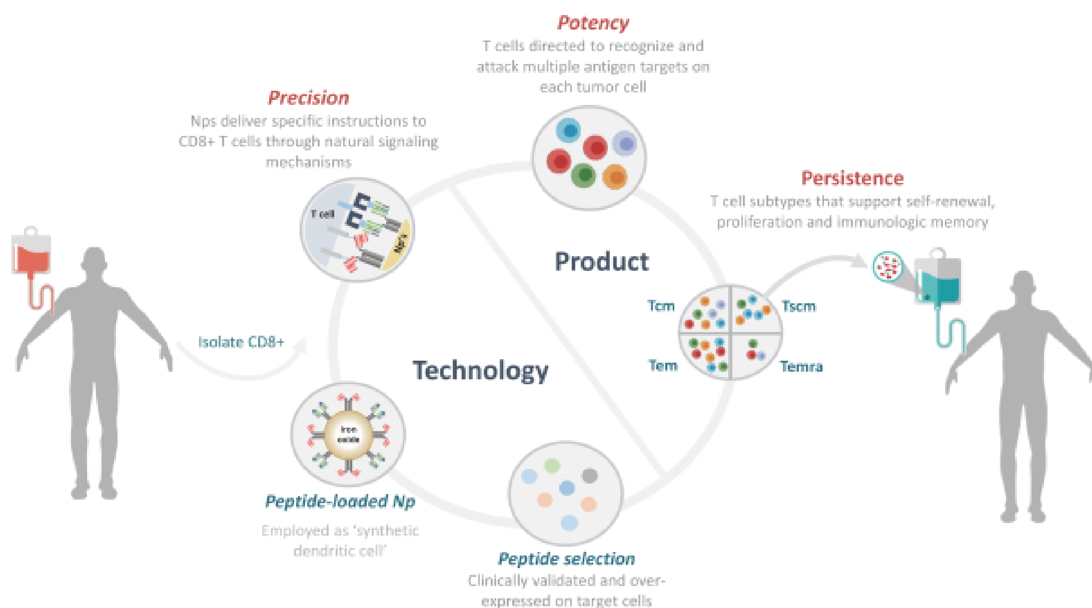
Mimicking a Natural T Cell Response

AIM-expanded T cells are designed to drive a natural immune response by maintaining natural target recognition, engagement, activation and killing mechanisms. This is accomplished by using endogenous, or non-engineered, T cells, which maintain a natural range of TCR affinities, including those with both high and low avidity. We believe that these combined attributes may deliver potent killing without the off-tissue and off-target toxicities seen with engineered cell therapies. Importantly, the expanded T cells maintain these attributes regardless of PBMC source, expanding T cells of similar potency and quality from either healthy donors or patients.

To demonstrate that AIM-expanded T cells maintain these attributes regardless of the blood source, whether patient or donor, we transferred our technology to a third-party research group for a series of non-clinical studies. This research group compared the clonotypes and Vß levels, which are two different measures of TCR diversity of T cell receptors in four healthy donors and four patients with stage 3 and stage 4 melanoma. As the graphic below shows, the number and patterns represented by the colors (each color representing one TCR) are similar for both the healthy donor and melanoma patient groups, which indicates that the TCR repertoires were similar between groups in terms of breadth and depth.



We believe that our AIM ACT product candidates offer a unique combination of attributes that, when combined, have the potential to address many of the current limitations of other cell therapy approaches. This system has been optimized to be highly controllable and to enable the consistent and reproducible manufacturing of T cell product candidates with the potential to combine cellular precision, potency and persistence while reducing the potential for undesired toxicities. The graphic below illustrates how the key features of our AIM technology deliver differentiated cell therapy products.

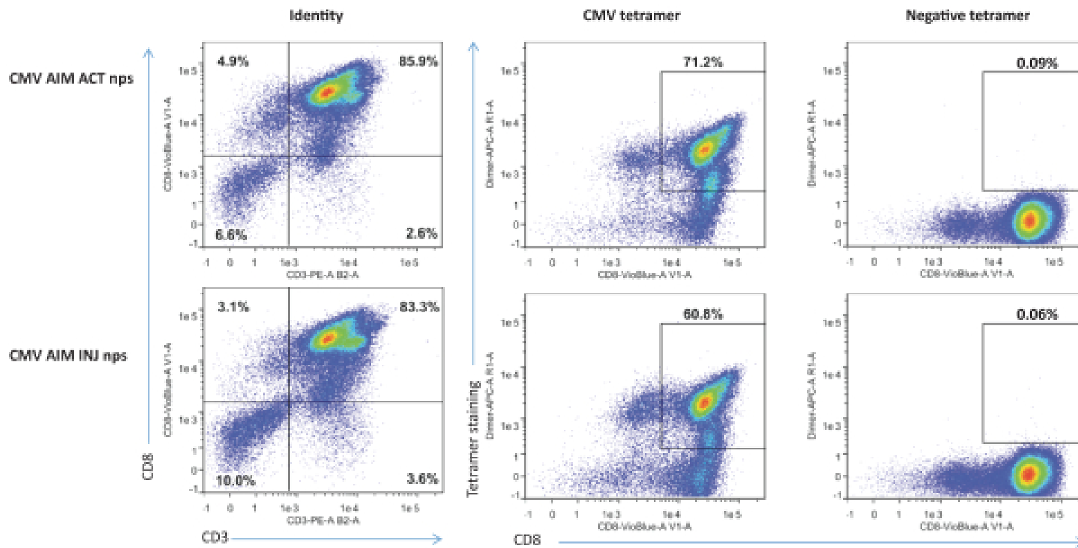


AIM INJ Modality

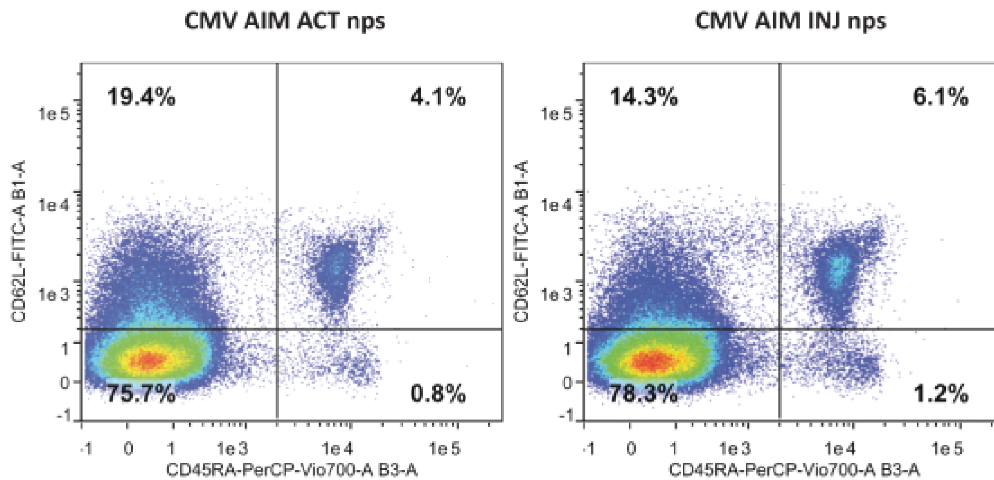
We are developing AIM INJ nanoparticles as an injectable modality. Based on specific size and bio-distribution characteristics, the AIM INJ nanoparticles are designed to engage tumor antigen-specific CD8+ T cell populations at multiple sites *in vivo*, such as the lymph node, lymphatic system, in the peripheral blood, or the tumor. Similar to the AIM ACT nanoparticle, the AIM INJ nanoparticles are designed to mimic the core functions of dendritic cells, by delivering the same two key immune-specific signals: (i) an antigen-specific recognition signal delivered by an HLA molecule loaded with an antigenic peptide (Signal 1), and (ii) a co-stimulatory signal to induce proliferation and expansion of the activated T cells (Signal 2). The only significant difference between AIM ACT and AIM INJ is the nanoparticle core composition; the AIM INJ modality incorporates a biodegradable PLGA-PEG nanoparticle of approximately 100 nanometers in diameter, whereas the AIM ACT modality utilizes a SPIO core of similar size and shape. Importantly, both nanoparticle cores have similar design specifications and use the same chemistry to couple the same humanized signaling proteins, which then use the same antigen peptide loading process to complete the construct of the nanoparticle.

The AIM INJ nanoparticles have the following specifications: they are ~100nm diameter in size with minimal size distribution reflected by a polydispersity index (PDI) of <0.2, their surface charge is between 0 and -10mV, a conjugated Signal 1 to Signal 2 protein ratio of 1:1, and a protein molecule surface density between 100 and 500 molecules per nanoparticle. Initial *in vitro* experiments have shown the AIM INJ nanoparticles to be stable for at least 6 months during which they maintain their functionality and specificity.

To evaluate and confirm the potency and specificity of AIM INJ nanoparticles, we have performed *in vitro* T cell cultures, which compared the AIM INJ nanoparticle capability to expand antigen-specific T cells to that of the AIM ACT nanoparticles. Both AIM ACT and AIM INJ nanoparticles used identical versions of Signal 1 and Signal 2 proteins. The graphics below show the outcome of these cultures. The first column shows that both AIM ACT and AIM INJ nanoparticles stimulate a similar general CD8+ T cell population. In the second and third columns, we used multimer staining to identify CD8+ T cells that are specific to the antigens of interest. On each graph, the number of CD8+ T cells is plotted on the x-axis and the antigen specificity is plotted on the y-axis. The second column shows that when the T cells against the specific antigens were identified (in this case against a cytomegalovirus, or CMV), both modalities were similarly successful. The last column shows a negative control.

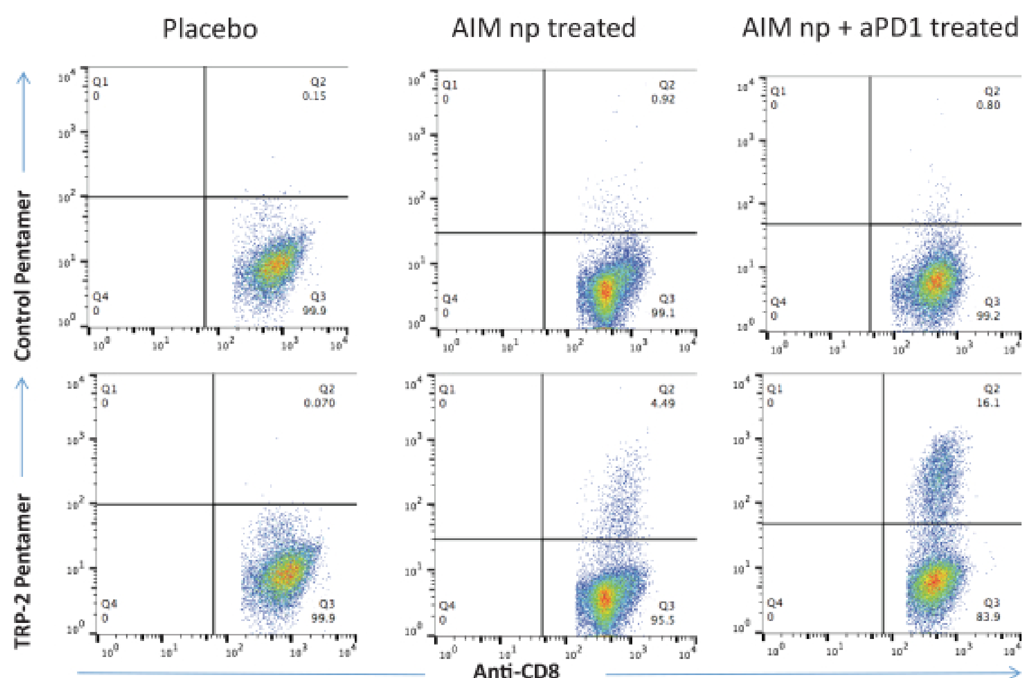


Additionally, we tested the phenotypes of the T cells generated by both modalities in anti-CD62L / anti-CD45RA staining assay similar to that described earlier for AIM ACT. Again, the phenotypes generated by the two modalities were substantially the same.



In vivo proof of concept data for the AIM INJ modality were generated by a third-party team of researchers using prototype AIM INJ nanoparticles. In a study by these researchers using a mouse melanoma lung metastasis model, direct injection of AIM nanoparticles into mice activated and expanded low-affinity T cells, which led to complete tumor eradication, while control mice developed more than 200 lung metastases.

In another study conducted by third-party researchers using a mouse melanoma model, mice were subcutaneously injected with B16-F10, a very aggressive mouse melanoma cell line. Three days after tumor cells were injected, mice were treated with (i) placebo injections, (ii) melanoma TRP-2 peptide loaded AIM nanoparticles, or (iii) a combination of AIM nanoparticles and the checkpoint inhibitor, anti-PD1. The graphic below shows the outcome of this study. In this case, the researchers extracted lymphocytes from the tumors and then used both a control staining (top row) and a TRP-2-specific staining (bottom row) to determine the presence of antigen-specific T cells in the tumor. T cells that are found in a tumor are called tumor-infiltrating lymphocytes, or TILs. The x-axis on each of the graphs below measures the presence of CD8+ T cells, while the y-axis measures antigen specificity. Cells that are in the upper right quadrant are TILs against the desired antigens. As shown below, placebo injections did not result in TIL formation, whereas AIM nanoparticles induced significant numbers of melanoma-specific TILs. This effect was further enhanced when anti-PD1 and AIM nanoparticles were combined. This effect is particularly significant because the scientific literature suggests that anti-PD1 alone does not lead to TIL formation in this model.



We believe these nonclinical data provide evidence that AIM INJ nanoparticles have the potential to identify, engage and expand their targeted T cell populations to elicit a potent anti-tumor response.

Our Clinical-Stage Product Candidates

We have two programs in clinical trials: NEXI-001 for AML patients and NEXI-002 for MM patients.

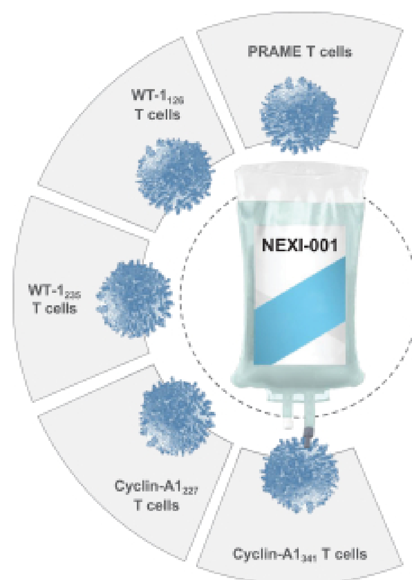
NEXI-001

Our lead program, NEXI-001, is an allogeneic cell therapy in Phase I/II development for the treatment of patients with AML who have relapsed disease after receiving allo-HSCT. Allo-HSCT is currently the only therapeutic procedure with established curative potential for intermediate and high risk AML patients. However, of the approximately 20,000 patients diagnosed with AML in the United States in 2019, approximately 50% were young or healthy enough to qualify for allo-HSCT. Of those patients who do receive allo-HSCT, fewer than half are cured. Patients who relapse after allo-HSCT face a dismal prognosis and are left with very limited treatment options. Most will succumb to their disease within one year of relapse.

Treatment Paradigm for AML

While there are currently no approved therapies for this relapsed patient population, donor lymphocyte infusion, or DLI, is employed as the standard-of-care treatment. DLI is a procedure in which non-selected and non-disease specific T cells are collected from an AML patient's original stem cell donor by apheresis. The T cells are then infused directly into the AML patient with the hope that some populations of the infused T cells will recognize and kill the patient's leukemia cells, directing a graft versus leukemia, or GvL, effect. Unfortunately, this blunt approach works in only approximately 15% to 20% of patients. Making matters worse, approximately 50% to 60% of patients that receive DLI therapy experience life-threatening toxicities associated with non-leukemia specific T cells from the donor attacking healthy cells in the patient, a condition referred to as Graft Versus Host Disease, or GvHD. Currently, there is no way for a treating physician to "de-couple" the benefits of GvL from the toxicities of GvHD. They are not able to separate the "good" T cells from the "bad." Because each NEXI-001 infusion contains high proportions of T cells that are directed to specifically recognize and attack only a patient's leukemia cells and are comprised of very few T cell subtypes capable of eliciting a GvHD response, we believe therapy with NEXI-001 offers the potential to enhance the benefits of GvL while significantly reducing the risk of GvHD.

Our AIM technology is used to produce the NEXI-001 product candidate. As illustrated in the graphic below, AIM nanoparticles are loaded with AML-specific peptides from the WT 1, PRAME and Cyclin A1 antigens, which are used to enrich and expand AML-specific T cells. These AML-specific T cells recognize and attack these specific antigen peptide targets, which are commonly over-expressed on both leukemic blasts and leukemic stem cells.

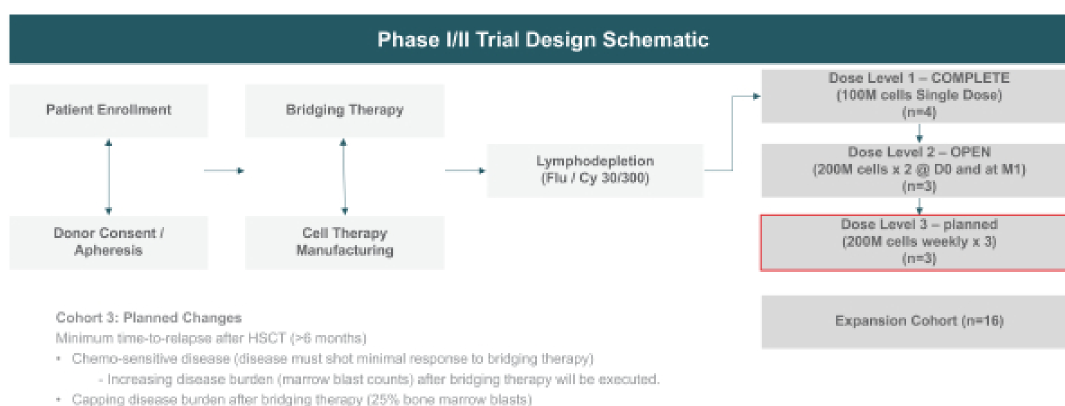


The T cells in NEXI-001 are designed to be highly potent and highly selective in their ability to distinguish leukemia cells from healthy cells, and to contain key T cell subtypes that promote immunologic memory and long-term T cell persistence. We believe this combination of attributes has the potential to deliver deep and durable clinical responses for these AML patients.

Phase I/II Clinical Trial Design

Our ongoing clinical trial with NEXI-001 is a prospective, multi-center, open-label, single-arm, dose-escalating Phase I/II trial that aims to enroll between 22 and 26 patients. The primary objective is to assess the safety and tolerability of a single infusion of NEXI-001 T cells in patients with AML who have either minimum residual disease, or MRD, or morphologically detectable disease after an HLA-matched allo-HSCT. Secondary objectives include signals of immunologic responses and preliminary anti-tumor activity, including evaluations of the following clinical endpoints: overall response rate, or ORR, which includes complete response, progression free survival, or PFS, and overall survival, or OS. Additional analysis will assess the *in vivo* persistence, proliferation, functionality and TCR repertoire of NEXI-001 T cells as measured in blood and bone marrow samples. Our clinical endpoints have been recognized as appropriate measurements of safety and clinical response.

This trial consists of two parts. The initial safety evaluation phase assesses the safety and tolerability of a single infusion of NEXI-001 at escalating dose levels. In the second part of the trial, the dose expansion phase, investigators further characterize safety and will also evaluate the initial efficacy of NEXI-001 T cells at the dose established in the safety evaluation phase. Once the recommended dose and regimen have been determined, evaluations of safety, tolerability and initial clinical response will become the objectives of the second part of the trial, the expansion phase. We are currently in the safety evaluation phase of the trial. The City of Hope Cancer Center is the lead clinical trial site for this trial, with additional trial sites at the Dana Farber Cancer Center, the M.D. Anderson Cancer Center, the Memorial Sloan Kettering Cancer Center, the Karmanos Cancer Institute, the Ohio State University Comprehensive Cancer Center, and the Advent Hospital in Orlando, Florida.



Preliminary Data from the Phase I/II Clinical Trial

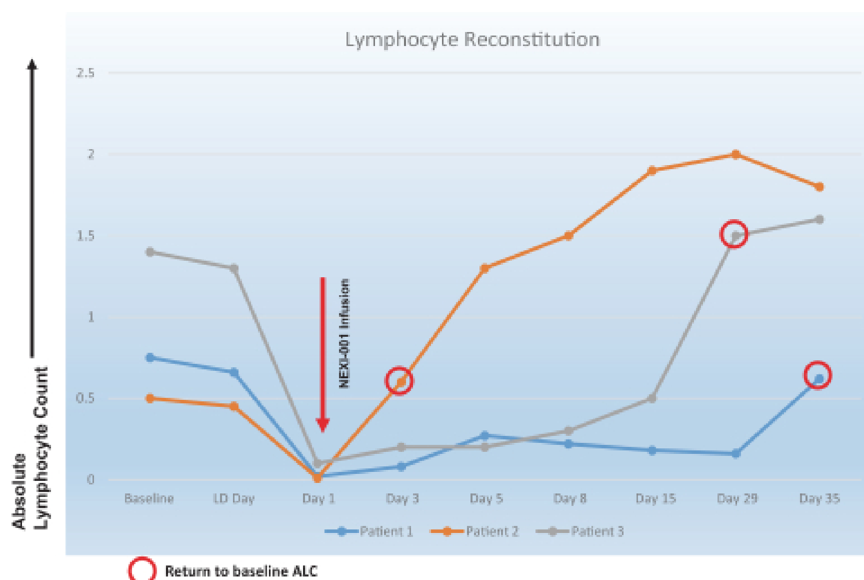
We have treated five patients across both Dose Level 1 and Dose Level 2 safety cohorts with a median follow-up of 4 months to date. Each of these patients has been closely monitored for safety and early signs of toxicity. In addition, biomarkers were analyzed to assess early signs of immunologic response; clinical lab reports and patient charts were used to measure myeloid activity (neutrophils counts, platelete counts, Red Blood Cell counts, transfusion burden); and validated clinical endpoints were incorporated to measure early signs of clinical activity. lab reports and patient charts were used to measure myeloid activity (neutrophils counts, platelete counts, Red Blood Cell counts, transfusion burden); and validated clinical endpoints were incorporated to measure early signs of clinical activity. It is important to note that we are early in the safety evaluation and dose-finding part of the Phase I/II trial, and that the results reported here represent data from the first five patients only and are not statistically significant.

Safety and tolerability. With a median follow-up of five months to date, there have been no significant adverse events, or SAEs, or treatment-related adverse events, or TRAEs, observed after a single infusion of NEXI-001 T cells at doses of 50M, 100M and 200M total T cells. This includes no cytokine release syndrome, or CRS, immune effector cell-associated neurotoxicity syndrome, or ICANS, or infusion-related reactions, or IRRs at any Grade Level (Grade 1-4).

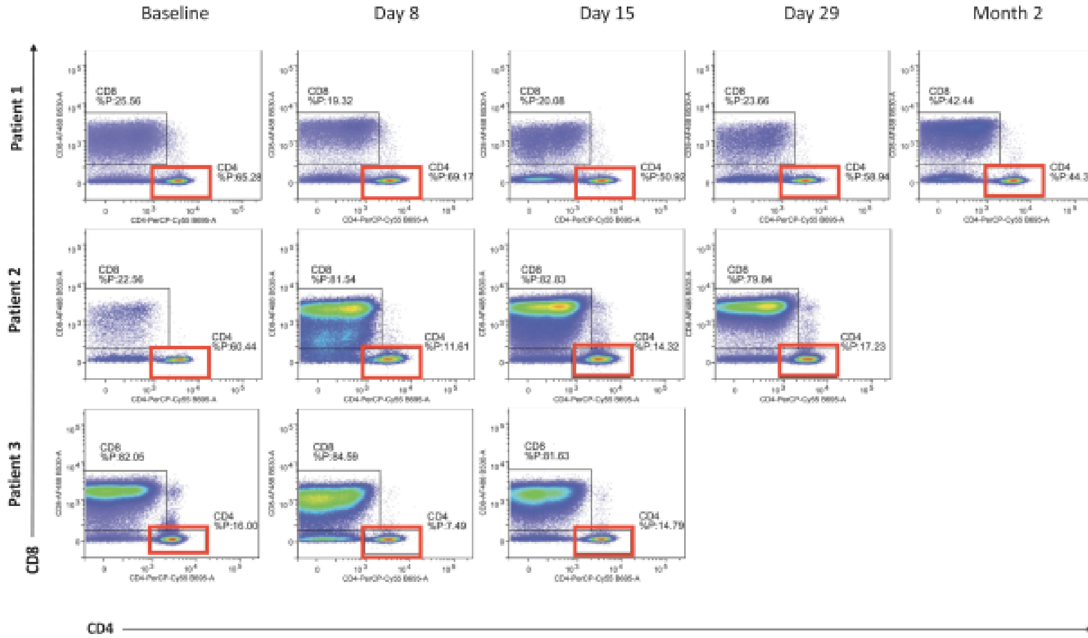
Immunological responses. For each of the first five patients, treated we have observed initial indicators of immunologic response after a single infusion of NEXI-001 T cells, including (i) early lymphocyte reconstitution to baseline levels after administration of lymphodepleting therapy with rapid and robust recovery of the CD4+ T cell compartment; (ii) the presence, proliferation and persistence of NEXI-001 antigen-specific T cells as measured by multimer-staining of peripheral blood when adequate samples were available for analysis; (iii) clonal expansion and persistence of NEXI-001 T cells in both peripheral blood and bone marrow as measured by TCR sequencing when data was available; and (iv) the presence of T cell subtypes that support anti-tumor activity, T cell proliferation, self-renewal and long-term persistence as measured by phenotype staining of NEXI-001 antigen-specific T cells in peripheral blood over time when adequate samples were available for analysis. It is important to note that we are early in the safety evaluation and dose-finding part of the Phase I/II trial, and that these results are not statistically significant.

The following graphics and commentary, which discuss the first three patients' results as a representative sample, address each of these points in turn.

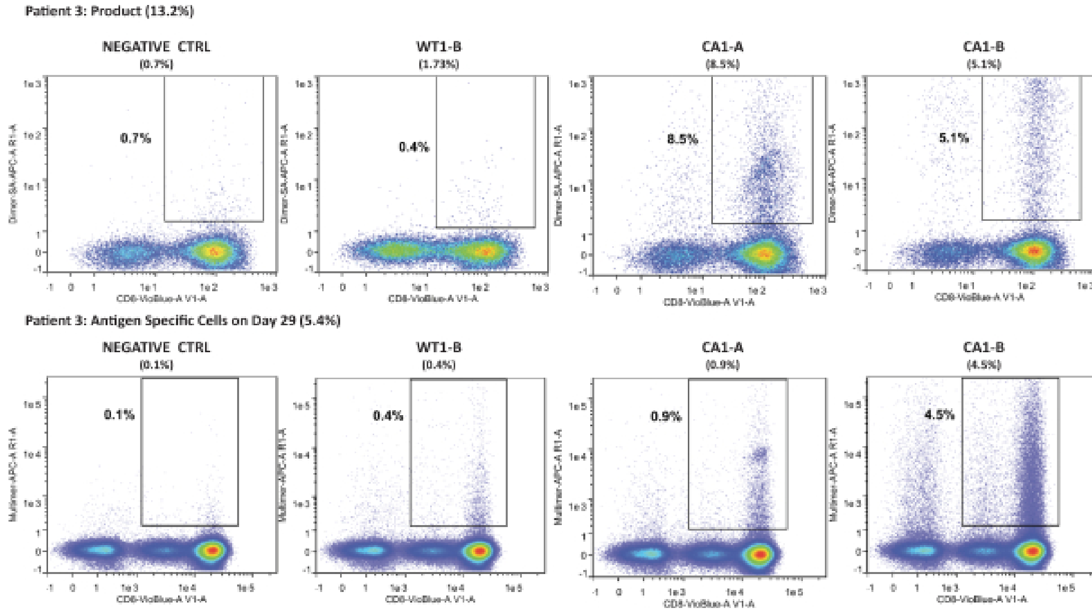
- *Lymphocyte reconstitution.* After a single infusion of NEXI-001 T cells, each of the three patients assessed experienced lymphocyte reconstitution early within the range of generally observed lymphocyte reconstitution after lymphodepleting therapy, which is typically one to three months. In the graphic below, absolute lymphocyte counts, or ALC, are depicted over time, and show returns to baseline levels for each patient (marked with a red circle) within 35 days after lymphodepletion (in a range of three to 35 days).



We have also generated data on the kind of T cells that are driving this rapid lymphocyte response. In the graphic below, we have collected biomarker data on the first three clinical patients at successive time points over the first month after dosing. The data is organized so that each column is a time point, and each row is a patient. The chart measures the presence of different kinds of T cells, with the x-axis measuring the presence of CD4+ T cells and the y-axis measuring the presence of CD8+ T cells. Overall, this shows the total T cell reconstitution as a proportion of CD8+ T cells (marked with a black box) and CD4+ T cells (marked with a red box). Under normal circumstances, CD8+ T cells dominate the early recovery of the T cell fraction, with CD4+ T cell recovery typically not seen until two or three months after lymphodepleting therapy. The observation of a combined CD8+ and CD4+ T cell immune response, which mimics the desired natural response, is even more intriguing because each infusion of NEXI-001 T cell contains very few, less than 2%, CD4+ T cells. A plausible explanation for this observation may be that the immune signals triggered by the infusion of NEXI-001 T cells recruit tissue-resident CD4+ T cells capable of helping to generate a rapid and robust cell-mediated immune response.

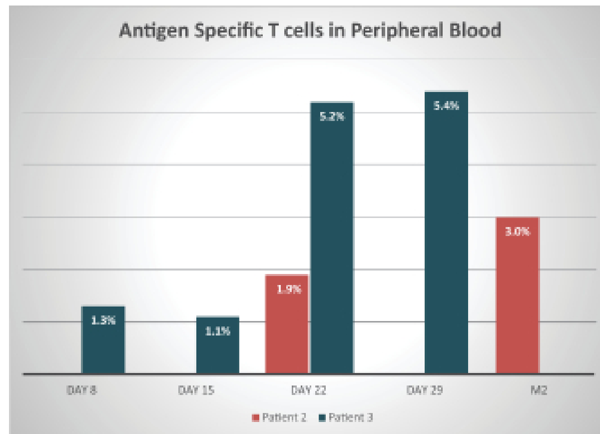


- *Proliferation and persistence of NEXI-001 antigen-specific T cells.* After a single infusion, NEXI-001 antigen-specific T cells were detectable in peripheral blood samples taken from the two patients who were analyzed, as determined by multimer staining. The graphics below illustrate these findings. First, a detailed analysis of Patient 3 is shown as a representative sample of data from the two patients in the trial who were analyzed. The data on the top row show the presence of antigen-specific cells in the NEXI-001 product. In this case, the x-axis measures the overall presence of CD8+ T cells, and the y-axis measures antigen specificity, with the upper right box indicating the desired CD8+ antigen-specific T cells. In the case of Patient 3, 13.2% of the total T cells in the infusion were specific to one or more of the three antigen peptides targeted. The bottom row shows the same analysis, but 29 days after infusion. This time, 5.4% of the T cells in the peripheral blood sample were CD8+ T cells specific to the antigens of interest. We believe that this high percentage demonstrates that the antigen-specific CD8+ T cell population is proliferating after infusion.

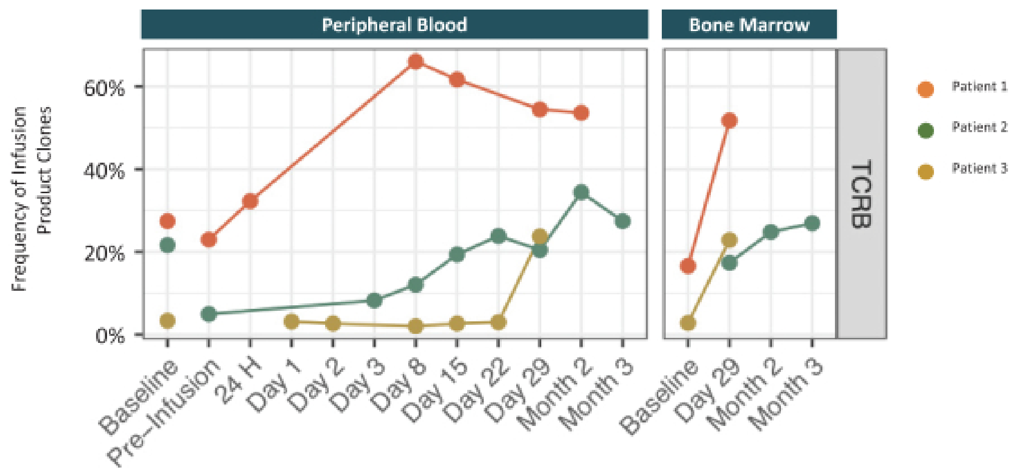


[Table of Contents](#)

The graphic below shows that same percentage of total CD8+ T cells in the peripheral blood of the patient that are specific to one or more of the three antigen peptides targeted over time after infusion for both patients included in this analysis. As both sets of data show, the antigen-specific T cell populations in each NEXI-001 product expanded over time in the patients, with persistence of up to one and two months, representing the last time points measured in each patient, respectively.

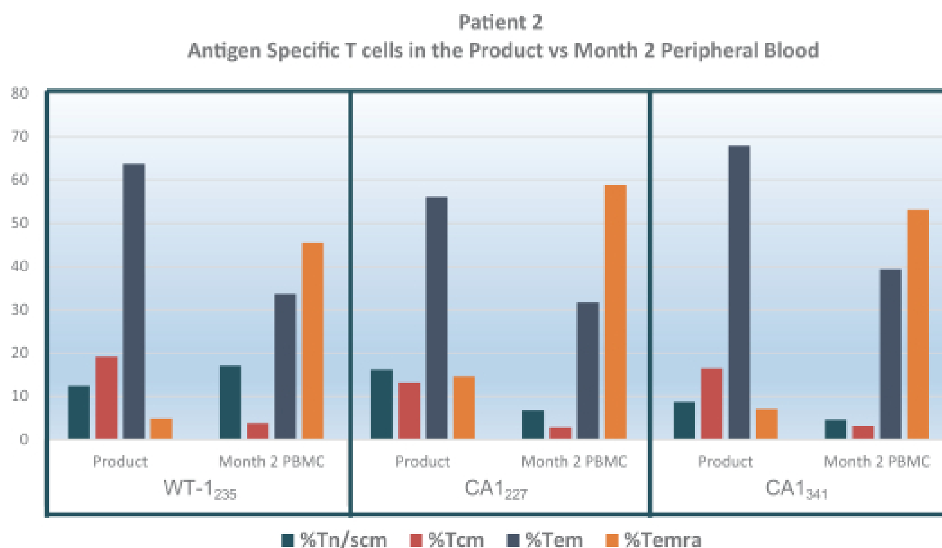


- *Clonal expansion and trafficking of NEXI-001 T cells.* TCR sequencing was used to identify and track "unique" T cell clones from NEXI-001 after each patient's infusion. This permits the measurement of clonal presence, expansion and persistence in both the peripheral blood and bone marrow of each patient treated. The graphic below shows that T cell clones from each NEXI-001 product were detectable in the peripheral blood of each patient as early as Day 1, and were observed to expand over time. Additionally, as shown in the graph on the right, T cell clones from each NEXI-001 infusion were shown to effectively traffic from the blood to the bone marrow of each patient and expand over time. In Patient 1, the NEXI-001 T cell clones accounted for more than 50% of the patient's entire bone marrow T cell fraction at Month 1. In Patient 2 and Patient 3, NEXI-001 T cell clones accounted for approximately 20% of the total bone marrow T cell fraction at the same time point. Patient 4 and Patient 5 T cell data is still being collected.



- *Persistence of critical memory T cell phenotypes.* Finally, and perhaps most interestingly, the T cell subtype of each NEXI-001 product was maintained in the peripheral blood of each of the three patients over each time point measured after infusion (up to two months). Importantly, the stem cell-like memory T cell and central memory T cell populations that support self-renewal, immunologic memory, long-term persistence and anti-tumor activity were maintained.

The graph below shows data from Patient 2 as a representative sample of all three patients treated, and shows how the subtypes for each T cell population specific to individual antigen peptide targets were maintained from the NEXI-001 product at two months after infusion. We believe that maintenance of the key T cell subtypes that support self-renewal, immunologic memory, long-term persistence and anti-tumor activity has the potential to deliver potent and durable clinical responses for these patients.



Clinical activity. In addition to the immunological responses, we also assessed each patient for signs of early clinical activity. The endpoints of interest included reductions in tumor burden (leukemia blast cell counts in peripheral blood and bone marrow and overall tumor size), improvement of donor immune cell chimerism (granulocyte, T cell, bone marrow), and reduction in tumor mutation burden as measured by Next Generation Sequencing, or NGS. Signs of early clinical activity were observed in four of the first five patients treated to-date. It is important to note that we have observed this activity early in the dose escalation trial schema, as four of these patients received single infusions of 50M or 100M cells only. As depicted in the clinical trial schema above, the highest dose level cohort planned for this trial includes infusion of >1B T cells with multiple infusions over two cycles.

A summary of key clinical observations for each patient dosed follows.

- *Patient 1.* This patient, a 65-year-old male, relapsed five months after receiving an allogeneic stem cell transplant. He failed a donor lymphocyte infusion, or DLI, of one billion cells as well as a targeted therapy before entering our clinical trial. This patient received a single infusion of 50M T cells. Of particular interest is the fact that the NEXI-001 T cell product was generated from the patient's original stem cell and DLI donor.

  After receiving a single infusion of 50M NEXI-001 T cells, the patient was observed to have stable bone marrow disease, improvement in donor cell chimerism, improvement in neutrophil engraftment, decrease in tumor mutation burden, and decreases in both platelet and Red Blood Cell, or RBC,

transfusion burden at the one-month follow-up timepoint, However, six weeks after administration of our cells, the patient's treating physician decided to add enasidenib therapy to address the patient's remaining IDH2 tumor mutation. Six weeks later, the patient's disease progressed and the patient subsequently dropped off study.

After three months of follow-up, no SAEs or TRAEs of any grade were reported.

- *Patient 2.* This patient, a 40-year-old male, relapsed seven years after receiving an allogeneic stem cell transplant. The patient's leukemia presented as a myeloid sarcoma, which occurs when leukemia blasts escape the bone marrow and travel to a 'sanctuary site', forming a sarcoma, or solid tumor-like mass. He also failed several targeted therapies before enrolling in our clinical trial.

After receiving a single infusion of 100M NEXI-001 T cells, the patient's myeloid sarcoma was observed to decrease in diameter by 18% as measured by CT scan at the one-month follow-up timepoint. This response was classified as stable disease, or SD, by RECIST Criteria 1.1. The patient's marrow blast counts were undetectable by flow cytometry at the one-month follow-up timepoint. At the month-two follow-up, the patient presented with progressive disease, and was dropped off study..

- *Patient 3.* This patient, a 72-year-old female, relapsed three months after receiving an allogeneic stem cell transplant. Her blast count at relapse was 40% and she subsequently failed several targeted and experimental therapies before enrolling in our clinical trial.

  This patient had proliferating disease after the administration of bridging therapy and prior to infusion of 100M NEXI-001 T cells. While this patient demonstrated initial signs of immunological response, there we no signs of clinical activity, the patient presented with progressive disease at the one-month follow-up timepoint. and was dropped off study. The patient succumbed to her disease shortly thereafter.

- *Patient 4.* This patient, a 43-year-old male, relapsed 10 months after receiving an allogeneic stem cell transplant. He also failed both targeted and chemotherapy before enrolling in our clinical trial. In the time between screening and infusion of the 100M NEXI-001 T cells, the patient developed a fungal infection that led to bilateral pneumonia and the need for supplemental oxygen.

After receiving a single infusion of 100M NEXI-001 T cells, the patient was observed to have stable bone marrow disease through the three-month follow-up timepoint (ongoing response). Also observed were decreasing peripheral blast counts, a >50% decrease in both platelet and RBC transfusion burden, complete neutrophil engraftment, and increased ICOG performance. This patient remains on study and continues to be monitored.

- *Patient 5.* This patient, a 23-year-old male, relapsed 25 months after receiving an allogeneic stem cell transplant, and presented with MRD, or minimal residual disease, positive AML. This is the first patient enrolled in the Dose Level 2 cohort, and received an initial infusion of 200M NEXI-001 T cells. At the one-month follow-up timepoint, the patient observed a reduction in bone marrow blasts as measured by bone marrow flow cytometry. At the two-month follow-up timepoint, the patient was assessed as having Marrow Leukemia Free State (MLFS) disease. Per revised protocol, this patient is eligible to receive a repeat infusion of 200M NEXI-001 T cells. This patient remains on study and continues to be monitored.

As stated above, we are early in the safety evaluation and dose-finding part of the Phase I/II trial, and the results presented represent data from the first five patients only and are not statistically significant.

NEXI-002

NEXI-002 is an autologous cell therapy in Phase I/II clinical development to treat patients with relapsed and/or refractory MM who have failed at least three prior lines of therapy. MM accounts for around 10% to 15% of all hematologic malignancies and primarily affects older individuals, with approximately 32,000 new cases a year in the United States. While significant progress has been made in the treatment of MM, there is currently no cure for the condition.

Treatment Paradigm for MM

There are currently several T cell therapies under clinical investigation for this patient population. Among them, anti-B-cell maturation antigen, or BCMA, transduced CAR T therapies have demonstrated early and impressive initial clinical results across multiple Phase II/III clinical trials, with objective responses rates, or ORR, greater than 90% in patients reported within some individual trials, and progression free survival, or PFS, rates of approximately 11 months. As clinical trial experience grows and initial data sets mature, certain and common limitations of these therapies are also becoming evident, with many directly attributable to the technology itself.

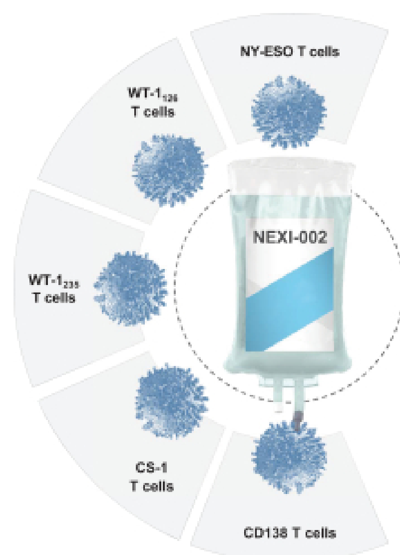
CAR T therapy, by design, uses an antibody to target a single protein, such as BCMA, expressed on the surface of a plasma cell. These surface proteins are not critical to the survival of the plasma cell, and can be down-regulated when under immune pressure, such as from the CAR T cell. As a result, the tumor cell can avoid detection by the CAR T cell in a process known as tumor escape. We also believe that a primary driver of tumor relapse following CAR T therapy is the loss of CAR T cells from a patient's body: the CAR T cells do not persist long enough to maintain a durable clinical response. Due to the way CAR T cells are manufactured, they contain highly potent T cells, but do not contain the natural T cell subtypes that support self-renewal, immunologic memory and long-term persistence. When the CAR T cells die, the cancer can relapse.

NEXI-002 was designed to address these emerging limitations of CAR T therapy.

- *Tumor escape.* Each infusion of NEXI-002 contains populations of T cells directed to recognize and attack multiple antigen targets on each malignant plasma cell, as shown in the figure below. These targets represent a combination of cell surface antigen proteins, such as CS-1 and CD138, and endogenously presented survival antigen proteins, such as WT-1 and NY-ESO. We believe that by targeting multiple antigen proteins that are over-expressed on each malignant plasma cell, some of which are necessary for tumor cell survival, NEXI-002 has the potential to effectively address tumor escape as an immune evasion mechanism.
- *Tumor relapse.* The AIM technology has been optimized to consistently produce product candidates that contain T cell subtypes that support anti-tumor potency, self-renewal, immunologic memory and long-term T cell persistence. We believe the combination of these T cell characteristics has the potential to effectively address disease relapse due to short-term T cell survival.

When taken together we believe these attributes of NEXI-002 give it the potential to improve the durability of clinical responses observed with current BCMA-transduced CAR T products, extend PFS rates and improve the toxicity profile reported to date when using these genetically engineered T cell modalities.

As with NEXI-001, our AIM technology is used to produce each NEXI-002 infusion. AIM nanoparticles loaded with MM-specific antigen peptides, enriched and expanded by the E+E system, generate populations of T cells that are directed to recognize and attack the specific antigen targets, as illustrated in the graphic below.



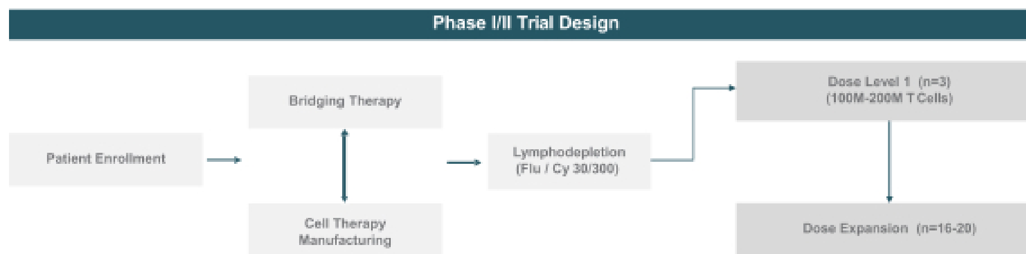
The T cells in each NEXI-002 infusion are designed to be highly potent and highly selective in their ability to distinguish malignant plasma cells from healthy plasma cells, and to contain key T cell subtypes that promote anti-tumor potency, immunologic memory and long-term T cell persistence. We believe this combination of attributes has the potential to deliver deep and durable clinical responses for MM patients who have failed at least three lines of prior therapy.

Phase I/II Clinical Trial Design

Our ongoing clinical trial with NEXI-002 is a prospective, multi-center, open-label, single-arm, dose-escalating Phase I/II clinical trial that aims to enroll between 19 and 23 patients. This trial consists of two phases. The initial safety evaluation phase assesses the safety and tolerability of a single infusion of NEXI-002 within a single dose range. In the second part of the trial, the expansion phase, investigators will further define safety and will also evaluate the initial efficacy of each product candidate at the dose established in the safety evaluation phase. We are currently in the safety evaluation phase of the trial. The trial's primary objective is to assess the safety and tolerability of a single infusion of NEXI-002 T cells in patients with MM who have failed at least three prior lines of therapy. Secondary objectives include signals of anti-tumor activity, ORR (which includes complete response), OS and PFS. Additional biomarker analysis will assess the *in vivo* persistence, proliferation, functionality and TCR repertoire of NEXI-002 T cells as measured in blood and bone marrow samples. Our clinical endpoints have been recognized as appropriate measurements of safety and clinical response. The Dana

Farber Cancer Center is the lead clinical trial site for this trial, with additional trial sites at the City of Hope Cancer Center, the M.D. Anderson Cancer Center, the Memorial Sloan Kettering Cancer Center, the Karmanos Cancer Institute, the Ohio State University Comprehensive Cancer Center, and the Advent Hospital in Orlando, Florida.

- Design: Prospective, multi-center, open-label, single-arm Phase I/II study
- Eligibility: HLA-A2 patients with relapsed/refractory MM who have failed >3 prior lines of therapy
- Objectives: Primary: Safety and tolerability
  Secondary: Immunologic and anti-tumor activity (ORR, PFS, OS)
- Biomarkers: Antigen-specific T cell persistence, Immuno-phenotype, Functionality, TCR sequencing (blood and bone marrow), and HLA expression



Preliminary Data from the Phase I/II Clinical Trial

We have treated two patients in the Dose Level 1 safety cohort. With a median follow-up of one month on two patients to date, there have been no SAEs or TRAEs reported after a single infusion of NEXI-002 T cells, including no CRS, ICANs or IRRs. Analyses of immunologic and clinical activity are ongoing. We expect to announce three-month data from the completed safety cohort by the end of the second quarter of 2021. Initial data for most patients in the trial, including the expansion cohort, is expected by the end of 2021.

Future Opportunities

Moving forward, we expect to pursue additional modality applications and indications across multiple disease areas. Our strategy is to establish clinical proof of concept, or POC, for the AIM technology with NEXI-001 and NEXI-002 in hematologic malignancies, and then to develop new AIM ACT and AIM INJ product candidates to expand into solid tumors, with potential further expansion into autoimmune disorders and infectious diseases. We have generated a significant body of non-clinical data to support this approach, which we use to prioritize our clinical development efforts and to identify potential disease areas and indications to pursue.

- *Solid Tumors.* The scientific community has identified, robustly characterized and clinically evaluated over 75 specific antigen targets across multiple solid tumor types, and we plan to use this data to inform our next wave of product development in oncology. We intend to identify a "basket" of solid tumors that share a common set of highly immunogenic and clinically validated tumor-relevant antigen targets for inclusion in our next AIM ACT clinical program. We envision this program will evaluate a new AIM ACT product candidate as both monotherapy and in combination with a tumor microenvironment, or TME, altering therapy, such as checkpoint inhibitors. We plan to evaluate clinical POC to support the AIM technology in solid tumors, which would serve as the basis for the introduction of an AIM INJ product candidate into early clinical development for solid tumor indications.
- *Autoimmune Disorders*. We believe that our AIM technology will enable us to target autoimmune conditions using either the AIM ACT or AIM INJ modality. For most autoimmune disorders like Type 1 Diabetes, autoreactive (or self-destructive) T cells become the cells targeted for therapeutic intervention. For these conditions, AIM nanoparticles are loaded with Signal 1 antigen peptides that autoreactive T cells recognize, and Signal 2 is programmed to deliver a suppressive or apoptotic signal that either

tolerizes or eliminates the disease-causing T cells. In conditions like multiple sclerosis, or MS, the Epstein-Barr virus, or EBV, plays a critical role in mediating the disease process. Eliminating EBV-infected cells with EBV-specific T cells has been shown by others to impact disease progression for patients with Primary Progressive MS. We believe that EBV-specific AIM ACT or AIM INJ product candidates can be developed for clinical evaluation in various forms of MS.

- *Infectious Diseases*. We believe that there may be significant opportunities to address other viral-mediated diseases using the AIM platform to develop either AIM ACT or AIM INJ product candidates. We also believe that the AIM technology may offer a novel approach to the rapid treatment of, and preparation for, future viral-epidemics and pandemics.
- *Expanding to new HLA allele subtype populations.* We are also developing additional HLA allele subtypes. NEXI-001 and NEXI-002 currently use the HLA-A2 allele, which is most prevalent within the Caucasian ethnicity. However, the additional HLA subtypes we plan to develop, including HLA-A1, HLA-A11, HLA-A24 and HLA-B7, would broaden the patient eligibility of future product candidates. We believe the modular AIM platform will facilitate the rapid development of nanoparticles that exchange the current HLA-A2 for new HLA subtypes, which could then be used for all AIM product candidates in development.

In addition, we continually survey the scientific and industry landscape for opportunities to license, partner or acquire technologies that may help us advance current or new T cell therapies for the benefit of patients.

Manufacturing

Using our AIM technology platform, we have developed a manufacturing process that benefits from the interchangeability and modular nature of the platform. We believe that our manufacturing process possesses a number of key advantages, including (i) consistent characterization of the final T cells across indications, (ii) a reproducible process that delivers the same composition and quality of final T cells across indications regardless of peptide mix used or source of PBMC, whether patient or donor, (iii) the ability to rapidly modify and test process refinements for comparability of the final product, and (iv) the potential to increase efficiency and to rapidly scale up the manufacturing process. We also believe that these attributes address many of the manufacturing challenges faced by other cell therapy approaches, including the inability to control for composition, longer manufacturing times and scale-up limitations.

Manufacturing Process

The manufacture of the AIM nanoparticles, regardless of application, includes the production of two signaling proteins, which, when conjugated to the core nanoparticles (SPIO or PLGA/PEG) comprise the AIM nanoparticles. When the peptide-loaded Signal 1 protein is combined with the co-stimulatory Signal 2 protein on the nanoparticle, the resulting AIM nanoparticles simulate classic antigen presentation and co-stimulatory signals directly to relevant T cells.

The Proteins

Our current AIM ACT and AIM INJ nanoparticles share the same Signal 1 and Signal 2 proteins aligned to the specified therapeutic goal. Signal 1, shown on the left in the graphic below, is a humanized HLA.A*02.01 IgG4 (Fc) fusion protein hinge dimer, which is designed for the specific loading of disease-relevant antigen peptides to deliver the antigen specific signal to a targeted T cell. Signal 2, shown on the right in the graphic below, is a humanized anti-CD28 monoclonal antibody, which is designed to provide the co-stimulatory or “go” signal for activation and proliferation. Both Signal 1 and Signal 2 are provided simultaneously to T cells by the

AIM nanoparticles, within AIM ACT or AIM INJ modalities. As a result, our design specifications for nanoparticle production also include the density and ratio of protein signals.

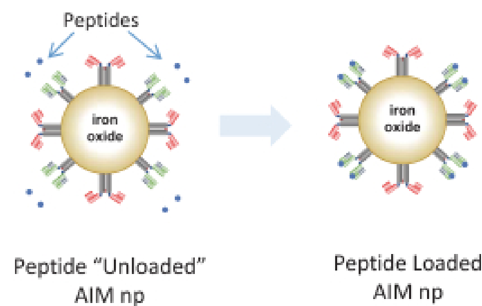
Signal 1: HLA-A*02:01 (IgG4) fusion protein **Signal 2:** anti-CD28 Antibody

Our molecular engineering approach employs a modular “cassette” to design, build and test novel protein constructs, which enables rapid selection for new product development. As part of our modular system, all proteins include free cysteines, which are used for coupling of the proteins to the nanoparticle core.

Our proteins are manufactured by a third-party CMO. These same proteins are used for both modalities.

AIM ACT Nanoparticle

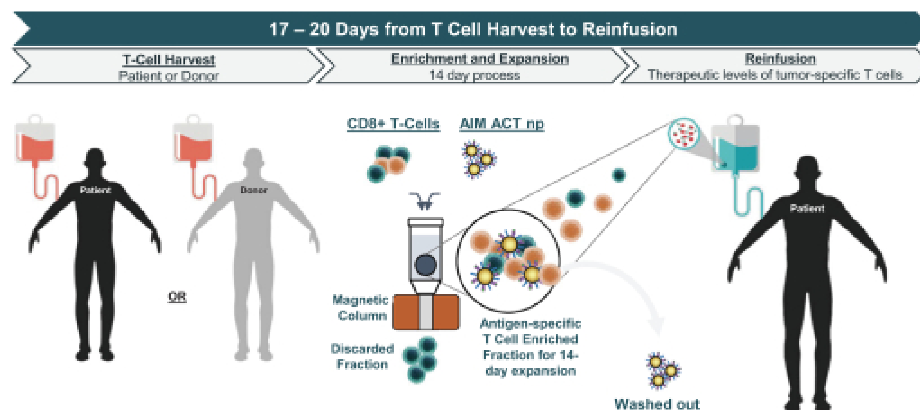
The AIM ACT nanoparticles are produced by coupling the HLA.A*02.01 hinge dimer and anti-CD28 antibody proteins to the SPIO core, which is approximately 80 to 100 nanometers in diameter and consistent with our design specifications. AIM ACT nanoparticles are produced by a third-party CMO. Our site-directed coupling methods have been designed to control for protein density, protein ratio and to direct the functional ends of both proteins outward for T cell engagement and signaling. The manufacturing of the AIM ACT core nanoparticle, which is antigen-peptide “unloaded”, takes approximately seven days and is illustrated below in the graphic on the left. Peptide loading of AIM ACT core nanoparticles is accomplished by loading each individual peptide of the selected peptide mix separately using individual nanoparticle aliquots, illustrated below in the graphic on the right. While different peptide combinations are used for NEXI-001 and NEXI-002, the peptide loading procedure is the same and is completed in approximately three days. Each product-specific peptide-loaded nanoparticle mix is washed to remove excess peptides followed by fill-finish and release of vials for use in the manufacturing of NEXI-001 or NEXI-002. This standardized approach to coupling proteins to core nanoparticles and to peptide loading methods was established during process development and designed to enable rapid interchangeability of protein or peptide mixes to develop new product candidates regardless of the modality, whether AIM ACT or AIM INJ.



AIM ACT Product

The AIM ACT product for each patient, whether NEXI-001 and NEXI-002, is manufactured using our proprietary E+E system. This system has been developed and optimized to consistently produce T cells with the combined differentiation attributes described in the platform technology section regardless of peptide mix, whether NEXI-001 or NEXI-002, or starting PBMC source material, whether donor or patient. For clinical manufacturing, we have developed an automated, fully-closed cell-processing system, and custom application programs to perform our proprietary E+E process using the AIM ACT nanoparticles. The manufacturing process is completed in approximately 14 days.

The current Phase I/II clinical manufacturing of NEXI-001 and NEXI-002 is performed by a third-party CMO. The following graphic summarizes our manufacturing process, which is further described below.



Cells are collected via apheresis from healthy donors for the manufacture of NEXI-001 or from MM patients for the manufacture of NEXI-002 and shipped to our CMO for the manufacture of the final T cell product. The E+E system involves the following key steps.

- *CD8+ enrichment*. The first step is designed to enrich for CD8+ T cells by deleting unwanted cells such as CD4+ T cells, monocytes and neutrophils.
- *CD8+ antigen-specific enrichment*. The remaining CD8+ enriched cells are co-cultured with the product-specific mix of peptide loaded AIM ACT nanoparticles for NEXI-001 or NEXI-002. After incubation with the peptide loaded ACT nanoparticles, the cells are passed through a magnetic column where the ACT nanoparticle engaged antigen-specific CD8+ cells are captured and “pulled down” and proceed to the expansion phase, while remaining non-target cells flow through, shown in the graphic above as the discarded fraction.
- *Expansion*. The CD8+ antigen specific enriched cells are transferred to the expansion chamber and cultured for 14 days using media and our proprietary cytokine mix. During this phase, T cells that are engaged with the AIM nanoparticles via Signal 1 and 2 transition their phenotype from naïve to memory, which also “primes” the T cell’s cytolytic properties.
- *Harvest and formulation*. Final T cells are harvested from the expansion chamber, washed to remove media, cytokines and residual AIM ACT nanoparticles and then formulated with dimethyl sulfoxide, used as a cryoprotectant, in infusion bags (20 milliliters or 40 milliliters). There are no detectable AIM ACT nanoparticles or free protein remaining in the final product. The final formulated cells are frozen and upon release are shipped to the site for patient administration.

Product release specifications include CD3+ T cells, CD8+ T cells, total antigen specificity, purity and sterility. Our manufacturing process has demonstrated consistency in producing T cells with the desired composition and quality for release. Additionally, our manufacturing process consistently produces T cells that include the important memory subtypes, Tscm, Tcm and Tem. While this is not required as a release specification, we believe it is an important differentiating attribute.

Our manufacturing process has been extensively tested across multiple different peptides, peptide mixes and nanoparticle lots. One specific experiment was conducted to demonstrate consistency and to evaluate the variance contribution of each donor (or patient) versus the variance contribution of the process using 26 split runs with 13 healthy donor PBMCs as starting material. Split runs are conducted by dividing the apheresis material in half after the first step and running the E+E process on two different machines with two different operators in parallel. To further test the performance of the manufacturing process, the experiment also evaluated different AIM ACT nanoparticle lots, peptide mixes, manufacturing machines and operators. Regardless of nanoparticle lot, peptide mix, machine or operator, the variances in the final product results were driven primarily by each donor or patient source material (approximately 98% of the variances), and not the process (less than 2%). Similar runs were used to further optimize key manufacturing steps.

AIM INJ Nanoparticle

The AIM INJ program is based on the core nanoparticle material using PLGA-PEG polymers. PLGA and PEG have been widely used in pharmaceutical formulations.

The AIM INJ core nanoparticle is produced using the two polymers at a defined ratio to meet our specification. The core nanoparticle manufacturing will be conducted in a fully closed multi-unit system that complies with current good manufacturing procedures, or cGMP, and provides a scale-up process that is achieved through multiplying our current manufacturing process rather than a more traditional process scale-up for larger scale production. Once scale-up has occurred, we anticipate that the PLGA-PEG core nanoparticles will be able to be manufactured in approximately three days. The same proteins, protein conjugation and peptide loading methods used to produce AIM ACT nanoparticles are used to manufacture the AIM INJ nanoparticles, which is the final product. We anticipate that the manufacturing time for the final AIM INJ product candidate will be approximately three to five days, followed by a fill-finish process and release.

Manufacturing Strategy

We currently plan to use third-party CMOs for near term manufacturing. However, in the future we may decide to bring some manufacturing capabilities in house. Our current manufacturing strategy is designed to address clinical and, if approved, commercial supply for the United States; however, we anticipate the same strategy can be applied to expand into other geographic regions.

Commercialization

Subject to receiving marketing approvals, we expect to commence commercialization activities by building a focused commercial organization in the United States to market, sell and distribute our products. We believe that such an organization can efficiently address the community of hematologists and oncologists who are the key specialists treating the patient populations for which our most advanced product candidates are being developed. Outside the United States, we expect to enter into distribution and other marketing arrangements with third parties to support any of our product candidates that obtain marketing approval.

Given our potential to generate novel product candidates with potential to address a wide variety of cancers, autoimmune and infectious diseases, we may also consider opportunistically entering into strategic partnerships focused on certain targets, product candidates, disease areas or geographies. These collaborations could advance and accelerate our current clinical and platform development programs in ways that could maximize product availability and value creation.

Competition

We are initially developing product candidates to address hematological malignancies, which will be followed by an expansion into solid tumors, autoimmune disorders and infectious diseases. Accordingly, we may face competitors from multiple biotechnology or biopharmaceutical companies, many of which have access to greater resources, technical expertise and broader collaborations that could result in faster development, exclusive access to novel enabling technologies, biomarker-based differentiation or commercialization. These competitors also compete for recruiting and retaining talent in critical areas of research, development, manufacturing, regulatory and commercial functions. If NEXI-001, NEXI-002 or any of our future product candidates do not offer sustainable advantages over competing products, we may not be able to successfully compete against current and future competitors.

The field of immuno-oncology is rapidly evolving, and we expect to compete with companies developing other approaches to direct T cell function. These include but are not limited to, the following modalities.

Genetically Engineered T Cells

These include both CAR-T and TCR engineered cell therapies being developed as treatments for MM and AML. CAR-T cell therapies generally target single cell surface antigen proteins and are mostly limited to blood tumors, including products and product candidates being developed at companies such as Bristol-Myers Squibb Company, Novartis AG, Gilead Sciences, Inc., Fate Therapeutics, Inc. and Mustang Bio, Inc. We also expect to compete with TCR engineered cell therapies, which employ high affinity TCR's against a single endogenously presented antigen peptide, including products and product candidates being developed by companies such as Adaptimmune Therapeutics plc, GlaxoSmithKline plc, Gilead Sciences, Inc. and Immatics N.V.

Non-engineered T Cells

These are cell therapy approaches that employ the *ex vivo* activation and expansion of non-genetically engineered endogenous T cells, including TIL products, such as those being developed by Iovance Biotherapeutics, Inc., and antigen presenting cell, or APC, based systems, *ex vivo* activation and expansion systems, such as those being developed by Atara Biotherapeutics, Inc. and Marker Therapeutics, Inc.

Cancer Vaccines

Cancer vaccine approaches rely on host antigen presenting cells as intermediaries to process and present specific signals that direct a targeted T cell function, including products and product candidates being developed at companies like SQZ Biotechnologies Company, BioNTech SE and Moderna, Inc.

Antibody Platforms

These modalities employ modified antibodies to redirect T cell function and include bispecific T cell engagers, or BiTEs, and dual-affinity re-targeting proteins, or DARTs, including products and product candidates being developed at companies like Amgen Inc., GlaxoSmithKline plc, Johnson & Johnson and MacroGenics, Inc.

Our competitors may obtain regulatory approval for their products more rapidly than we may, or may obtain patent protection or other intellectual property rights that limit our ability to develop or commercialize our product candidates. Our competitors may also develop drugs that are more effective, more convenient, more widely used and less costly or have a better safety profile than our products. These competitors may also be more successful in manufacturing and marketing their products.

Johns Hopkins License Agreement

In June 2011, we entered into an exclusive license agreement with Johns Hopkins, which was subsequently amended and then superseded in January 2017 by an amended and restated exclusive license agreement, which we refer to as the A&R Johns Hopkins License Agreement. Pursuant to the A&R Johns Hopkins License Agreement, we have (i) an exclusive license to make, have made, use, import, offer for sale and sell artificial antigen presenting cells (AIM nanoparticles) covered by patent rights owned by Johns Hopkins in therapeutic, diagnostic and non-clinical fields, (ii) an exclusive license to make have made, use, import, offer for sale and sell fusion proteins covered by patent rights owned by Johns Hopkins in the therapeutic field, (iii) a non-exclusive license to make, have made, use, import, offer for sale and sell fusion proteins covered by patent rights owned by Johns Hopkins in diagnostic and non-clinical fields and (iv) a non-exclusive right to use Johns Hopkins's know-how to develop, make, have made and sell products covered by patent rights owned by Johns Hopkins and to develop and provide services covered by the patent rights owned by Johns Hopkins. The rights licensed to us are worldwide and include the right to grant sublicenses.

Johns Hopkins retains rights to practice the patent rights and know-how for itself and other non-profit academic and non-profit research institutions for any non-profit, non-commercial research or other non-commercial purpose. The United States government may have a non-exclusive, non-transferable, irrevocable, paid-up license to practice or have practiced for or on behalf of the United States throughout the world the inventions described in the patent rights owned by Johns Hopkins that were supported by federal funding. We may be obligated to manufacture the products sold or used in the United States that are covered by patent rights supported by federal funding substantially in the United States.

Under the terms of the 2011 license agreement and the A&R Johns Hopkins License Agreement, Johns Hopkins was entitled to an up-front license fee of $155,000 and we issued them 464,748 shares of our common stock. Johns Hopkins was also entitled to milestone fees of $75,000 in connection with clinical trial milestones. For the first licensed product or licensed service in the therapeutic field, we may be required to pay Johns Hopkins additional aggregate milestone fees of $1.625 million for clinical and regulatory milestone fees. We may be required to pay Johns Hopkins reduced milestone fees for the second and third licensed products or licensed services in the therapeutic field in connection with clinical and regulatory milestones. In the diagnostic field, we may be required to pay Johns Hopkins aggregate milestone fees of $400,000 for the first licensed product or licensed service and reduced milestone fees for the second and third licensed products or licensed services. We may be required to pay Johns Hopkins aggregate milestone fees of $100,000 for commercial milestones for the first licensed product or licensed service in the non-clinical field. In the aggregate, we may be required to pay Johns Hopkins additional milestone fees of up to $4.225 million for all clinical, regulatory and commercial milestones for all licensed products or licensed services in the therapeutic field, the diagnostic field and the non-clinical field. We may also be required to pay royalties in the low to upper single digits on net sales of licensed products and licensed services in the therapeutic field, diagnostic field and non-clinical field that are covered by the patent rights owned by Johns Hopkins or use know-how of Johns Hopkins. We are required to make minimum annual royalty payments of $100,000 to Johns Hopkins for the remainder of the term of the A&R Johns Hopkins License Agreement; the amount of the minimum annual royalty payment started in the low five figures in the first year of the agreement and increased to $100,000 in the third year of the agreement. We may also be required to pay Johns Hopkins a low double digit percentage, not to exceed 15%, of any non-royalty sublicense consideration we receive. We are also required to use commercially reasonable efforts to meet certain clinical and technical diligence milestones.

In the event Johns Hopkins or another party provides us with clinical or other evidence demonstrating the practicality of a particular market or use within the therapeutic, diagnostic or non-clinical fields that we are not developing or commercializing, we are required to use commercially reasonable efforts to start development or attempt to sublicense to a suitable third party for that particular market or use. If we fail to use commercially reasonable efforts to commence development or do not grant a sublicense to a suitable third party, all rights to that particular use will revert back to Johns Hopkins at no cost and Johns Hopkins will be able to license that

particular use to third parties. We are not required to cause development of any licensed product or licensed service for a particular market or use if we reasonably demonstrate to Johns Hopkins that developing such licensed products or licensed services or granting a sublicense for such market or use would a have a potentially adverse commercial effect upon licensed products or licensed services being developed or sold by us, our affiliates or our existing sublicensees.

Unless terminated earlier in accordance with the agreement, the A&R Johns Hopkins License Agreement and the royalty obligations thereunder will continue on a licensed product-by-licensed product or licensed service-by-licensed service and country-by-country basis until the expiration date of the last-to-expire patent or, if no patents issue, until the tenth anniversary of the agreement, at which time the licenses will become fully paid up and royalty-free.

We or Johns Hopkins may terminate the A&R Johns Hopkins License Agreement if the other party files for insolvency or if there is an uncured breach of obligations or failure to perform by the other party. We may terminate the A&R Johns Hopkins License Agreement upon giving Johns Hopkins 90 days' written notice.

Intellectual Property

We believe that our patents and patent applications, and other proprietary rights, that we own or control through licensing, are important to our business and competitive position. In addition to patents, we rely on trade secrets, know-how, and continuing technological innovations to develop, maintain and strengthen our competitive position. We seek to protect these, in part, through confidentiality agreements with certain employees, consultants, advisors and other parties. Our success will depend in part on our ability, and the ability of our licensor, to obtain, maintain (including making periodic filings and payments) and enforce our patents, including those patents and applications to which we have exclusive rights.

We own or have exclusively licensed five issued United States patents and eight pending patent applications for the United States. We also have 37 issued or allowed foreign patents and 64 pending foreign patent applications (including PCT Applications) intended to protect the intellectual property underlying our technology. In addition to the United States, we have patents issued or applications pending in Australia, Brazil, Canada, China, Europe (EPO), Hong Kong, India, Israel, Japan, South Korea, Mexico, Russian Federation, and Singapore. Our patent applications describe and claim certain features of our technologies, including our T cell activation and expansion platform, our cell therapy product candidates, and our drug candidates based on injectable artificial antigen presenting cells. We currently control issued patents in the United States, Australia, Canada, China, Europe, Israel, Japan, Mexico, and South Korea which relate to the technology for generating our cell therapy products (NEXI-001 and NEXI-002) from allogeneic or autologous T cells. Applications relating to our NEXI-001 and NEXI-002 programs remain pending in all jurisdictions for which we have filed patent applications, including more recent patent applications that relate in part to the NEXI-001 and NEXI-002 composition of matter. In addition, we control issued or allowed patents in the United States, Australia, Brazil, Japan, Mexico, and Europe that relate to our AIM INJ programs, including patents covering compositions of matter and methods of use. Applications relating to our AIM INJ programs remain pending in Australia, Brazil, Canada, China, Europe, Hong Kong, India, Israel, Japan, Mexico, South Korea, Singapore, and United States. We have and will continue to actively protect our intellectual property, including filing patent applications for our innovations, prosecuting our pending patent applications, and maintaining and enforcing our issued patents. No assurances can be given that pending patent applications will result in the issuance of a patent or that the examination process will not require us to narrow our claims. In addition, issued patents may be circumvented by third parties, or found unenforceable or invalid if contested before a court or administrative agency. Thus, we may not be able to successfully enforce our patent rights against third parties. No assurance can be given that others will not independently develop a similar or competing technology or design around any patents that may be issued to us.

Each of our patents, if and when granted, will generally have a term of 20 years from its earliest, non-provisional filing date, subject to available extensions. Our patents and, if granted, patent applications have expiry dates ranging from 2034 to 2039.

For more comprehensive risks related to our proprietary technology and processes, please see the section of this prospectus captioned "*Risk Factors—Risks Related to Intellectual Property.*"

Employees and Human Capital Resources

As of December 31, 2020, we had 44 full-time employees. Of these employees, 31 were engaged in research and development activities. Substantially all of our employees are based in Gaithersburg, Maryland. None of our employees are represented by labor unions or covered by collective bargaining agreements. We consider our relationship with our employees to be good.

Our human capital resources objectives include, as applicable, identifying, recruiting, retaining, incentivizing and integrating our existing and new employees, advisors and consultants. The principal purposes of our equity and cash incentive plans are to attract, retain and reward personnel through the granting of stock-based and cash-based compensation awards, in order to increase stockholder value and the success of our company by motivating such individuals to perform to the best of their abilities and achieve our objectives.

Government Regulation and Product Approval

Therapeutic products are subject to rigorous regulation by the FDA and other governmental agency regulations in the United States and in foreign countries. Noncompliance with applicable requirements can result in import detentions, fines, civil penalties, injunctions, suspensions or losses of regulatory approvals or clearances, recall or seizure of products, operating restrictions, denial of export applications, governmental prohibitions on entering into supply contracts, and criminal prosecution. Failure to obtain regulatory approvals or the restriction, suspension or revocation of regulatory approvals or clearances, as well as any other failure to comply with regulatory requirements, would have a material adverse effect on our business, financial condition and results of operations. In connection with therapeutic approval, we will have to comply with the many requirements associated with preclinical and clinical trials, the FDA application process, the terms of any pre-certification protocols and agreements, FDA manufacturing requirements for prototypes, and testing. Upon approval of a Biologics License Application, or BLA and similar approvals in other jurisdictions, there will be additional regulation relating to the packaging, distribution, marking, marketing and claims of our potential products. These later regulations are not only found in federal regulation but many states and, of course, foreign countries.

The U.S. FDA Process

The FDA regulates the clinical testing and design of therapeutics to ensure that medical products distributed in the United States are safe and effective for their intended uses. The application process for a new therapeutic is highly regulated.

As a biopharmaceutical company that operates in the United States, we are subject to extensive regulation by relevant authorities. Our potential products will be regulated as biologics. With this classification, commercial production of our potential products will need to occur in registered and licensed facilities in compliance with cGMP established by the FDA for biologics. The FDA categorizes human cell- or tissue-based products as either minimally manipulated or more than minimally manipulated, and has determined that more than minimally manipulated products require clinical trials to demonstrate product safety and efficacy and the submission of a BLA for marketing authorization.

Government authorities in the United States (at the federal, state and local levels) and in other countries extensively regulate, among other things, the research, development, testing, manufacturing, quality control,

approval, labeling, packaging, storage, record-keeping, promotion, advertising, distribution, post-approval monitoring and reporting, marketing and export and import of biopharmaceutical products such as those we are developing. Our candidates must be approved by the FDA before they may be legally marketed in the United States and by the appropriate foreign regulatory agency before they may be legally marketed in a foreign country. Generally, our activities in other countries will be subject to regulation that is similar in nature and scope as that imposed in the United States, although there can be important differences. Additionally, some significant aspects of regulation in Europe are addressed in a centralized way, but country-specific regulation remains essential in many respects. The process for obtaining regulatory marketing 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. Product Development Process

In the United States, the FDA regulates pharmaceutical and biological products under the Federal Food, Drug and Cosmetic Act, or FDCA, the Public Health Services Act, or PHSA, and their respective implementing regulations. Products are also subject to other federal, state and local statutes and regulations. 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. Failure to comply with the applicable U.S. requirements at any time during the product development process, approval process or after approval, may subject an applicant to administrative or judicial sanctions. FDA sanctions could include, among other actions, refusal to approve pending applications, withdrawal of an approval, a clinical hold, warning letters, product recalls or withdrawals from the market, product seizures, total or partial suspension of production or distribution injunctions, fines, refusals of government contracts, restitution, disgorgement or civil or criminal penalties. Any agency or judicial enforcement action could have a material adverse effect on us. The FDA has limited experience with commercial development of T cell therapies for cancer, including direct-injectable technologies such as AIM INJ. The process required by the FDA before a biological product may be marketed in the United States generally involves the following:

- completion of nonclinical laboratory tests and animal studies according to Good Laboratory Practices, or GLPs, and applicable requirements for the humane use of laboratory animals or other applicable regulations;
- submission to the FDA of an IND, which must become effective before human clinical trials may begin;
- approval by an independent institutional review board, or IRB, or ethics committee at each clinical trial site before each clinical trial may be initiated;
- performance of adequate and well-controlled human clinical trials according to the FDA’s regulations commonly referred to as Good Clinical Practice, or GCP, and any additional requirements for the protection of human research patients and their health information, to establish the safety and efficacy of the proposed biological product for its intended use;
- submission to the FDA of a BLA for marketing approval that includes substantive evidence of safety, purity, and potency from results of nonclinical testing and clinical trials;
- satisfactory completion of an FDA inspection of the manufacturing facility or facilities where the biological product is produced to assess compliance with cGMP to assure that the facilities, methods and controls are adequate to preserve the biological product’s identity, strength, quality and purity and, if applicable, the FDA’s current Good Tissue Practices, or cGTPs, for the use of human cellular and tissue products;
- potential FDA audit of the trial and clinical trial sites that generated the data in support of the BLA; and
- FDA review and approval, or licensure, of the BLA.

Preclinical studies

Before testing any biological product candidate, including our drug candidates, in humans, the drug candidate enters the preclinical testing stage. Preclinical tests, also referred to as nonclinical studies, include laboratory evaluations of product chemistry, toxicity and formulation, as well as animal studies to assess the potential safety and activity of the drug candidate. The conduct of the preclinical tests must comply with federal regulations and requirements, including GLP. The clinical trial sponsor must submit the results of the preclinical tests, together with manufacturing information, analytical data, any available clinical data or literature and a proposed clinical protocol, to the FDA as part of the IND. Some preclinical testing may continue even after the IND is submitted. An IND is a request for authorization from the FDA to administer an investigational product to humans, and must become effective before human clinical trials may begin.

Human clinical trials in support of a BLA

Clinical trials involve the administration of the biological product candidate to human research subjects under the supervision of qualified investigators, generally physicians not employed by or under the trial sponsor's control. Clinical trials are conducted under protocols detailing, among other things, the objectives of the clinical trial, dosing procedures, subject selection and exclusion criteria, and the parameters to be used to monitor subject safety, including stopping rules that assure a clinical trial will be stopped if certain adverse events should occur. Each protocol and any amendments to the protocol must be submitted to the FDA as part of the IND. An IND automatically becomes effective 30 days after receipt by the FDA, unless the FDA raises concerns or questions regarding the proposed clinical trials and places the trial on a clinical hold within that 30-day time period. In such a case, the IND sponsor and the FDA must resolve any outstanding concerns before the clinical trial can begin. The FDA may also impose clinical holds on a biological product candidate at any time before or during a clinical trial due to safety concerns or non-compliance. If the FDA imposes a clinical hold, the trial may not recommence without FDA authorization and then only under terms authorized by the FDA. Accordingly, we cannot be sure that submission of an IND will result in the FDA allowing clinical trials to begin or that, once begun, issues will not arise that suspend or terminate such trials.

Clinical trials must be conducted and monitored in accordance with the FDA's regulations comprising the GCP requirements, including the requirement that all research patients provide informed consent. Further, each clinical trial must be reviewed and approved by an independent institutional review board, or IRB, at or servicing each institution at which the clinical trial will be conducted. An IRB is charged with protecting the welfare and rights of trial participants and considers such items as whether the risks to individuals participating in the clinical trials are minimized and are reasonable in relation to anticipated benefits. The IRB also approves the form and content of the informed consent form that must be signed by each clinical trial subject or his or her legal representative and must monitor the clinical trial until completed. Clinical trials also must be reviewed by an institutional biosafety committee, or IBC, a local institutional committee that reviews and oversees basic and clinical research conducted at that institution. The IBC assesses the safety of the research and identifies any potential risk to public health or the environment.

Information about certain clinical trials, including details of the protocol and eventually study results, also must be submitted within specific timeframes to the National Institutes of Health for public dissemination on the ClinicalTrials.gov data registry. Information related to the investigational product, patient population, phase of investigation, study sites and investigators and other aspects of the clinical trial is made public as part of the registration of the clinical trial. Sponsors are also obligated to disclose the results of their clinical trials after completion. Disclosure of the results of these trials can be delayed in some cases for up to two years after the date of completion of the trial.

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

- Phase I. The product candidate is initially introduced into human subjects to test for safety, dosage tolerance, absorption, metabolism, distribution and excretion. The initial human testing is often

conducted in patients, rather than in healthy volunteers, in the case of products for severe or life-threatening diseases.

- Phase II. The biological product is evaluated in a limited patient population to identify possible safety risks (adverse effects), optimize dosing and preliminarily evaluate the efficacy of the product for specific targeted diseases.
- Phase III. Clinical trials are undertaken in an expanded patient population to further evaluate dosage, clinical efficacy, and safety, often at geographically dispersed trial sites. These clinical trials are intended to establish the overall risk to benefit ratio of the product and provide, if appropriate, an adequate basis for product labeling. These trials may include comparisons with placebo and/or other comparator treatments. The duration of treatment is often extended to mimic the actual use of a product during marketing.

Post-approval clinical trials, sometimes referred to as Phase IV clinical trials, may be conducted after initial marketing approval. These clinical trials are used to gain additional experience from the treatment of patients in the intended therapeutic indication, particularly for long-term safety follow-up. In certain instances, the FDA may mandate the performance of Phase IV clinical trials as a condition of approval of a BLA.

Progress reports detailing the results of the clinical trials must be submitted at least annually to the FDA and more frequently if serious adverse events, or SAEs, occur. The FDA or the sponsor may suspend or terminate a clinical trial at any time on various grounds, including a finding that the research subjects or patients are being exposed to an unacceptable health risk. Similarly, an IRB can suspend or terminate approval of a clinical trial at its institution if the clinical trial is not being conducted in accordance with the clinical protocol, GCP, or other IRB requirements or if the drug has been associated with unexpected serious harm to patients. Additionally, some trials are overseen by an independent group of qualified experts organized by the trial sponsor known as the data safety monitoring board or committee. This group provides authorization for whether a trial may move forward at designated checkpoints.

During the development of a new drug or biological product, sponsors have the opportunity to meet with the FDA at certain points, including prior to submission of an IND, at the end of Phase II, and before submission of a BLA. These meetings can provide an opportunity for the sponsor to share information about the data gathered to date, for the FDA to provide advice, and for the sponsor and the FDA to reach agreement on the next phase of development. Sponsors typically use the end of Phase II meeting to discuss their Phase II clinical results with the agency and to present their plans for the pivotal Phase III studies that they believe will support approval of the new drug or biological product.

Human immunotherapy products are a new category of therapeutics. Because this is a relatively new and expanding area of novel therapeutic interventions, there can be no assurance as to the length of the trial period, the number of patients the FDA will require to be enrolled in the trials in order to establish the safety, efficacy, purity and potency of immunotherapy products, or that the data generated in these trials will be acceptable to the FDA to support marketing approval.

Concurrently with clinical trials, companies usually complete additional studies and must also develop additional information about the physical characteristics of the biological product as well as finalize a process for manufacturing the product in commercial quantities in accordance with cGMP requirements. To help reduce the risk of the introduction of adventitious agents with use of biological products, the PHSA emphasizes the importance of manufacturing control for products whose attributes cannot be precisely defined. The manufacturing process must be capable of consistently producing quality batches of the drug candidate and, among other things, the sponsor must develop methods for testing the identity, strength, quality, potency and purity of the final biological product. Additionally, appropriate packaging must be selected and tested and stability studies must be conducted to demonstrate that the biological drug candidate does not undergo unacceptable deterioration over its shelf life.

U.S. Review and Approval Processes

Assuming successful completion of the required clinical testing, the results of the preclinical studies and clinical trials, along with information relating to the product's chemistry, manufacturing, and controls and proposed labeling, are submitted to the FDA as part of a BLA requesting approval to market the product for one or more indications. A BLA in particular must contain proof of the biological product candidate's safety, purity, potency and efficacy for its proposed indication or indications. Data may come from company-sponsored clinical trials intended to test the safety and efficacy of a product's use 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 efficacy of the investigational product to the satisfaction of the FDA. The testing and approval processes require substantial time and effort and there can be no assurance that the FDA will accept the BLA for filing and, even if filed, that any approval will be granted on a timely basis, if at all.

Under the Prescription Drug User Fee Act, as amended, or PDUFA, each BLA must be accompanied by a significant user fee, and the sponsor of an approved BLA is also subject to an annual program fee. The FDA adjusts the PDUFA user fees on an annual basis. Fee waivers or reductions are available in certain circumstances, including a waiver of the application fee for the first application filed by a small business. Additionally, no user fees are assessed on BLAs for products designated as orphan drugs, unless the product also includes a non-orphan indication.

According to the goals and policies for original BLAs agreed to by the FDA under PDUFA, the FDA has ten months from the filing date in which to complete its initial review of a standard application and respond to the applicant, and six months from the filing date for an application with priority review. For all BLAs, the ten and six-month time periods run from the filing date; for all other original applications, the ten and six-month time periods run from the submission date. Despite these review goals, it is not uncommon for FDA review of a BLA to extend beyond the goal date.

Within 60 days following submission of the application, the FDA reviews a BLA submitted to determine if it is substantially complete before the agency accepts it for filing. The FDA may refuse to file any BLA that it deems incomplete or not properly reviewable at the time of submission and may request additional information. In this event, the BLA must be resubmitted with the additional information. The resubmitted application also is subject to review before the FDA accepts it for filing. Once the submission is accepted for filing, the FDA begins an in-depth substantive review of the BLA. The FDA reviews the BLA to determine, among other things, whether the proposed product is safe, potent, and/or effective for its intended use, and has an acceptable purity profile, and whether the product is being manufactured in accordance with cGMP to assure and preserve the product's identity, safety, strength, quality, potency and purity. Most such applications are meant to be reviewed within ten months from the date it is accepted for filing, and most applications for "priority review" products are meant to be reviewed within six months from the date the application is accepted for filing. The review process may be extended by the FDA for three additional months to consider new information or in the case of a clarification provided by the applicant to address an outstanding deficiency identified by the FDA following the original submission.

The FDA may refer applications for novel biological products or biological products that present difficult questions of safety or efficacy to an advisory committee, typically a panel that includes clinicians and other experts, for review, evaluation and a recommendation as to whether the application should be approved and under what conditions. The FDA is not bound by the recommendations of an advisory committee, but it considers such recommendations carefully when making final decisions on approval. The FDA likely will re-analyze the clinical trial data, which could result in extensive discussions between the FDA and the applicant during the review process. The FDA also may require submission of a risk evaluation and mitigation strategy, or REMS, if it determines that a REMS is necessary to ensure that the benefits of the drug outweigh its risks and to assure the safe use of the drug or biological product. The REMS could include medication guides, physician communication plans, assessment plans and/or elements to assure safe use, such as restricted distribution methods, patient

registries or other risk minimization tools. The FDA determines the requirement for a REMS, as well as the specific REMS provisions, on a case-by-case basis. If the FDA concludes a REMS is needed, the sponsor of the BLA must submit a proposed REMS. The FDA will not approve a BLA without a REMS, if required.

Before approving a BLA, the FDA will typically conduct a pre-approval inspection of the facilities at which the product is manufactured. The FDA will not approve the product unless it determines that the manufacturing processes and facilities are in compliance with cGMP requirements and adequate to assure consistent production of the product within required specifications. For immunotherapy products, the FDA also will not approve the product if the manufacturer is not in compliance with the cGTPs, to the extent applicable. These are FDA regulations and guidance documents that govern the methods used in, and the facilities and controls used for, the manufacture of human cells, tissues, and cellular and tissue based products (HCT/Ps), which are human cells or tissue intended for implantation, transplant, infusion, or transfer into a human recipient. The primary intent of the cGTP requirements is to ensure that cellular tissue-based products are manufactured in a manner designed to prevent the introduction, transmission and spread of communicable disease. Additionally, before approving a BLA, the FDA will typically inspect one or more clinical sites to assure that the clinical trials were conducted in compliance with IND trial requirements and GCP requirements. To assure cGMP, cGTP and GCP compliance, an applicant must incur significant expenditure of time, money and effort in the areas of training, record keeping, production, and quality control.

In addition, under the Pediatric Research Equity Act, or PREA, a BLA or supplement to a BLA must contain data to assess the safety and effectiveness of the product for the claimed indications in all relevant pediatric subpopulations and to support dosing and administration for each pediatric subpopulation for which the product is safe and effective. The FDA may grant deferrals for submission of data or full or partial waivers. A sponsor who is planning to submit a marketing application for a product that includes a new active ingredient, new indication, new dosage form, new dosing regimen or new route of administration is required to submit an initial Pediatric Study Plan, or PSP, within sixty days of an end-of-Phase II meeting or, if there is no such meeting, as early as practicable before the initiation of the Phase III or Phase II/III clinical trial. The initial PSP must include an outline of the pediatric study or studies that the sponsor plans to conduct, including trial objectives and design, age groups, relevant endpoints and statistical approach, or a justification for not including such detailed information, and any request for a deferral of pediatric assessments or a full or partial waiver of the requirement to provide data from pediatric studies along with supporting information. The FDA and the sponsor must reach an agreement on the PSP. A sponsor can submit amendments to an agreed upon initial PSP at any time if changes to the pediatric plan need to be considered based on data collected from pre-clinical studies, early phase clinical trials or other clinical development programs. Unless otherwise required by regulation, the PREA does not apply to any product for an indication for which orphan designation has been granted. However, if only one indication for a product has orphan designation, a pediatric assessment may still be required for any applications to market that same product for the non-orphan indication(s).

Notwithstanding the submission of relevant data and information, the FDA may ultimately decide that the BLA does not satisfy its regulatory criteria for approval and deny approval or may require additional clinical or other data and information. Data obtained from clinical trials are not always conclusive and the FDA may interpret data differently than we interpret the same data. On the basis of the FDA's evaluation of the BLA and accompanying information, including the results of the inspection of the manufacturing facilities, the FDA may issue either an approval letter or a Complete Response Letter, or CRL. An approval letter authorizes commercial marketing of the product with specific prescribing information for specific indications. A CRL indicates that the review cycle of the application is complete and the application will not be approved in its present form. A CRL generally outlines the deficiencies in the submission and may require substantial additional testing or information in order for the FDA to reconsider the application. The CRL may require additional clinical or other data, additional pivotal Phase III clinical trial(s) and/or other significant and time-consuming requirements related to clinical trials, preclinical studies or manufacturing. If a CRL is issued, the applicant may choose to either resubmit the BLA addressing all of the deficiencies identified in the letter, or withdraw the application. If and when those deficiencies have been addressed to the FDA's satisfaction in a resubmission of the BLA, the FDA

will issue an approval letter. The FDA has committed to reviewing such resubmissions in response to an issued CRL in either two or six months depending on the type of information included. Even with the submission of this additional information, however, the FDA ultimately may decide that the application does not satisfy the regulatory criteria for approval.

If a product receives regulatory approval from the FDA, the approval is limited to the conditions of use (e.g., patient population, indication) described in the application. Further, depending on the specific risk(s) to be addressed, the FDA may require that contraindications, warnings or precautions be included in the product labeling, require that post-approval trials, including Phase IV clinical trials, be conducted to further assess a product's safety after approval, require testing and surveillance programs to monitor the product after commercialization, or impose other conditions, including distribution and use restrictions or other risk management mechanisms under a REMS, which can materially affect the potential market and profitability of the product. The FDA may prevent or limit further marketing of a product based on the results of post-marketing trials or surveillance programs. After approval, some types of changes to the approved product, such as adding new indications, manufacturing changes and additional labeling claims, are subject to further testing requirements and FDA review and approval.

Fast Track, Breakthrough Therapy and Priority Review Designations

The FDA is authorized to designate certain products for expedited development or review if they are intended to address an unmet medical need in the treatment of a serious or life-threatening disease or condition. These programs include fast track designation, Breakthrough Therapy Designation and priority review designation and regenerative medicine advanced therapy designation.

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 by providing a therapy where none exists or a therapy that may be potentially superior to existing therapy based on efficacy or safety factors. Fast track designation provides opportunities for more frequent interactions with the FDA review team to expedite development and review of the product. The FDA may also review sections of the BLA for a fast track product on a rolling basis before the complete application is submitted, if the sponsor and the FDA agree on a schedule for the submission of the application sections and the sponsor pays any required user fees upon submission of the first section of the NDA or BLA. In addition, fast track designation may be withdrawn by the sponsor or rescinded by the FDA if the designation is no longer supported by data emerging from the clinical trial process.

In addition, with the enactment of FDASIA in 2012, Congress created a new regulatory program for product candidates designated by FDA as "breakthrough therapies" upon a request made by the IND sponsors. 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 drug or biologic may demonstrate substantial improvement over existing therapies on one or more clinically significant endpoints, such as substantial treatment effects observed early in clinical development. Drugs or biologics designated as breakthrough therapies are also eligible for accelerated approval of their respective marketing applications. The FDA must take certain actions with respect to breakthrough therapies, such as holding timely meetings with and providing advice to the product sponsor, which are intended to expedite the development and review of an application for approval of a breakthrough therapy.

Finally, the FDA may designate a product for priority review if it is a drug or biologic that treats a serious condition and, if approved, would provide a significant improvement in safety or effectiveness. The FDA determines at the time that the marketing application is submitted, on a case-by-case basis, whether the proposed drug represents a significant improvement in treatment, prevention or diagnosis of disease when compared with other available therapies. Significant improvement may be illustrated by evidence of increased effectiveness in the treatment of a condition, elimination or substantial reduction of a treatment-limiting drug reaction,

documented enhancement of patient compliance that may lead to improvement in serious outcomes, or evidence of safety and effectiveness in a new subpopulation. A priority review designation is intended to direct overall attention and resources to the evaluation of such applications, and to shorten the FDA's goal for taking action on a marketing application from ten months to six months for an original BLA from the date of filing.

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. Furthermore, fast track designation, breakthrough therapy designation and priority review do not change the standards for approval and may not ultimately expedite the development or approval process.

As part of the 21st Century Cures Act, congress created an accelerated approval pathway for regenerative medicine advanced therapies, or RMATs, which includes therapeutic tissue engineered products, human cell and tissue products, cell therapies and combination products using any such therapies. The program is intended to facilitate expedited development and review of RMATs intended to address serious diseases or conditions.

A sponsor may request a RMAT designation from the FDA concurrently with or any time after the IND submission. The FDA has 60 calendar days to determine if the drug product meets the required criteria. Preliminary clinical evidence that the product has the potential to address a serious unmet need or condition is expected, is not required to indicate that the drug product may offer significant improvement over current therapies. The RMAT designation provides the same benefits of the fast track and breakthrough designation programs and programs may be eligible for priority review. Products with the RMAT designation may also be eligible for accelerated approval if pre-agreed criteria are met.

Accelerated Approval Pathway

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 receive accelerated approval from the FDA and may be approved on the basis of adequate and well-controlled clinical trials establishing that the drug product has an effect on a surrogate endpoint that is reasonably likely to predict clinical benefit. The FDA may also grant accelerated approval for such a drug or biologic when the product has an effect on an intermediate clinical endpoint that can be measured earlier than an effect on irreversible morbidity or mortality, or IMM, and that is reasonably likely to predict an effect on IMM or other clinical benefit, taking into account the severity, rarity, or prevalence of the condition and the availability or lack of alternative treatments. As a condition of approval, the FDA may require that a sponsor of a drug receiving accelerated approval perform post-marketing clinical trials to verify and describe the predicted effect on IMM or other clinical endpoint, and the product may be subject to expedited withdrawal procedures. Drugs and biologics granted accelerated approval must meet the same statutory standards for safety and effectiveness as those granted traditional approval.

For the purposes of accelerated approval, a surrogate endpoint is a marker, such as a laboratory measurement, radiographic image, physical sign, or other measure that is thought to predict clinical benefit, but is not itself a measure of clinical benefit. Surrogate endpoints can often be measured more easily or more rapidly than clinical endpoints. An intermediate clinical endpoint is a measurement of a therapeutic effect that is considered reasonably likely to predict the clinical benefit of a drug, such as an effect on IMM. The FDA has limited experience with accelerated approvals based on intermediate clinical endpoints, but has indicated that such endpoints generally may support accelerated approval when the therapeutic effect measured by the endpoint is not itself a clinical benefit and basis for traditional approval, if there is a basis for concluding that the therapeutic effect is reasonably likely to predict the ultimate long-term clinical benefit of a drug.

The accelerated approval pathway is most often used in settings in which the course of a disease is long and an extended period of time is required to measure the intended clinical benefit of a drug, even if the effect on the surrogate or intermediate clinical endpoint occurs rapidly. For example, accelerated approval has been used extensively in the development and approval of drugs for treatment of a variety of cancers in which the goal of

therapy is generally to improve survival or decrease morbidity and the duration of the typical disease course requires lengthy and sometimes large clinical trials to demonstrate a clinical or survival benefit.

The accelerated approval pathway is usually contingent on a sponsor's agreement to conduct, in a diligent manner, additional post-approval confirmatory studies to verify and describe the drug's clinical benefit. As a result, a product candidate approved on this basis is subject to rigorous post-marketing compliance requirements, including the completion of Phase IV or post-approval clinical trials to confirm the effect on the clinical endpoint. Failure to conduct required post-approval studies, or to confirm the predicted clinical benefit of the product during post-marketing studies, would allow the FDA to withdraw approval of the drug. All promotional materials for product candidates being considered and approved under the accelerated approval program are subject to prior review by the FDA.

Orphan Drug Designation and Exclusivity

Under the Orphan Drug Act, the FDA may grant orphan drug designation to a drug or biologic product intended to treat a rare disease or condition, which is generally a disease or condition that affects fewer than 200,000 individuals in the United States, or more than 200,000 individuals in the United States and for which there is no reasonable expectation that the cost of developing and making available in the United States a drug or biologic for this type of disease or condition will be recovered from sales in the United States for that drug or biologic. Orphan drug designation must be requested before submitting an NDA or BLA. After the FDA grants orphan drug designation, the identity of the therapeutic agent and its potential orphan use will be disclosed publicly by the FDA; the posting will also indicate whether the drug or biologic is no longer designated as an orphan drug. More than one product candidate may receive an orphan drug designation for the same indication. Orphan drug designation does not convey any advantage in or shorten the duration of the regulatory review and approval process.

If a product that has orphan drug designation subsequently receives the first FDA approval for the disease for which it has such designation, the product is entitled to seven years of orphan product exclusivity. During the seven-year exclusivity period, the FDA may not approve any other applications to market a product containing the same active moiety for the same disease, except in very limited circumstances, such as a showing of clinical superiority to the product with orphan drug exclusivity. A product is clinically superior if it is safer, more effective or makes a major contribution to patient care. Thus, orphan drug exclusivity could block the approval of one of our potential products for seven years if a competitor obtains approval of the same product as defined by the FDA and we are not able to show the clinical superiority of our product candidate or if our product candidate's indication is determined to be contained within the competitor's product orphan indication. In addition, the FDA will not recognize orphan drug exclusivity if a sponsor fails to demonstrate upon approval that the product is clinically superior to a previously approved product containing the same active moiety for the same orphan condition, regardless of whether or not the approved product was designated an orphan drug or had orphan drug exclusivity.

Patent Term Restoration

Depending upon the timing, duration and specifics of FDA approval of our biological products, some of our US patents may be eligible for limited patent term extension. These patent term extensions permit a patent restoration term of up to five years as compensation for any patent term lost during product development and the FDA regulatory review process. However, patent term restoration cannot extend the remaining term of a patent beyond a total of 14 years from the product's approval date. The patent term restoration period is generally one-half the time between the effective date of an IND, and the submission date of a BLA, plus the time between the submission date of a BLA and the approval of that application. Only one patent applicable to an approved biological product is eligible for the extension, and the extension must be applied for prior to expiration of the patent. The USPTO in consultation with the FDA, reviews and approves the application for any patent term extension or restoration.

Pediatric exclusivity

Pediatric exclusivity is a type of non-patent marketing exclusivity available in the United States and, if granted, it provides for the attachment of an additional six months of marketing protection to the term of any existing regulatory exclusivity or listed patents. This six-month exclusivity may be granted if a sponsor submits pediatric data that fairly respond to a written request from the FDA for such data. The data do not need to show the product to be effective in the pediatric population studied; rather, if the clinical trial is deemed to fairly respond to the FDA's request, the additional protection is granted. If reports of requested pediatric studies are submitted to and accepted by the FDA within the statutory time limits, whatever statutory or regulatory periods of exclusivity or patent protection cover the product are extended by six months. This is not a patent term extension, but it effectively extends the regulatory period during which the FDA cannot approve another application. The issuance of a Written Request does not require the sponsor to undertake the described studies.

Reference Product Exclusivity for Biological Products

In March 2010, the Patient Protection and Affordable Care Act was enacted in the United States and included the Biologics Price Competition and Innovation Act of 2009, or the BPCIA. The BPCIA amended the PHSA to create an abbreviated approval pathway for biological products that are biosimilar to or interchangeable with an FDA-licensed reference biological product. To date, the FDA has approved a number of biosimilars, and numerous biosimilars have been approved in Europe. The FDA has also issued several guidance documents outlining its approach to reviewing and approving biosimilars and interchangeable biosimilars.

A biosimilar product is defined as one that is highly similar to a reference product notwithstanding minor differences in clinically inactive components and for which there are no clinically meaningful differences between the biological product and the reference product in terms of the safety, purity and potency of the product. An interchangeable product is a biosimilar product that can be expected to produce the same clinical results as the reference product in any given patient and, for products administered multiple times to an individual, that the product and the reference product 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 biological product without such alternation or switch. Upon licensure by the FDA, an interchangeable biosimilar may be substituted for the reference product without the intervention of the health care provider who prescribed the reference product, although to date no such products have been approved for marketing in the United States.

The biosimilar applicant must demonstrate that the product is biosimilar based on data from (1) analytical studies showing that the biosimilar product is highly similar to the reference product; (2) animal studies (including toxicity); and (3) one or more clinical studies to demonstrate safety, purity and potency in one or more appropriate conditions of use for which the reference product is approved. In addition, the applicant must show that the biosimilar and reference products have the same mechanism of action for the conditions of use on the label, route of administration, dosage and strength, and the production facility must meet standards designed to assure product safety, purity and potency.

A reference biological product is granted 12 years of data exclusivity from the time of first licensure of the product, and the first approved interchangeable biologic product will be granted an exclusivity period of up to one year after it is first commercially marketed. If pediatric studies are performed and accepted by the FDA as responsive to a Written Request, the 12-year exclusivity period will be extended for an additional six months. In addition, the FDA will not accept an application for a biosimilar or interchangeable product based on the reference biological product until four years after the date of first licensure of the reference product. "First licensure" typically means the initial date the particular product at issue was licensed in the United States. Date of first licensure does not include the date of licensure of (and a new period of exclusivity is not available for) a supplement for the reference product for a subsequent application filed by the same sponsor or manufacturer of the reference product (or licensor, predecessor in interest or other related entity) for a change (not including a

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

The BPCIA is complex and only beginning to be interpreted and implemented by the FDA. In addition, recent government proposals have sought to reduce the 12-year reference product exclusivity period. Other aspects of the BPCIA, some of which may impact the BPCIA exclusivity provisions, have also been the subject of recent litigation. As a result, the ultimate impact, implementation and meaning of the BPCIA is subject to significant uncertainty.

Post-Approval Requirements

Any potential products for which we receive FDA approvals are subject to continuing regulation by the FDA, including, among other things, record-keeping requirements, reporting of adverse experiences with the product, providing the FDA with updated safety and efficacy information, product sampling and distribution requirements, and complying with FDA promotion and advertising requirements, which include, among others, standards for direct-to-consumer advertising, restrictions on promoting products for uses or in patient populations that are not described in the product’s approved uses (known as off-label use), limitations on industry-sponsored scientific and educational activities, and requirements for promotional activities involving the internet. Although physicians may prescribe legally available products for off-label uses, if the physicians deem to be appropriate in their professional medical judgment, it is FDA’s position that manufacturers may not market or promote such off-label uses. 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. If there are any modifications to the product, including changes in indications, labeling or manufacturing processes or facilities, the applicant may be required to submit and obtain FDA approval of a new BLA or a supplement, which may require the applicant to develop additional data or conduct additional pre-clinical studies and clinical trials. The FDA may also place other conditions on approvals including the requirement for a REMS to assure the safe use of the product. A REMS 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. Any of these limitations on approval or marketing could restrict the commercial promotion, distribution, prescription or dispensing of products. Product approvals may be withdrawn for non-compliance with regulatory standards or if problems occur following initial marketing.

In addition, quality control and manufacturing procedures must continue to conform to applicable manufacturing requirements after approval to ensure the quality and long-term stability of the product. We expect to rely on third parties for the production of clinical and commercial quantities of our potential products in accordance with cGMP regulations. The cGMP regulations include requirements relating to organization of personnel, buildings and facilities, equipment, control of components and drug product containers and closures, production and process controls, packaging and labeling controls, holding and distribution, laboratory controls, records and reports and returned or salvaged products. The manufacturing facilities for our product candidates must meet cGMP requirements and satisfy the FDA or comparable foreign regulatory authorities before any product is approved and our commercial products can be manufactured. We rely, and expect to continue to rely, on third parties for the production of clinical and commercial quantities of our products in accordance with cGMP regulations. These manufacturers must comply with cGMP regulations that require, among other things, quality control and quality assurance, the maintenance of records and documentation and the obligation to investigate and correct any deviations from cGMP. Manufacturers and other entities involved in the manufacture and distribution of approved products are required to register their establishments with the FDA and certain state

agencies, and are subject to periodic unannounced inspections by the FDA and certain state agencies for compliance with cGMP and other laws. Accordingly, manufacturers must continue to expend time, money, and effort in the area of production and quality control to maintain cGMP compliance. Future inspections by the FDA and other regulatory agencies may identify compliance issues at the facilities of our CMOs that may disrupt production or distribution or require substantial resources to correct. In addition, the discovery of conditions that violate these rules, including failure to conform to cGMP regulations, could result in enforcement actions, and the discovery of problems with a product after approval may result in restrictions on a product, manufacturer, or holder of an approved BLA, including, among other things, voluntary recall and regulatory sanctions as described below.

Once an approval or clearance of a drug is granted, the FDA may withdraw the 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 mandatory revisions to the approved labeling to add new safety information; imposition of post-market or clinical trials to assess new safety risks; or imposition of distribution 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 other enforcement-related letters or clinical holds on post-approval clinical trials;
- refusal of the FDA to approve pending BLAs or supplements to approved BLAs, or suspension or revocation of product approvals;
- product seizure or detention, or refusal to permit the import or export of products;
- injunctions or the imposition of civil or criminal penalties; and
- consent decrees, corporate integrity agreements, debarment, or exclusion from federal health care programs; or mandated modification of promotional materials and labeling and the issuance of corrective information.

In addition, the Drug Supply Chain Security Act, or DSCSA, was enacted with the aim of building an electronic system to identify and trace certain prescription drugs distributed in the United States, including most biological products. The DSCSA mandates phased-in and resource-intensive obligations for pharmaceutical manufacturers, wholesale distributors, and dispensers over a 10-year period that is expected to culminate in November 2023. From time to time, new legislation and regulations may be implemented that could significantly change the statutory provisions governing the approval, manufacturing and marketing of products regulated by the FDA. It is impossible to predict whether further legislative or regulatory changes will be enacted, or FDA regulations, guidance or interpretations changed or what the impact of such changes, if any, may be.

Regulation Outside of the United States

In addition to regulations within the United States, we will be subject to a variety of foreign regulations governing clinical trials and commercial sales and distribution of our products outside of the United States. Whether or not we obtain FDA approval for a product candidate, we must obtain approval by the comparable regulatory authorities of foreign countries or economic areas, such as the 28-member European Union, before we may commence clinical trials or market products in those countries or areas. It is not yet clear how the United Kingdom’s withdrawal from the European Union will affect the approval of medicinal products in the UK. The approval process and requirements governing the conduct of clinical trials, product licensing, pricing and reimbursement vary greatly between countries and jurisdictions and can involve additional testing and additional administrative review periods. The time required to obtain approval in other countries and jurisdictions might

differ from and be longer than that required to obtain FDA approval. Regulatory approval in one country or jurisdiction does not ensure regulatory approval in another, but a failure or delay in obtaining regulatory approval in one country or jurisdiction may negatively impact the regulatory process in others.

European Union drug development, review and approval

In the European Union, our product candidates also may be subject to extensive regulatory requirements. As in the United States, medicinal products can be marketed only if a marketing authorization from the competent regulatory agencies has been obtained. Similar to the United States, the various phases of pre-clinical and clinical research in the European Union are subject to significant regulatory controls.

The Clinical Trials Directive 2001/20/EC, the Directive 2005/28/EC on GCP, and the related national implementing provisions of the individual EU Member States govern the system for the approval of clinical trials in the European Union. Under this system, an applicant must obtain prior approval from the competent national authority of the EU Member States in which the clinical trial is to be conducted. Furthermore, the applicant may only start a clinical trial at a specific study site after the competent ethics committee has issued a favorable opinion. The clinical trial application must be accompanied by, among other documents, an IMPD (the Common Technical Document) with supporting information prescribed by Directive 2001/20/EC, Directive 2005/28/EC, where relevant the implementing national provisions of the individual EU Member States and further detailed in applicable guidance documents. All suspected unexpected serious adverse reactions to the investigated drug that occur during the clinical trial have to be reported to the competent national authority and the Ethics Committee of the Member State where they occurred.

In April 2014, the new Clinical Trials Regulation, (EU) No 536/2014 (Clinical Trials Regulation) was adopted and it is anticipated to come into application in late 2020 or early 2021. The Clinical Trials Regulation will be directly applicable in all the EU Member States, repealing the current Clinical Trials Directive 2001/20/EC. Conduct of all clinical trials performed in the European Union will continue to be bound by currently applicable provisions until the new Clinical Trials Regulation becomes applicable. The extent to which ongoing clinical trials will be governed by the Clinical Trials Regulation will depend on when the Clinical Trials Regulation becomes applicable and on the duration of the individual clinical trial. If a clinical trial continues for more than three years from the day on which the Clinical Trials Regulation becomes applicable the Clinical Trials Regulation will at that time begin to apply to the clinical trial.

The new Clinical Trials Regulation aims to simplify and streamline the approval of clinical trials in the European Union. The main characteristics of the regulation include: a streamlined application procedure via a single entry point, the “EU portal”; a single set of documents to be prepared and submitted for the application as well as simplified reporting procedures for clinical trial sponsors; and a harmonized procedure for the assessment of applications for clinical trials, which is divided in two parts. Part I is assessed by the competent authorities of all EU Member States in which an application for authorization of a clinical trial has been submitted (Member States concerned). Part II is assessed separately by each Member State concerned. Strict deadlines have been established for the assessment of clinical trial applications. The role of the relevant ethics committees in the assessment procedure will continue to be governed by the national law of the concerned EU Member State. However, overall related timelines will be defined by the Clinical Trials Regulation.

To obtain a marketing authorization of a drug in the European Union, we may submit marketing authorization applications, or MAA, either under the so-called centralized or national authorization procedures.

Centralized procedure

The centralized procedure provides for the grant of a single marketing authorization following a favorable opinion by the European Medicines Agency, or EMA, that is valid in all 27 European Union member states, or EU member states, as well as Iceland, Liechtenstein and Norway. The centralized procedure is compulsory for

medicines produced by specified biotechnological processes, products designated as orphan medicinal products, advanced-therapy medicines (such as gene-therapy, somatic cell-therapy or tissue-engineered medicines) and products with a new active substance indicated for the treatment of specified diseases, such as HIV/AIDS, cancer, diabetes, neurodegenerative disorders or autoimmune diseases and other immune dysfunctions and viral diseases. The centralized procedure is optional for products that represent a significant therapeutic, scientific or technical innovation, or whose authorization would be in the interest of public health. Under the centralized procedure the maximum timeframe for the evaluation of an MAA by the EMA is 210 days, excluding clock stops, when additional written or oral information is to be provided by the applicant in response to questions asked by the Committee for Medicinal Products for Human Use, or the CHMP. Accelerated assessment might be granted by the CHMP in exceptional cases, when a medicinal product is expected to be of a major public health interest, particularly from the point of view of therapeutic innovation. The timeframe for the evaluation of an MAA under the accelerated assessment procedure is of 150 days, excluding stop-clocks.

National authorization procedures

There are also two other possible routes to authorize medicinal products in several EU countries, which are available for investigational medicinal products that fall outside the scope of the centralized procedure:

- Decentralized procedure. Using the decentralized procedure, an applicant may apply for simultaneous authorization in more than one EU country of medicinal products that have not yet been authorized in any EU country and that do not fall within the mandatory scope of the centralized procedure.
- Mutual recognition procedure. In the mutual recognition procedure, a medicine is first authorized in one EU Member State, in accordance with the national procedures of that country. Following this, further marketing authorizations can be sought from other EU countries in a procedure whereby the countries concerned agree to recognize the validity of the original, national marketing authorization.

Under the above described procedures, before granting the marketing authorization, the EMA or the competent authorities of the Member States of the EEA make an assessment of the risk-benefit balance of the product on the basis of scientific criteria concerning its quality, safety and efficacy.

Conditional approval

In specific circumstances, E.U. legislation (Article 14(7) Regulation (EC) No 726/2004 and Regulation (EC) No 507/2006 on Conditional Marketing Authorizations for Medicinal Products for Human Use) enables applicants to obtain a conditional marketing authorization prior to obtaining the comprehensive clinical data required for an application for a full marketing authorization. Such conditional approvals may be granted for product candidates (including medicines designated as orphan medicinal products) if (1) the risk-benefit balance of the product candidate is positive, (2) it is likely that the applicant will be in a position to provide the required comprehensive clinical trial data, (3) the product fulfills unmet medical needs and (4) the benefit to public health of the immediate availability on the market of the medicinal product concerned outweighs the risk inherent in the fact that additional data are still required. A conditional marketing authorization may contain specific obligations to be fulfilled by the marketing authorization holder, including obligations with respect to the completion of ongoing or new studies, and with respect to the collection of pharmacovigilance data. Conditional marketing authorizations are valid for one year, and may be renewed annually, if the risk-benefit balance remains positive, and after an assessment of the need for additional or modified conditions or specific obligations. The timelines for the centralized procedure described above also apply with respect to the review by the CHMP of applications for a conditional marketing authorization.

Pediatric studies

Prior to obtaining a marketing authorization in the European Union, applicants have to demonstrate compliance with all measures included in an EMA-approved Pediatric Investigation Plan, or PIP, covering all

subsets of the pediatric population, unless the EMA has granted a product-specific waiver, a class waiver, or a deferral for one or more of the measures included in the PIP. The respective requirements for all marketing authorization procedures are set forth in Regulation (EC) No 1901/2006, which is referred to as the Pediatric Regulation. This requirement also applies when a company wants to add a new indication, pharmaceutical form or route of administration for a medicine that is already authorized. The Pediatric Committee of the EMA, or PDCO, may grant deferrals for some medicines, allowing a company to delay development of the medicine in children until there is enough information to demonstrate its effectiveness and safety in adults. The PDCO may also grant waivers when development of a medicine in children is not needed or is not appropriate, such as for diseases that only affect the elderly population.

Before a marketing authorization application can be filed, or an existing marketing authorization can be amended, the EMA determines that companies actually comply with the agreed studies and measures listed in each relevant PIP.

European Union regulatory exclusivity

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

European Union orphan designation and exclusivity

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

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

- the second applicant can establish that its product, although similar, is safer, more effective or otherwise clinically superior;

- the applicant consents to a second orphan medicinal product application; or
- the applicant cannot supply enough orphan medicinal product.

PRIME designation

The EMA grants access to the Priority Medicines, or PRIME, program to investigational medicines for which it determines there to be preliminary data available showing the potential to address an unmet medical need and bring a major therapeutic advantage to patients. As part of the program, EMA provides early and enhanced dialogue and support to optimize the development of eligible medicines and speed up their evaluation, aiming to bring promising treatments to patients sooner.

Periods of authorization and renewals

A marketing authorization is valid for five years in principle and the marketing authorization may be renewed after five years on the basis of a re-evaluation of the risk-benefit balance by the EMA or by the competent authority of the authorizing member state. To this end, the marketing authorization holder must provide the EMA or the competent authority with a consolidated version of the file in respect of quality, safety and efficacy, including all variations introduced since the marketing authorization was granted, at least six months before the marketing authorization ceases to be valid. Once renewed, the marketing authorization is valid for an unlimited period, unless the European Commission or the competent authority decides, on justified grounds relating to pharmacovigilance, to proceed with one additional five-year renewal. Any authorization which is not followed by the actual placing of the drug on the EU market (in case of centralized procedure) or on the market of the authorizing member state within three years after authorization ceases to be valid (the so-called sunset clause).

Rest of the world regulation

For other countries outside of the European Union and the United States, such as countries in Eastern Europe, Latin America or Asia, the requirements governing the conduct of clinical trials, product licensing, pricing and reimbursement vary from jurisdiction to jurisdiction. Additionally, the clinical trials must be conducted in accordance with GCP requirements and the applicable regulatory requirements and the ethical principles that have their origin in the Declaration of Helsinki.

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

Coverage, Pricing and Reimbursement

Sales of pharmaceutical products approved by the FDA will depend in significant part on the availability of third-party coverage and reimbursement for the products. Third-party payors include government healthcare programs in the United States such as Medicare and Medicaid, managed care providers, private health insurers and other organizations. These third-party payors are increasingly challenging the price and examining the cost-effectiveness of medical products and services. In addition, significant uncertainty exists as to the reimbursement status of newly approved healthcare products. The process for determining whether a payor will provide coverage for a product may be separate from the process for setting the price or reimbursement rate that the payor will pay for the product once coverage is approved. Further, there is no uniform policy for coverage and reimbursement in the United States. Third-party payors may limit coverage to specific products on an approved list, or formulary, which might not include all of the approved products for a particular indication. We may need to conduct expensive pharmacoeconomic studies to demonstrate the medical necessity and cost-effectiveness of our products, in addition to the costs required to obtain FDA or other comparable regulatory approvals.

Moreover, a payor's decision to provide coverage for a drug product does not imply that an adequate reimbursement rate will be approved. Third-party reimbursement may not be sufficient to maintain price levels high enough to realize an appropriate return on investment in product development. Our product candidates may not be considered cost-effective. It is time consuming and expensive to seek reimbursement from third-party payors. Reimbursement may not be available or sufficient to allow us to sell our products on a competitive and profitable basis.

In addition, in some foreign countries, the proposed pricing for a drug must be approved before it may be lawfully marketed. The requirements governing drug pricing vary widely from country to country. Some countries provide that drug products may be marketed only after a reimbursement price has been agreed. Some countries may require the completion of additional studies that compare the cost-effectiveness of our product candidate to currently available therapies (so called health technology assessment, or HTA) in order to obtain reimbursement or pricing approval. For example, the European Union provides options for its member states to restrict the range of medicinal products for which their national health insurance systems provide reimbursement and to control the prices of medicinal products for human use. A member state may approve a specific price for the medicinal product or it may instead adopt a system of direct or indirect controls on the profitability of the company placing the medicinal product on the market. Other member states allow companies to fix their own prices for drug products but monitor and control prescription volumes and issue guidance to physicians to limit prescriptions. There can be no assurance that any country that has price controls or reimbursement limitations for pharmaceutical products will allow favorable reimbursement and pricing arrangements for any of our products. Historically, products launched in the European Union do not follow price structures of the United States and generally tend to by significantly lower.

The downward pressure on health care costs in general, particularly prescription drugs, has become intense. As a result, increasingly high barriers are being erected to the entry of new products. In addition, there can be considerable pressure by governments and other stakeholders on prices and reimbursement levels, including as part of cost containment measures. Political, economic and regulatory developments may further complicate pricing negotiations, and pricing negotiations may continue after reimbursement has been obtained. Reference pricing used by various EU member states and parallel distribution (arbitrage between low-priced and high-priced member states) can further reduce prices. Any country that has price controls or reimbursement limitations for drug products may not allow favorable reimbursement and pricing arrangements.

Other U.S. Health Care Laws and Regulations

Although we currently do not have any products on the market, our current and future arrangements with healthcare professionals, principal investigators, consultants, customers and third-party payors expose us to broadly applicable healthcare regulation and enforcement by the U.S. federal government and the states and foreign governments in which we conduct our business, such as fraud and abuse, transparency and health information privacy rules and regulations. These laws include, without limitation:

- the federal anti-kickback statute, prohibits, among other things, persons from knowingly and willfully soliciting, offering, receiving or paying remuneration, directly or indirectly, in cash or in kind, to induce or reward either the referral of an individual for, or the purchase, order or recommendation of, any good or service, for which payment may be made, in whole or in part, under a federal health care program such as Medicare and Medicaid;
- the federal false claims laws, including the False Claims Act provides for civil whistleblower or qui tam actions, and the civil monetary penalties law, which among other things prohibit individuals or entities from knowingly presenting, or causing to be presented, to the federal government, claims for payment that are false or fraudulent or making a false statement to avoid, decrease or conceal an obligation to pay money to the federal government;

- the federal Health Insurance Portability and Accountability Act of 1996, or HIPAA, imposes criminal and civil liability for executing a scheme to defraud any health care benefit program or making false statements relating to health care matters;
- HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act, or HITECH Act, and its implementing regulations, also imposes obligations, including mandatory contractual terms, with respect to safeguarding the privacy, security and transmission of individually identifiable health information, for covered entities, including certain healthcare providers, health plans, and healthcare clearinghouses, and their business associates and covered subcontractors that provide services to, or on behalf of, the covered entity that involve individually identifiable health information;
- the federal transparency requirements under the Physician Payments Sunshine Act require certain manufacturers of FDA-approved drugs, devices, biologics and medical supplies covered by Medicare or Medicaid to report, on an annual basis, to the Department of Health and Human Services information related to payments and other transfers of value to physicians (currently defined to include doctors, dentists, optometrists, podiatrists and chiropractors) and teaching hospitals, as well as ownership and investment interests held by such physicians and their immediate family members. Beginning in 2022, applicable manufacturers will also be required to report information related to payments and other transfers of value provided in the previous year to physician assistants, nurse practitioners, clinical nurse specialists, certified registered nurse anesthetists, and certified nurse midwives;
- the U.S. Foreign Corrupt Practices Act, or FCPA, and other anti-corruption laws and regulations pertaining to our financial relationships and interactions with foreign government officials, which prohibit U.S. companies and their employees, officers, and representatives from paying, offering to pay, promising, or authorizing the payment of anything of value to any foreign government official (including, potentially, healthcare professionals in countries in which we operate or may sell our products), government staff member, political party, or political candidate to obtain or retain business or to otherwise seek favorable treatment; and
- analogous state and foreign laws and regulations, such as state anti-kickback and false claims laws, may apply to sales or marketing arrangements and claims involving health care items or services reimbursed by nongovernmental third-party payors, including private insurers.

Some state laws require pharmaceutical companies to comply with the pharmaceutical industry’s voluntary compliance guidelines, or the relevant compliance guidance promulgated by the federal government, in addition to requiring drug manufacturers to report information related to payments to physicians and other health care providers or marketing expenditures to the extent that those laws impose requirements that are more stringent than the Physician Payments Sunshine Act. In addition, state and local laws may require the registration of pharmaceutical sales representatives. State and foreign laws also govern the privacy and security of health information in some circumstances, many of which differ from each other in significant ways and often are not preempted by HIPAA, thus complicating compliance efforts.

Violations of any of such laws or any other governmental regulations that apply to us, may subject us to significant penalties, including, without limitation, civil, criminal and administrative penalties, damages, fines, disgorgement, additional reporting requirements and oversight if we become subject to a corporate integrity agreement or similar agreement to resolve allegations of non-compliance with these laws, the curtailment or restructuring of our operations, exclusion from participation in federal and state healthcare programs and imprisonment, any of which could adversely affect our ability to operate our business.

Health Care Reform in the United States and Potential Changes to Health Care Laws

The FDA’s and other regulatory authorities’ policies may change and additional government regulations may be enacted that could prevent, limit or delay regulatory approval of our product candidates. If we are slow or

unable to adapt to changes in existing requirements or the adoption of new requirements or policies, or if we are not able to maintain regulatory compliance, we may lose any marketing approval that we otherwise may have obtained and we may not achieve or sustain profitability, which would adversely affect our business, prospects, financial condition and results of operations.

As previously mentioned, a primary trend in the U.S. health care industry and elsewhere is cost containment. Government authorities and other third-party payors have attempted to control costs by limiting coverage and the amount of reimbursement for particular medical products and services, implementing reductions in Medicare and other health care funding and applying new payment methodologies. For example, in March 2010, the Affordable Care Act was enacted, which, among other things, increased the minimum Medicaid rebates owed by most manufacturers under the Medicaid Drug Rebate Program; introduced a new methodology by which rebates owed by manufacturers under the Medicaid Drug Rebate Program are calculated for drugs that are inhaled, infused, instilled, implanted or injected; extended the Medicaid Drug Rebate Program to utilization of prescriptions of individuals enrolled in Medicaid managed care plans; imposed mandatory discounts for certain Medicare Part D beneficiaries as a condition for manufacturers' outpatient drugs coverage under Medicare Part D; and established a Center for Medicare Innovation at the U.S. Centers for Medicare & Medicaid Services, or CMS, to test innovative payment and service delivery models to lower Medicare and Medicaid spending.

There remain judicial, executive branch and Congressional challenges to certain aspects of the ACA, and as a result certain sections of the ACA have not been fully implemented or effectively repealed. In particular, in December of 2018, a Texas U.S. District Court Judge ruled that the ACA is unconstitutional in its entirety because the "individual mandate" was repealed by Congress as part of the Tax Cuts and Jobs Act, effective January 1, 2019. On December 18, 2019, the U.S. Court of Appeals for the Fifth Circuit upheld the District Court ruling that the individual mandate was unconstitutional but remanded the case back to the District Court to determine whether other reforms enacted as part of the ACA but not specifically related to the individual mandate or health insurance, including the provisions comprising the BPCIA, could be severed from the rest of the ACA so as not to be declared invalid as well. The United States Supreme Court is currently reviewing this case, although it is unclear when a decision will be made. It is also unclear how such litigation and other efforts to repeal and replace the ACA will impact the ACA and our business.

In addition, other legislative changes have been proposed and adopted in the United States since the Affordable Care Act that affect health care expenditures. There has been heightened governmental scrutiny over the manner in which manufacturers set prices for their marketed products, which has resulted in several Congressional inquiries, presidential executive orders and proposed and enacted federal and state legislation designed to, among other things, bring more transparency to product pricing, review the relationship between pricing and manufacturer patient programs and reform government program reimbursement methodologies for pharmaceutical and biologic products. Notably, on December 20, 2019, President Trump signed the Further Consolidated Appropriations Act for 2020 into law (P.L. 116-94) that includes a piece of bipartisan legislation called the Creating and Restoring Equal Access to Equivalent Samples Act of 2019 or the "CREATES Act." The CREATES Act aims to address the concern articulated by both the FDA and others in the industry that some brand manufacturers have improperly restricted the distribution of their products, including by invoking the existence of a REMS for certain products, to deny generic and biosimilar product developers access to samples of brand products. Because generic and biosimilar product developers need samples to conduct certain comparative testing required by the FDA, some have attributed the inability to timely obtain samples as a cause of delay in the entry of generic and biosimilar products. To remedy this concern, the CREATES Act establishes a private cause of action that permits a generic or biosimilar product developer to sue the brand manufacturer to compel it to furnish the necessary samples on "commercially reasonable, market-based terms." Whether and how generic and biosimilar product developments will use this new pathway, as well as the likely outcome of any legal challenges to provisions of the CREATES Act, remain highly uncertain and its potential effects on our future commercial products are unknown. On July 24, 2020 and September 13, 2020, President Trump announced several executive orders related to prescription drug pricing that seek to implement several of the administration's proposals. The

FDA also released a final rule on September 24, 2020 providing guidance for states to build and submit importation plans for drugs from Canada. Further, on November 20, 2020, HHS finalized a regulation removing safe harbor protection for price reductions from pharmaceutical manufacturers to plan sponsors under Part D, either directly or through pharmacy benefit managers, unless the price reduction is required by law. The rule also creates a new safe harbor for price reductions reflected at the point-of-sale, as well as a safe harbor for certain fixed fee arrangements between pharmacy benefit managers and manufacturers. The likelihood of implementation of any of the other Trump administration reform initiatives is uncertain, particularly in light of the recent U.S. presidential election.

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. It is also possible that additional governmental action is taken in response to the COVID-19 pandemic. We expect that additional state and federal health care reform measures will be adopted in the future, any of which could limit the amounts that federal and state governments will pay for health care products and services.

Facilities

Our principal office is located in Gaithersburg, Maryland. We currently lease approximately 22,800 square feet of office and laboratory space under a lease that is due to expire on June 30, 2022. We anticipate that we will require additional office and laboratory space for our planned operations prior to the expiration of our current lease.

Legal Proceedings

As of the date of this prospectus, we are not party to any material legal matters or claims.

MANAGEMENT

Executive Officers and Directors

The following table provides information regarding our executive officers and directors, including their age as of January 15, 2021:

Name	Age	Position
Executive Officers:		
Scott Carmer	56	President, Chief Executive Officer and Director
John Trainer, M.B.A.	47	Chief Financial Officer
Jerome (Jerry) Zeldis, M.D., Ph.D.	70	Executive Vice President of Research and Development
Kristi Jones	58	Chief Operating Officer
Non-Employee Directors:(1)		
Sol J. Barer, Ph.D.	73	Chairman of the Board of Directors
Alan S. Roemer, M.B.A., M.P.H.	50	Director
Tim Bertram, Ph.D.	65	Director
Paul D'Angio, RPH, MSJ	62	Director
Zhengbin (Bing) Yao, Ph.D.	55	Director
Tony Yao, M.D., Ph.D.	48	Director
Grant Verstandig	31	Director

(1) See "Certain Relationships and Related Party Transactions—Agreements with Stockholders" for a discussion of arrangements among our stockholders pursuant to which each director was selected.

Executive Officers

Scott Carmer has served as our President and Chief Executive Officer since March 2018 and as a member of our board of directors since January 2017. He served as our Chief Operating Officer from July 2015 to March 2018 and as our Chief Business Officer from February 2014 to July 2015. Prior to joining us, from 2010 to 2014, Mr. Carmer served as Executive Vice President, Commercial Operations of MedImmune, LLC, the former biologics division of AstraZeneca. From 2006 to 2010, Mr. Carmer served as Vice President, Rheumatology Sales & Marketing of Genentech, Inc., or Genentech. Prior to Genetech, Mr. Carmer held several leadership roles of increasing responsibility at Amgen, Inc., most recently as Executive Director of Global Marketing. Mr. Carmer started his career at GlaxoSmithKline plc, where he held key roles in Global Brand Management, Business Development, Commercial Operations, Managed Care and Field Sales. Mr. Carmer earned his B.S. in Biology from the University of Kentucky. Mr. Carmer's qualifications to serve on the board of directors include his extensive executive leadership in the life sciences industry and his knowledge of our business as our President and Chief Executive Officer.

John Trainer has served as our Chief Financial Officer since January 2020. Before joining us, Mr. Trainer served as Vice President and Head of Partnering and Strategy of MedImmune from February 2017 to July 2019. Prior to MedImmune, Mr. Trainer served as Vice President, Corporate Development of AstraZeneca from April 2015 to February 2017, as well as the global commercial leader for AstraZeneca's infection, neuroscience and gastrointestinal therapeutic areas from May 2013 to April 2015. Mr. Trainer previously served on the boards of directors of several private biotechnology companies, including Corvidia Therapeutics, Inc., Archigen Biotech Limited and Fujifilm Kyowa Kirin Biologics Co., Ltd. Prior to joining AstraZeneca, Mr. Trainer was a strategy consultant at Monitor Group, where he provided strategic planning in healthcare and other industries. Mr. Trainer received his M.B.A. from Harvard Business School and his A.B. from Harvard College.

Jerome B. Zeldis, M.D., Ph.D. has served as Executive VP Research since January 2021. He was Chief Medical Officer and President of Clinical Research, Regulatory, and Safety at Sorrento Therapeutics, and Chief

Executive Officer of Celgene Global Health and Chief Medical Officer of Celgene Corporation, Summit, NJ. Prior to that he was Celgene's Senior Vice President of Clinical Research and Medical Affairs and has been at Celgene since February 1997. He attended Brown University for an A.B., M.S., followed by Yale University for an M.Phil., M.D., Ph.D. in Molecular Biophysics and Biochemistry (immunochemistry). Dr. Zeldis trained in Internal Medicine at the UCLA Center for the Health Sciences and Gastroenterology at the Massachusetts General Hospital and Harvard Medical School. He was Assistant Professor of Medicine at the Harvard Medical School, Associate Professor of Medicine at University of California, Davis, Clinical Associate Professor of Medicine at Cornell Medical School and Professor of Clinical Medicine at the Robert Wood Johnson Medical School in New Brunswick, New Jersey. Prior to working at Celgene, Dr. Zeldis worked at Sandoz Research Institute and Janssen Research Institute in both clinical research and medical development. He is currently on the board of PTC Therapeutics, Soligenix, Immodulon, and NexGel.

Kristi Jones has served as our Chief Operating Officer since March 2018. She previously served as our Chief Business Officer from September 2017 to March 2018 and as a consultant to us from September 2015 to February 2017. From 2013 to 2015, Ms. Jones was Vice President of Portfolio Strategy at AstraZeneca. From November 2011 to July 2013 she served as Vice President of Global Strategic Marketing at MedImmune. Prior to that, Ms. Jones held multiple leadership roles with increasing responsibility at Genentech where she worked for 16 years, including Head of Immunology and Ophthalmology Global Product Strategy, Life Cycle Lead and Franchise Management. Ms. Jones has held roles in Strategy, Business Development, Commercial Operations, Managed Care, Marketing and Sales. Ms. Jones serves on the Life Science Panel for Springboard Enterprises focused on start-up companies led by women and on the Cell Therapy Committee for the Alliance of Regenerative Medicine. Ms. Jones received her Pharmacy degree from the University of Texas, College of Pharmacy and her B.S. in Biology from Texas Tech University.

Non-Employee Directors

Sol J. Barer, Ph.D. has served as the Chairman of our board of directors since November 2019. Dr. Barer has served as Chairman of the Hackensack Meridian Health Center for Discovery & Innovation since June 2018 and as a member of Barer & Son Capital, an investment fund focused on capitalizing early stage breakthrough biotechnology companies, since 2017. Dr. Barer also serves on the boards of directors of several public companies, including Teva Pharmaceutical Industries Limited as Chairman, Aevi Genomic Medicine, Inc. as Chairman, and ContraFect Corporation as lead Director. Dr. Barer previously served as Chairman and director of InspireMD, Inc. from 2011 to 2017, and as a director of Amicus Therapeutics, Inc. from 2009 to 2017 and Aegerion Pharmaceuticals, Inc. from 2011 to 2016. From 1987 to 2011, Dr. Barer held various leadership positions at Celgene. He served as Chairman of Celgene from January 2011 to June 2011, Executive Chairman from June 2010 to January 2011, and Chairman and Chief Executive Officer from May 2006 to June 2010. He was previously President of Celgene from 1993 to May 2016 and Chief Operating Officer from 1994 to May 2006. Dr. Barer was the founder of the biotechnology group at the Celanese Research Company that was subsequently spun off as Celgene. Dr. Barer received his Ph.D. in organic and physical chemistry from Rutgers University and his B.S. in chemistry from Brooklyn College of the City University of New York. We believe that Dr. Barer's qualifications to serve on our board of directors include his significant scientific, executive and board leadership experience in the biopharmaceutical industry.

Alan S. Roemer, M.B.A., M.P.H. has served as a member of our board of directors since February 2017 and served as chairman of our board of directors from December 2017 to November 2019. He has served as chairman and a member of the board of directors of IN8bio, Inc., a private biotechnology company, since September 2020 and as chairman and a member of the board of directors of UTILITY therapeutics Ltd., a private biotechnology company, since March 2020. Mr. Roemer was a founding leadership team member and senior vice president of Roivant Sciences, Inc., a private biopharmaceutical company, from the company's inception May 2014 to August 2019, where he held various senior management roles responsible for finance, operations and corporate development. From March 2015 to August 2015, he also served as principal financial and accounting officer of Axovant Sciences Ltd., a public biopharmaceutical company, and a founding leadership team member and chief

financial officer of its wholly owned subsidiary, Axovant Sciences, Inc. Prior to Roivant and Axovant, Mr. Roemer served in various executive roles, including managing director of the Trout Group LLC and Trout Capital LLC from 2009 to 2014, chief financial officer and treasurer of Zelos Therapeutics, Inc. from 2008 to 2009, and vice president of Pharmasset, Inc. 1999 to 2008, which was subsequently acquired by Gilead Sciences, Inc., where he was the first full-time management team member. Mr. Roemer has also served as a member of the board of directors of SomPharmaceuticals SA, a private biopharmaceutical company, from August 2012 to May 2016, until its acquisition by Amryt Pharma plc, as a member of the business advisory board of Envisagenics, Inc., a private artificial intelligence company, since March 2020, and a member of the board of trustees of the Helene Fuld College of Nursing since June 2014. Mr. Roemer received a B.S. in Business Administration from Georgetown University and his MBA and MPH degrees from Emory University's Goizueta Business School and Rollins School of Public Health. We believe that Mr. Roemer's qualifications to serve on our board include significant executive and board leadership experience in the biopharmaceutical industry.

Tim Bertram, Ph.D. has served as a member of our board of directors since January 2017. Since January 2019, Dr. Bertram has served as Chief Executive Officer of Twin City Bio LLC, a contract development and manufacturing service for pharmaceutical and biotech companies focused on cell-based therapies. Since May 2005, Dr. Bertram served as Chief Executive Officer and as a member of the board of directors of inRegen, a clinical-stage cellular therapeutics company focused on the treatment of chronic renal disease. Prior to that, he served as Chief Executive Officer of RegenMed Therapeutics. He served as Chief Scientific Officer of Tengion Inc. from 2004 to 2014 after serving as President of Research and Development where he brought four cell-based therapeutic products from discovery through Phase 2 clinical development. Dr. Bertram was involved in the development and registration of eight medical products while serving as a senior executive at Pfizer Inc., SmithKline Beecham Pharmaceuticals, and The Procter & Gamble Company. He was a faculty member at the University of Illinois, and a visiting scientist at the National Institutes of Health. Tengion Inc. filed a voluntary chapter 7 bankruptcy petition in December 2014. Dr. Bertram received his D.V.M. and Ph.D. in Cellular Pathology from Iowa State University and was board certified in Veterinary Pathology in 1984. We believe that Dr. Bertram's qualifications to serve on our board of directors include his leadership experience in drug development at public and private biotechnology companies, along with his leadership in the innovation of cellular therapeutics

Paul D'Angio, RPH, MSJ has served as a member of our board of directors since January 2017. Mr. D'Angio served as Vice President, Head of Manufacturing of PDS Biotechnology Corporation, a clinical stage immunotherapy company, from March 2019 through June 2020. He also has served as President of PDA Pharmaceutical Services LLC since September 2016. From December 2017 to March 2019, Mr. D'Angio served as Vice President, Head of Development of Edge Therapeutics, Inc., a biopharmaceutical company. From December 1998 to August 2016, he served as Senior Director, Senior Vice President, Global Head of Technical Operations of Celgene, where he gained extensive cross-functional and technical leadership experience in building and operating a global pharmaceutical manufacturing and supply chain organization. Mr. D'Angio is a registered pharmacist and received his BSc in Pharmacy from Duquesne University and MSJ in Healthcare Law from Seton Hall University Law School. We believe that Mr. D'Angio's qualifications to serve on our board of directors include his substantial experience in the pharmaceutical industry, specifically in commercial manufacturing, drug product development, risk management operations and investigational materials supply.

Zhengbin (Bing) Yao, Ph.D. has served as a member of our board of directors since January 2017. Dr. Yao brings more than 20 years' experience in the biopharmaceutical industry. Dr. Yao has served as Chief Executive Officer of Viela Bio, Inc., a clinical stage biotechnology company focused on autoimmune and severe inflammatory diseases, since February 2018 and as Chairman of its board of directors since January 2019. From October 2010 to February 2018, Dr. Yao served in various leadership roles at MedImmune, most recently as Senior Vice President, Head of Respiratory, Inflammation, Autoimmune iMED. Dr. Yao also served as Senior Vice President, Head of Immuno-Oncology Franchise, of AstraZeneca. Prior to his tenure at MedImmune and AstraZeneca, Dr. Yao served as Head of PTL for Immunology, Infectious Diseases, Neuroscience, and Metabolic

Disease of Genentech. Previously, Dr. Yao was Vice President and Head of Research of Tanox, Inc., before it was acquired by Genentech in 2007. Dr. Yao serves on the boards of directors of Viela Bio, Inc. and Immune-Onc Therapeutics, Inc., a private biotechnology company developing biotherapies for cancer. Dr. Yao received his M.S. in Immunology from Anhui Medical University in Anhui, China and his Ph.D. in Microbiology and Immunology from the University of Iowa. We believe that Dr. Yao's qualifications to serve on our board of directors include his significant experience in the biopharmaceutical industry, particularly in autoimmune disease, and his experience serving as a chief executive officer of a publicly-traded biotechnology company.

Tony Yao, M.D., Ph.D. has served as a member of our board of directors since December 2017. Dr. Yao has served as a portfolio manager at ArrowMark Partners, an asset management firm, since 2012, where he leads the healthcare team and manages the healthcare portfolio. Dr. Yao serves on the boards of directors of 4D Molecular Therapeutics, Inc., a private gene medicines company, and Precision BioSciences, Inc., a publicly-traded biotechnology company. Dr. Yao began his investment career in 2002 at Janus Capital Group Inc., where he focused on making investments in biotechnology, devices, and diagnostic companies at all stages of development. Later, he was assistant portfolio manager of the Janus Worldwide Fund. Dr. Yao received his bachelor's degree in Biochemistry from Brown University and his M.D. and Ph.D. in Immunology from Stanford University. We believe that Dr. Yao's qualifications to serve on our board of directors include his medical background and experience in private equity investing, particularly with healthcare companies.

Grant Verstandig has served as a member of our board of directors since January 2021. Since March 2017, Mr. Verstandig has served as the Chief Digital Officer of UnitedHealth Group. In this role he is responsible for the strategic direction, governance and performance expectations of UnitedHealth Group's digital platforms and capabilities. Before assuming this role, Mr. Verstandig was the founder and CEO of Rally Health, Inc., a consumer-centric digital health company that develops online and mobile tools. Rally Health was founded in 2010 and UnitedHealth Group acquired a majority stake in the business in 2014 and consequently in 2017, Rally became a wholly-owned subsidiary of Optum. He is also the co-founder and chairman of Epirus, a venture-backed directed energy company that creates counter-UAS systems and power management solutions for multiple applications, and co-founder of Spycraft Entertainment, a content and entertainment production company focused on intelligence and military operations. Mr. Verstandig also serves on the National Council for the American Enterprise Institute and is a founding member of the Greater Washington Partnership where he is currently a director. Mr. Verstandig has served as an advisor to several organizations in the health, defense, foreign policy and intelligence spaces, and is a senior advisor to the National Security Agency on advanced analytics, technology and artificial intelligence. Mr. Verstandig attended Brown University. We believe that Mr. Verstandig's qualifications to serve on our board of directors include his healthcare industry experience, along with his leadership in the innovation of technology-enabled health services.

Board Composition

As of January 15, 2021, our board of directors consisted of eight members, all of whom are members pursuant to the board composition provisions of our existing fifth amended and restated certificate of incorporation. Our board of directors may consider a broad range of factors relating to the qualifications and background of nominees, which may include diversity, which is not only limited to race, gender or national origin. We have no formal policy regarding board diversity. Our board of directors' priority in selecting board members is identification of persons who will further the interests of our stockholders through his or her established record of professional accomplishment, the ability to contribute positively to the collaborative culture among board members, knowledge of our business, understanding of the competitive landscape and professional and personal experiences and expertise relevant to our growth strategy. Our directors hold office until their successors have been elected and qualified or until the earlier of their death, resignation or removal. Our sixth amended and restated certificate of incorporation and amended and restated by-laws that will become effective upon the completion of this offering will provide that our directors may be removed only for cause by the affirmative vote of the holders of at least % of the votes that all our stockholders would be entitled to cast in

an annual election of directors, and that any vacancy on our board of directors, including a vacancy resulting from an enlargement of our board of directors, may be filled only by vote of a majority of our directors then in office.

Director Independence

Rule 5605 of the Nasdaq Listing Rules requires a majority of a listed company's board of directors to be comprised of independent directors within one year of listing. In addition, the Nasdaq Listing Rules require that, subject to specified exceptions, each member of a listed company's audit, compensation and nominating and governance committees be independent and that audit committee members also satisfy independence criteria set forth in Rule 10A-3 under the Exchange Act. Under Rule 5605(a)(2), a director will only qualify as an "independent director" if, in the opinion of our board of directors, that person does not have a relationship that would interfere with the exercise of independent judgment in carrying out the responsibilities of a director. In order to be considered independent for purposes of Rule 10A-3, a member of an audit committee of a listed company may not, other than in his or her capacity as a member of the board of directors, the audit committee or any other board committee, accept, directly or indirectly, any consulting, advisory, or other compensatory fee from the listed company or any of its subsidiaries or otherwise be an affiliated person of the listed company or any of its subsidiaries.

Our board of directors has determined that all members of our board of directors, except Scott Carmer, are independent directors, including for purposes of the rules of The Nasdaq Stock Market and relevant federal securities laws and regulations. There are no family relationships among any of our directors or executive officers.

Staggered Board

In accordance with the terms of our sixth amended and restated certificate of incorporation and amended and restated by-laws that will become effective upon the completion of this offering, our board of directors will be divided into three staggered classes of directors of the same or nearly the same number and each will be assigned to one of the three classes. At each annual meeting of the stockholders, a class of directors will be elected for a three-year term to succeed the directors of the same class whose terms are then expiring. The terms of the directors will expire upon the election and qualification of successor directors at the annual meeting of stockholders to be held during the years 2022 for Class I directors, 2023 for Class II directors and 2024 for Class III directors:

- our Class I directors will be and ;
- our Class II directors will be and ; and
- our Class III directors will be and .

Our sixth amended and restated certificate of incorporation and amended and restated by-laws will provide that the number of our directors shall be fixed from time to time by a resolution of the majority of our board of directors. Any additional directorships resulting from an increase in the number of directors will be distributed among the three classes so that, as nearly as possible, each class shall consist of one third of the board of directors.

The division of our board of directors into three classes with staggered three-year terms may delay or prevent stockholder efforts to effect a change of our management or a change in control. See the "Description of Capital Stock—Anti-Takeover Effects of Delaware Law, Our Amended and Restated Certificate of Incorporation and Our Amended and Restated By-Laws" section of this prospectus for a discussion of these and other anti-takeover provisions in our sixth amended and restated certificate of incorporation and amended and restated by-laws, which will become effective immediately prior to the completion of this offering.

Committees of the Board of Directors

Our board of directors has an audit committee and a compensation committee and intends to establish a nominating and governance committee, each of which will have the composition and responsibilities described below upon completion of this offering. Each of the below committees will have a written charter approved by our board of directors, effective upon completion of this offering. Each of the committees will report to our board of directors as such committee deems appropriate and as our board of directors may request. Upon completion of this offering, copies of each committee charter will be posted on the investor relations section of our website. Members will serve on these committees until their resignation or until otherwise determined by our board of directors. In addition, from time to time, special committees may be established under the direction of our board of directors when necessary to address specific issues.

Audit Committee

Effective upon completion of this offering, our audit committee will be comprised of , and , with serving as chairman of the committee. Our board of directors has determined that each member of the audit committee meets the independence requirements of Rule 10A-3 under the Exchange Act and the applicable Nasdaq Stock Market rules, and has sufficient knowledge in financial and auditing matters to serve on the audit committee. Our board of directors has determined that is an “audit committee financial expert” within the meaning of the SEC regulations and the applicable rules of The Nasdaq Stock Market. The audit committee’s responsibilities upon completion of this offering will include:

- selecting a firm to serve as the independent registered public accounting firm to audit our financial statements;
- ensuring the independence of the independent registered public accounting firm;
- discussing the scope and results of the audit with the independent registered public accounting firm, and reviewing, with management and that firm, our interim and year-end operating results;
- establishing procedures for employees to anonymously submit concerns about questionable accounting or audit matters;
- considering the effectiveness of our internal controls and internal audit function;
- reviewing material related-party transactions or those that require disclosure; and
- approving or, as permitted, pre-approving all audit and non-audit services to be performed by the independent registered public accounting firm.

Compensation Committee

Effective upon completion of this offering, our compensation committee will be comprised of , and , with serving as chairman of the committee. Each member of this committee is a non-employee director, as defined by Rule 16b-3 promulgated under the Exchange Act, and an outside director, as defined pursuant to Section 162(m) of the Internal Revenue Code of 1986, as amended. Our board of directors has determined that each member of the compensation committee is “independent” as defined in the rules of The Nasdaq Stock Market. The composition of our compensation committee meets the requirements for independence under the listing standards of The Nasdaq Stock Market, including the applicable transition rules. Our board of directors intends to cause our compensation committee to be comprised of only directors that are independent under the rules of The Nasdaq Stock Market within one year of the date of this prospectus. The compensation committee’s responsibilities upon completion of this offering will include:

- reviewing and approving, or recommending that our board of directors approve, the compensation of our executive officers;

- reviewing and recommending to our board of directors the compensation of our directors;
- reviewing and recommending to our board of directors the terms of any compensatory agreements with our executive officers;
- administering our equity incentive plans;
- reviewing and approving, or making recommendations to our board of directors with respect to, incentive compensation and equity plans; and
- reviewing all overall compensation policies and practices.

Nominating and Governance Committee

Effective upon completion of this offering, our nominating and governance committee will be comprised of , and , with as the chairman of the committee. Our board of directors has determined that each member of the nominating and governance committee is "independent" as defined in the applicable rules of The Nasdaq Stock Market. The nominating and governance committee's responsibilities upon completion of this offering will include:

- identifying and recommending candidates for membership on our board of directors;
- recommending directors to serve on board committees;
- reviewing and recommending our corporate governance guidelines and policies;
- reviewing proposed waivers of the code of conduct for directors and executive officers;
- evaluating, and overseeing the process of evaluating, the performance of our board of directors and individual directors; and
- assisting our board of directors on corporate governance matters.

Board Leadership Structure and the Role of the Board in Risk Oversight

Board Leadership Structure

The positions of our chairman of the board and chief executive officer are separated, with Mr. Carmer serving as our Chief Executive Officer and Dr. Barer serving as the chairman of our board of directors. Separating these positions allows Mr. Carmer, as our Chief Executive Officer, to focus on our day-to-day business, while allowing the chairman of the board to lead the board of directors in its fundamental role of providing advice to and independent oversight of management. Our board of directors recognizes the time, effort and energy that Mr. Carmer, as our Chief Executive Officer, must devote to his position in the current business environment, as well as the commitment required to serve as our chairman, particularly as the board of directors' oversight responsibilities continue to grow. Our board of directors also believes that this structure ensures a greater role for the independent directors in the oversight of our company and active participation of the independent directors in setting agendas and establishing priorities and procedures for the work of our board of directors. Our board of directors believes its administration of its risk oversight function has not affected its leadership structure. Our board of directors believes that having separate positions is the appropriate leadership structure for us at this time and demonstrates our commitment to good corporate governance.

Role of the Board in Risk Oversight

Risk is inherent with every business, and how well a business manages risk can ultimately determine its success. We face a number of risks, including those described under the section titled "Risk Factors" in this prospectus. Our board of directors is actively involved in oversight of risks that could affect us. This oversight is conducted primarily by our full board of directors, which has responsibility for general oversight of risks.

Following the closing of this offering, our board of directors will satisfy this responsibility through reports to the board by each committee chair regarding the committee's considerations and actions, as well as through regular reports directly from officers responsible for oversight of particular risks within our company. Our board of directors believes that full and open communication between management and the board of directors is essential for effective risk management and oversight.

Compensation Committee Interlocks and Insider Participation

None of the members of our compensation committee has at any time during the prior three years been one of our officers or employees. None of our executive officers currently serves, or in the past fiscal year has served, as a member of the board of directors or compensation committee of any entity that has one or more executive officers serving on our board of directors or compensation committee. For a description of transactions between us and members of our compensation committee and affiliates of such members, please see the "Certain Relationships and Related Party Transactions" section of this prospectus.

Code of Business Conduct and Ethics

We plan to adopt a code of business conduct and ethics that applies to all of our employees, officers and directors, including those officers responsible for financial reporting, which will be effective upon completion of this offering. Upon the completion of this offering, our code of business conduct and ethics will be available on our website at *www.neximmune.com*. We intend to disclose any amendments to the code, or any waivers of its requirements, on our website or in a Current Report on Form 8-K.

EXECUTIVE AND DIRECTOR COMPENSATION

Summary Compensation Table

The following table sets forth information regarding compensation earned with respect to the fiscal year ended December 31, 2020 by our principal executive officer and the next two most highly compensated executive officers who earned more than $100,000 during the fiscal year ended December 31, 2020 and were serving as executive officers as of such date. We refer to these individuals in this prospectus as our named executive officers.

Name and Principal Position	Year	Salary ($)	Bonus ($)	Option Awards ($)(1)	All Other Compensation ($)(2)	Total ($)
Scott Carmer	2020	387,454	122,360	-	7,669	517,483
President and Chief Executive Officer	2019	375,440	133,408	346,804	-	855,652
Kristi Jones	2020	307,516	77,692	-	11,577	396,785
Chief Operating Officer	2019	298,203	116,000	144,088	5,230	563,521
John Trainer(3)	2020	329,077	-	668,977	8,758	1,006,812
Chief Financial Officer						

(1) These amounts represent the aggregate grant date fair value for option awards granted during the fiscal year ended December 31, 2020, computed in accordance with FASB ASC Topic 718. A discussion of the assumptions used in determining grant date fair value may be found in Note to our financial statements for the fiscal year ended December 31, 2020 included elsewhere in this prospectus.

(2) The amounts in this column include our 401(k) match contribution for each named executive officer.

(3) Mr. Trainer joined the Company in 2020.

Narrative Disclosure to Summary Compensation Table

Annual Base Salary

Base salaries of our named executive officers (other than our Chief Executive Officer) are reviewed annually and recommended to our compensation committee by our chief executive officer, and the base salary for each named executive officer is recommended by our compensation committee and approved by our board of directors. Adjustments to base salaries are based on the scope of a named executive officer's responsibilities, individual contribution, experience and performance. Decisions regarding salary increases may consider the named executive officer's current salary, equity ownership and the amounts paid to individuals in comparable positions at our company and at our peer companies provided by the Radford Group.

Annual Cash Bonus Opportunities

Under our annual bonus program for 2020, each named executive officer was eligible to be considered for an annual bonus based by our compensation committee assessment of our performance in 2019. Each named executive officer was assigned a target bonus expressed as a percentage of their base salary, which was 50% for Mr. Carmer, 40% for Ms. Jones and 40% for Mr. Trainer. Our board of directors approved performance bonuses for the named executive officers as reflected in the column of the Summary Compensation Table above entitled "Bonus."

Bonus targets for the named executive officers are 50% for the Chief Executive Officer, and 40% for the Chief Operating Officer and Chief Financial Officer. These are adjusted for company performance for the year based on an assessment by the compensation committee.

Long-Term Equity Incentives

Our equity grant program is intended to align the interests of our named executive officers with those of our stockholders and to motivate them to make important contributions to our performance.

Employment Agreements

We have entered into executive employment agreements with each of our named executive officers in connection with their employment with us, the material terms of which are described below. These executive employment agreements provide for "at will" employment, subject to certain notice and severance requirements. Each of the named executive officers was also required to enter into restrictive covenant agreements which obligate each named executive officer to refrain from disclosing any of our proprietary information received during the course of employment and to assign to us any inventions conceived or developed during the course of employment. Such restrictive covenant agreements also contain non-competition and non-solicitation protections in our favor.

Scott Carmer

We entered into an employment agreement dated as of June 1, 2017 with Mr. Carmer with respect to his service as our President and Chief Operating Officer. Mr. Carmer was subsequently appointed as our President and Chief Executive Officer in March 2018. Under the terms of the agreement, Mr. Carmer was entitled to an initial annual base salary of $365,000, subject to increase by our board of directors; however, Mr. Carmer agreed to an annual base salary of $220,000 until the completion of a major financing, which was achieved upon the issuance of our Series A preferred stock in our Series A preferred stock financing in December 2017. Mr. Carmer's annual base salary was subsequently increased from $220,000 to $365,000 in December 2017. Under the terms of the agreement, in connection with the issuance of shares of our Series A preferred stock in December 2017, Mr. Carmer was entitled to receive a one-time bonus of $71,622, which was based on a fraction of the difference between his annual base salary of $365,000 and his lower annual base salary of $220,000, as well as options to purchase 3,861,335 shares of our common stock, such that his unvested stock options at that time would represent 3.00% of the fully diluted equity of the Company. Pursuant to the terms of the agreement, Mr. Carmer is also entitled to receive an annual cash bonus of up to 50% of his then-current base salary in the sole discretion of our board of directors and based on such factors that our board of directors deems appropriate. Mr. Carmer is also eligible to participate in our equity incentive plans and is entitled to participate in our health insurance and other employee benefit plans and to receive reimbursement for business expenses.

Mr. Carmer's employment agreement provides that in the event that (1) Mr. Carmer's employment is terminated other than for cause, (2) Mr. Carmer terminates his own employment as a result of a material breach of his employment agreement by the Company, including any material diminution in the nature or scope of Mr. Carmer's authorities, powers, functions, duties or responsibilities, following a cure period (a "Constructive Termination"), or (3) a change of control of the Company occurs, he is entitled to receive the following severance benefits: (i) a severance payment equal to 18 months of his then-current salary paid in installments; (ii) accelerated vesting and, if applicable, exercisability of the then-unvested portion of each of his outstanding equity awards; and (iii) eligibility for at least 18 months of healthcare coverage through COBRA. These severance benefits are conditioned upon Mr. Carmer's execution of a release of claims in favor of the Company. In the event of a Constructive Termination, Mr. Carmer is also entitled to a pro-rata portion of his annual bonus. In the event that Mr. Carmer's employment is terminated due to his death or disability, he or his beneficiary is entitled to payment of all accrued and unpaid base salary, payment for all accrued but unused vacation time for the then-current annual period, all unreimbursed business expenses incurred through the date of termination and a pro-rata portion of his annual bonus.

Kristi Jones

We entered into an employment agreement dated as of June 1, 2017 with Ms. Jones with respect to her service as our Chief Business Officer. Ms. Jones was subsequently appointed as our Chief Operating Officer in March 2018. Under the terms of the agreement, Ms. Jones was entitled to an initial annual base salary of $270,000, subject to increase by our board of directors; however, Ms. Jones agreed to an annual base salary of $200,000 until the completion of a major financing, which was achieved upon the issuance of our Series A preferred stock in our Series A preferred stock financing in December 2017. Ms. Jones's annual base salary was

subsequently increased from $200,000 to $270,000 on December 17, 2017. Under the terms of the agreement, in connection with the issuance of shares of our Series A preferred stock in December 2017, Ms. Jones was entitled to receive a one-time bonus of $36,885, which was based on a fraction of the difference between her annual base salary of $270,000 and her lower annual base salary of $200,000, as well as options to purchase 1,586,168 shares of our common stock, such that her unvested stock options at that time would represent 1.23% of the fully diluted equity of the Company. Pursuant to the terms of the agreement, Ms. Jones is also entitled to receive an annual cash bonus of up to 40% of her then-current base salary in the sole discretion of our board of directors and based on such factors that our board of directors deems appropriate. Ms. Jones is also eligible to participate in our equity incentive plans and is entitled to participate in our health insurance and other employee benefit plans and to receive reimbursement for business expenses.

Ms. Jones's employment agreement provides that in the event that (1) Ms. Jones's employment is terminated other than for cause, (2) Ms. Jones's Constructive Termination (as defined above), or (3) a change of control of the Company occurs, she is entitled to receive the following severance benefits: (i) a severance payment equal to 12 months of her then-current salary paid in installments; (ii) accelerated vesting and, if applicable, exercisability of the then-unvested portion of each of her outstanding equity awards; and (iii) eligibility for at least 18 months of healthcare coverage through COBRA. These severance benefits are conditioned upon Ms. Jones's execution of a release of claims in favor of the Company. In the event of a Constructive Termination, Ms. Jones is also entitled to a pro-rata portion of her annual bonus. In the event that Ms. Jones's employment is terminated due to her death or disability, she or her beneficiary is entitled to payment of all accrued and unpaid base salary, payment for all accrued but unused vacation time for the then-current annual period, all unreimbursed business expenses incurred through the date of termination and a pro-rata portion of her annual bonus.

John Trainer

We entered into an employment agreement dated as of January 6, 2020 with Mr. Trainer with respect to his service as our President and Chief Operating Officer. Under the terms of the agreement, Mr. Trainer was entitled to an initial annual base salary of $345,000, subject to increase by our board of directors. Mr. Trainer was entitled to receive options to purchase 2,843,886 shares of our common stock, such that his unvested stock options at that time would represent 1.2% of the fully diluted equity of the Company. Pursuant to the terms of the agreement, Mr. Trainer is also entitled to receive an annual cash bonus of up to 40% of his then-current base salary in the sole discretion of our board of directors and based on such factors that our board of directors deems appropriate. Mr. Trainer is also eligible to participate in our equity incentive plans and is entitled to participate in our health insurance and other employee benefit plans and to receive reimbursement for business expenses.

Mr. Trainer's employment agreement provides that in the event that (1) Mr. Trainer's employment is terminated other than for cause, (2) Mr. Trainer terminates his own employment as a result of a material breach of his employment agreement by the Company, including any material diminution in the nature or scope of Mr. Trainer's authorities, powers, functions, duties or responsibilities, following a cure period (a "Constructive Termination"), or (3) a change of control of the Company occurs, he is entitled to receive the following severance benefits: (i) a severance payment equal to 12 months of his then-current salary and a pro-rata share of Mr. Trainer's bonus target (40% of then-current salary) paid in installments; (ii) accelerated vesting and, if applicable, exercisability of the then-unvested portion of each of his outstanding equity awards; and (iii) eligibility for at least 18 months of healthcare coverage through COBRA. These severance benefits are conditioned upon Mr. Trainer's execution of a release of claims in favor of the Company. In the event that Mr. Trainer's employment is terminated due to his death or disability, he or his beneficiary is entitled to payment of all accrued and unpaid base salary, payment for all accrued but unused vacation time for the then-current annual period, all unreimbursed business expenses incurred through the date of termination and a pro-rata portion of his annual bonus.

Outstanding Equity Awards as of December 31, 2020

The following table shows grants of stock options outstanding on the last day of the fiscal year ended December 31, 2020, to each of our executive officers named in the Summary Compensation Table. Each of the of the outstanding equity awards in the table below was granted pursuant to 2017 Plan or 2018 Plan.

	Option Awards(1)				
Name	Number of Securities Underlying Unexercised Options (#) Exercisable	Number of Securities Underlying Unexercised Options (#) Unexercisable	Equity Incentive Plan Awards: Number of Securities Underlying Unexercised Unearned Options (#)	Option Exercise Price ($)	Option Expiration Date
Scott Carmer	1,636,000	-	-	$ 0.14	03/02/2027
President and Chief Executive Officer	545,333	-	-	$ 0.14	03/02/2027
	3,707,383	-	-	$ 0.15	07/30/2028
	153,952	-	-	$ 0.15	09/24/2028
	1,029,688	-	-	$ 0.25	03/18/2029
	940,000	-	-	$ 0.25	06/17/2029
Kristi Jones	271,803	-	-	$ 0.14	03/02/2027
Chief Operating Officer	1,522,021	-	-	$ 0.15	07/30/2028
	64,147		-	$ 0.15	09/24/2028
	422,977	-	-	$ 0.25	03/18/2029
	121,875	203,125	-	$ 0.25	06/17/2029
John Trainer	-	2,843,886	-	$ 0.30	03/04/2030
Chief Financial Officer					

Director Compensation

For the fiscal year ended December 31, 2020, we did not have a director compensation policy in place. The following table sets forth the total compensation paid or accrued during the fiscal year ended December 31, 2020 to each of our directors, other than Mr. Carmer who does not receive compensation for his service as a director.

Name	Option Awards ($)(1)	Total ($)
Sol J. Barer, Ph.D.	-	-
Alan S. Roemer, MBA, MPH	157,556	-
Tim Bertram, Ph.D.	78,778	-
Paul D'Angio, RPH, MSJ	78,778	-
Zhengbin (Bing) Yao, Ph.D.	78,778	-
Tony Yao, M.D., Ph.D.	78,778	-

(1) These amounts represent the aggregate grant date fair value for option awards granted during the fiscal year ended December 31, 2020, computed in accordance with FASB ASC Topic 718. A discussion of the assumptions used in determining grant date fair value may be found in Note to our financial statements for the fiscal year ended December 31, 2020 included elsewhere in this prospectus. The following table shows the aggregate number of stock options held by each of our non-employee directors as of December 31, 2020.

Name	Aggregate Number of Shares of Common Stock Subject to Stock Options
Sol J. Barer, Ph.D.	-
Alan S. Roemer, MBA, MPH	1,234,684
Tim Bertram, Ph.D.	617,342
Paul D'Angio, RPH, MSJ	617,342
Zhengbin (Bing) Yao, Ph.D.	617,342
Tony Yao, M.D., Ph.D.	617,342

Non-Employee Director Compensation Policy

We plan to adopt a policy with respect to the compensation payable to our non-employee directors, which will become effective upon the completion of this offering. Under this policy, each non-employee director will be eligible to receive compensation for his or her service consisting of annual cash retainers and equity awards. Our non-employee directors will receive the following annual retainers for their service:

Position	Retainer
Board Member	$
Board Chairperson	
Audit Committee Chair	
Compensation Committee Chair	
Nominating and Governance Committee Chair	
Audit Committee Member	
Compensation Committee Member	
Nominating and Governance Committee Member	

Equity awards for non-employee directors will consist of (i) an initial equity award consisting of options to purchase shares of common stock upon first appointment to the board of directors, and (ii) annual equity awards consisting of options to purchase shares of common stock, vesting 12 months after the grant date.

Directors may be reimbursed for travel, food, lodging and other expenses directly related to their service as directors. Directors are also entitled to the protection provided by their indemnification agreements and the indemnification provisions in the current certificate of incorporation and by-laws, as well as the amended and restated certificate of incorporation and amended and restated by-laws that will become effective upon the completion of this offering.

Equity Compensation Plans

Our 2017 Equity Incentive Plan, or the 2017 Plan, was approved by our board of directors and stockholders in January 2017, and was subsequently amended in April 2017. The 2017 Plan provides for the issuance of up to 10,906,667 shares of our common stock. The 2017 Plan allows us to make grants of stock options, restricted stock, restricted stock units and stock appreciation rights to our employees, directors and consultants. As of December 31, 2020, under the 2017 Plan, options to purchase 9,035,356 shares of our common stock were outstanding, 2,326,170 shares of our common stock had been issued and were outstanding pursuant to the exercise of options granted under the 2017 Plan, and 47,779 shares of our common stock were available for future awards under the 2017 Plan.

Our 2018 Equity Incentive Plan, or the 2018 Plan, was approved by our board of directors in June 2018 and our stockholders in July 2018, and was subsequently amended in July 2018. The 2018 Plan and 2017 Plan are collectively referred to as the “Equity Plans.” The 2018 Plan provides for the issuance of up to 42,643,980 shares of our common stock. The 2018 Plan allows us to make grants of stock options, restricted stock, restricted stock units and stock appreciation rights to our employees, directors and consultants. As of December 31, 2020, under the 2018 Plan, options to purchase 29,555,349 shares of our common stock were outstanding, 15,416 shares of NexImmune common stock had been issued and were outstanding pursuant to the exercise of options granted under the 2018 Plan, and 1,663,910 shares of our common stock were available for future awards under the 2018 Plan.

Under the Equity Plans, in the event there is a specified type of change in our capital structure, such as a recapitalization or stock split, appropriate adjustments will be made to (i) the class(es) and maximum number of securities subject to the Equity Plans, (ii) the class(es) and maximum number of securities that may be issued pursuant to the exercise of incentive stock options, and (iii) the class(es) and number of securities and price per share of stock subject to outstanding stock awards under the Equity Plans.

The Equity Plans also provide that in the event of a corporate transaction (as defined in the Equity Plans and described below), and except as otherwise stated in a stock option or other award agreement, our board of directors will take one or more of the following actions with respect to outstanding stock awards: (i) arrange for the surviving corporation or acquiring corporation to assume or substitute for the outstanding stock awards; (ii) accelerate the vesting of outstanding stock awards, with such awards terminating if not exercised prior to the effective time of the corporate transaction, (iii) terminate or cancel outstanding stock awards to the extent not vested or exercised prior to the effective time of the corporate transaction; or (iv) make a payment equal to the excess of the value the holder would receive upon exercise of the award over the exercise price payable by the holder.

Under the Equity Plans, a corporate transaction is generally the consummation of: (i) a sale or other disposition of all or substantially all of the assets of the Company and its subsidiaries; (ii) a sale or other disposition of at least 90% of the securities of the Company; (iii) a merger, consolidation or similar transaction following which the Company is not the surviving corporation; or (iv) a merger, consolidation or similar transaction following which the Company is the surviving corporation but the shares of our common stock outstanding immediately preceding the merger, consolidation or similar transaction are converted or exchanged by virtue of the merger, consolidation or similar transaction into other property, whether in the form of securities, cash or otherwise.

Other Compensation

All of our current named executive officers are eligible to participate in our employee benefit plans, including our medical, dental, vision, life and disability insurance plans, in each case on the same basis as all of our other employees. We generally do not provide perquisites or personal benefits to our named executive officers, except in limited circumstances.

401(k) Plan

We maintain a 401(k) plan for employees. The 401(k) plan is intended to qualify under Section 401(k) of the Internal Revenue Service Code of 1986, as amended, so that contributions to the 401(k) plan by employees or by us, and the investment earnings thereon, are not taxable to the employees until withdrawn from the 401(k) plan, and so that contributions by us, if any, will be deductible by us when made. Under the 401(k) plan, employees may elect to reduce their current compensation by up to the statutorily prescribed annual limit and to have the amount of such reduction contributed to the 401(k) plan. The 401(k) plan permits us to make contributions up to the limits allowed by law on behalf of all eligible employees. We make matching contributions of 100% of the first 3% contributed by employees to our 401(k) plan, effective June 1, 2019.

Rule 10b5-1 Sales Plans

Our directors and executive officers may adopt written plans, known as Rule 10b5-1 plans, in which they will contract with a broker to buy or sell shares of our common stock on a periodic basis. Under a Rule 10b5-1 plan, a broker executes trades pursuant to parameters established by the director or officer when entering into the plan, without further direction from the director or officer. The director or officer may amend or terminate the plan in limited circumstances. Our directors and executive officers may also buy or sell additional shares of our common stock outside of a Rule 10b5-1 plan when they are not in possession of material, nonpublic information.

CERTAIN RELATIONSHIPS AND RELATED PARTY TRANSACTIONS

The following is a description of transactions since January 1, 2017, to which we have been a party, in which the amount involved exceeds $120,000, and in which any of our directors, executive officers or holders of more than 5% of our capital stock, or an affiliate or immediate family member thereof, had or will have a direct or indirect material interest. We refer to such transactions as “related party transactions” and such persons as “related parties.” With the approval of our board of directors, we have engaged in the related party transactions described below. We believe the terms obtained or consideration that we paid or received, as applicable, in connection with the transactions described below were comparable to terms available or the amounts that would be paid or received, as applicable, from unaffiliated third parties.

Other than as described below, there have not been, nor are there any currently proposed, transactions or series of similar transactions to which we have been or will be a party other than compensation arrangements, which are described where required under the “Executive and Director Compensation” section of this prospectus.

Convertible Note Financings

2020 Convertible Notes

From April 2020 through January 15, 2021, we issued $22,024,786 aggregate principal amount of convertible notes, which mature in April 2021, to various investors.

The table below sets forth the aggregate principal amount of convertible notes issued to our directors, executive officers or holders of more than 5% of our capital stock, or an affiliate or immediate family member thereof:

Name	Principal Note Amount
Alan S. Roemer	$ 100,000
B&S NexImmune Holdco LLC	$ 2,750,000
Arrowmark Lifescience Fund LP	$ 750,000

The convertible notes will convert into preferred stock, which will convert into common stock, automatically upon the listing of our common stock on the Nasdaq Global Market at an effective conversion price of $ per share of common stock.

Equity Financings

Series A Financing

During the period between December 2017 and August 2018, we issued an aggregate of 121,735,303 shares of Series A preferred stock at a purchase price of $0.2951 per share for aggregate consideration of $25.0 million, plus conversion of convertible notes, or the Series A Financing. This amount includes the conversion of certain 2017 Convertible Notes and shares of our common stock into NexImmune Series A preferred stock.

The table below sets forth the aggregate number and purchase price of shares of Series A preferred stock issued to our directors, executive officers or holders of more than 5% of our capital stock, or an affiliate or immediate family member thereof:

Name	Shares Purchased for Cash	Aggregate Purchase Price (Cash)	Shares Issued Upon Conversion of 2017 Convertible Notes and Common Stock	Total Shares
Alan S. Roemer	254,151	$ 75,000	1,213,649	1,467,800
Allen & Company LLC	6,777,363	$2,000,000		6,777,363
B&S NexImmune Holdco LLC	15,435,445	$4,555,000		15,435,445
Joshua Barer			3,756,337	3,756,337
Kristi Jones			254,465	254,465
Meridian Small Cap Growth Fund	10,166,045	$3,000,000		10,166,045
Paul D'Angio	338,868	$ 100,000		338,868
Piedmont Capital Partners, LLC	10,166,045	$3,000,000	3,592,544	13,758,589
Scott Carmer			121,867	121,867
Sol Barer			13,815,067	13,815,067
THB Iron Rose, LLC	6,099,627	$1,800,000		6,099,627(1)
Timothy Bertram	487,970	$ 144,000	288,362	776,332
Tony Yao	33,886	$ 10,000		33,886

(1) TBH Iron Rose, LLC transferred 3,319,000 of its shares of our Series A preferred stock to Arrowmark Life Science Fund, LP on June 15, 2018.

Each share of Series A preferred stock will automatically convert into shares of common stock upon the completion of this offering.

Series A-2 Financing

In January 2019 and February 2019, we issued an aggregate of 22,047,361 shares of Series A-2 preferred stock at a purchase price of $0.3523 per share for aggregate consideration of $7.8 million, or the Series A-2 Financing.

The table below sets forth the aggregate number and purchase price of shares of our Series A-2 preferred stock issued to our directors, executive officers or holders of more than 5% of our capital stock, or an affiliate or immediate family member thereof:

Name	Shares	Aggregate Purchase Price
Alan S. Roemer	70,962	$ 25,000
Allen & Company LLC	1,363,496	$ 480,360
B&S NexImmune Holdco LLC	2,838,489	$ 1,000,000
Meridian Small Cap Growth Fund	2,838,488	$ 1,000,000
Paul D'Angio	70,962	$ 25,000
Piedmont Capital Partners, LLC	4,257,734	$ 1,500,000
THB Iron Rose, LLC	814,975	$ 287,116
Timothy Bertram	178,590	$ 62,917

Each share of Series A-2 preferred stock will automatically convert into shares of common stock upon the completion of this offering.

Table of Contents

Series A-3 Financing

In November 2019 and December 2019, we issued an aggregate of 31,209,734 shares of our Series A-3 preferred stock at a purchase price of $0.3523 per share for aggregate consideration of $11.0 million, or the Series A-3 Financing.

The table below sets forth the aggregate number of shares of Series A-3 preferred stock issued to our directors, executive officers or holders of more than 5% of our capital stock, or an affiliate or immediate family member thereof:

Name	Shares	Aggregate Purchase Price
Alan S. Roemer	459,074	$ 161,732
Allen & Company LLC	2,838,489	$ 1,000,000
B&S NexImmune Holdco LLC	1,419,244	$ 500,000
Meridian Small Cap Growth Fund	4,967,357	$ 1,750,000
Paul D'Angio	70,962	$ 25,000
Piedmont Capital Partners, LLC	2,838,489	$ 1,000,000
THB Iron Rose, LLC	8,515,468	$ 2,999,999
Timothy Bertram	283,848	$ 100,000

Each share of Series A-3 preferred stock will automatically convert into shares of common stock upon the completion of this offering.

Scott Carmer Loan

On March 30, 2018, we entered into a loan agreement and promissory note with our Chief Executive Officer, Scott Carmer, pursuant to which Mr. Carmer borrowed the aggregate principal sum of $150,000 from the Company. Mr. Carmer repaid the loan, including accrued interest, in two equal installments on March 30, 2019 and March 30, 2020 pursuant to the terms of the loan. The total interest paid on the loan was $5,692 based on an interest rate of 2.72% compounded annually.

Agreements with Stockholders

Investors' Rights, Voting and Restricted Stock Agreements

In connection with our preferred stock financings, we entered into investors' rights, voting and restricted stock agreements containing registration rights, information rights, voting rights and rights of first refusal, among other things, with certain holders of our preferred stock and certain holders of our common stock. The investors' rights, voting and restricted stock agreements shall terminate upon the completion of an IPO.

Registration Rights

Following the expiration of the lock-up period described below in "Shares Eligible for Future Sale—Lock-Up Agreements," pursuant to our registration rights agreement, the holders of shares of common stock, which includes shares of common stock outstanding as of December 31, 2020, shares of common stock issuable upon conversion of our preferred stock outstanding as of December 31, 2020 upon the completion of this offering, including shares of preferred stock issuable upon the automatic conversion of all of our outstanding convertible promissory notes upon the listing of our common stock on the Nasdaq Global Market assuming the listing had occurred on December 31, 2020, are entitled to registration rights with respect to the shares of common stock held by them. These shares include all of the shares held following this offering by our principal stockholders and their affiliates, except that such numbers of shares do not reflect the shares of common stock, if any, purchased by any holders of registration rights in this offering. See "Description of Capital Stock—Registration Rights" for a more detailed description of these registration rights.

Indemnification Agreements with Officers and Directors and Directors' and Officers' Liability Insurance

In connection with this offering, we will enter into indemnification agreements with each of our executive officers and directors. The indemnification agreements, our amended and restated certificate of incorporation and our amended and restated by-laws to be in effect upon completion of this offering will require us to indemnify our directors to the fullest extent not prohibited by Delaware law. Subject to certain limitations, our amended and restated by-laws also require us to advance expenses incurred by our directors and officers.

We also maintain a general liability insurance policy which covers certain liabilities of directors and officers of our company arising out of claims based on acts or omissions in their capacities as directors or officers.

Policies and Procedures for Related Party Transactions

In connection with this offering, we will adopt a written policy, effective upon completion of this offering, that requires all future transactions between us and any director, executive officer, holder of 5% or more of any class of our capital stock or any member of the immediate family of, or entities affiliated with, any of them, or any other related persons, as defined in Item 404 of Regulation S-K, or their affiliates, in which the amount involved is equal to or greater than $120,000, be approved in advance by our audit committee. Any request for such a transaction must first be presented to our audit committee for review, consideration and approval. In approving or rejecting any such proposal, our audit committee is to consider the relevant facts and circumstances available and deemed relevant to the audit committee, including, but not limited to, the extent of the related party's interest in the transaction, and whether the transaction is on terms no less favorable to us than terms we could have generally obtained from an unaffiliated third party under the same or similar circumstances.

Table of Contents

PRINCIPAL STOCKHOLDERS

The following table sets forth certain information with respect to the beneficial ownership of our common stock as of December 31, 2020 for:

- each person, or group of affiliated persons, who are known by us to beneficially own more than 5% of the outstanding shares of our common stock;
- each of our directors;
- each of our named executive officers; and
- all of our current directors and executive officers as a group.

The number of shares beneficially owned by each entity, person, director or executive officer is determined in accordance with the rules of the SEC and the information is not necessarily indicative of beneficial ownership for any other purpose. Under such rules, beneficial ownership includes any shares over which the individual has the sole or shared voting power or investment power as well as any shares which the individual has the right to acquire within 60 days of September 30, 2020 through the exercise of any stock option, warrant or other right. Except as otherwise indicated, and subject to applicable community property laws, the stockholders named in this table have sole voting and investment power with respect to all shares of our common stock held by that person.

The percentage of ownership is based on shares of our common stock outstanding as of December 31, 2020, assuming the conversion of all outstanding shares of our preferred stock into an aggregate of 217,154,926 shares of our common stock upon the consummation of this offering, including shares of preferred stock issuable upon the automatic conversion of all of our outstanding convertible promissory notes upon the listing of our common stock on the Nasdaq Global Market assuming the listing had occurred on December 31, 2020, and the percentage of beneficial ownership after this offering in the table below is based on shares of common stock assumed to be outstanding after the closing of the offering. Shares of NexImmune common stock that a person has the right to acquire within 60 days of December 31, 2020 are deemed outstanding for purposes of computing the percentage ownership of the person holding such rights, but are not deemed outstanding for purposes of computing the percentage ownership of any other person, except with respect to the percentage ownership of all current directors and executive officers as a group.

Unless otherwise indicated, the address of all listed stockholders is c/o NexImmune, Inc., 9119 Gaither Road, Gaithersburg, MD 20877.

Name of Beneficial Owner	Number of Shares Beneficially Owned	Percentage of Beneficial Ownership	
		Before offering	After offering
Principal Stockholders:			
Allen & Company LLC(1)	10,979,348	4.0%	%
ArrowMark Partners and its affiliates(2)	41,627,121	15.0%	%
B&S NexImmune Holdco LLC and Joshua Barer(3)	31,202,975	11.2%	%
Piedmont Capital Partners and its affiliates(4)	31,167,774	11.2%	%
Directors and Named Executive Officers:			
Scott Carmer(5)	7,585,889	2.7%	%
Sol J. Barer, Ph.D.(7)	25,095,328	9.0%	%
Alan S. Roemer, M.B.A., M.P.H.(8)	3,393,939	1.2%	%
Tim Bertram, Ph.D.(9)	1,823,245	*	*
Paul D’Angio, RPH, MSJ(10)	953,903	*	*
Zhengbin (Bing) Yao, Ph.D.(11)	473,111	*	*
Tony Yao, M.D., Ph.D.(12)	500,934	*	*
Kristi Jones(13)	3,489,693	1.3%	%
John Trainer(14)	770,219	*	*
All current executive officers and directors as a group (9 persons)	44,086,261	15.9%	%

* Indicates beneficial ownership of less than 1%.

(1) Consists of 10,979,348 shares of our common stock issuable upon the conversion of 6,777,363 shares of our Series A preferred stock, 1,363,496 shares of our Series A-2 preferred stock and 2,838,489 shares of our Series A-3 preferred stock held by Allen & Company LLC. The address of Allen & Company LLC is 711 Fifth Avenue, New York, New York 10022.

(2) Consists of (a) 4,381,873 shares of our common stock issuable upon the conversion of 3,388,682 shares of our Series A preferred stock and 993,191 shares of our Series A-2 preferred stock held by ArrowMark Fundamental Opportunity Fund, L.P. (ArrowMark Opportunity Fund), (b) 6,350,411 shares of our common stock issuable upon the conversion of 3,319,000 shares of our Series A preferred stock, 851,546 shares of our Series A-2 preferred stock, 709,622 shares of our Series A-3 preferred stock and 1,459,500 shares of our common stock upon conversion of convertible notes held by ArrowMark Life Sciences Fund, LP (ArrowMark Fund), (c) 131,455 shares of our common stock issuable upon the conversion of 101,660 shares of our Series A preferred stock and 29,795 shares of our Series A-2 preferred stock held by CF Ascent, LLC (Ascent), (d) 657,279 shares of our common stock issuable upon the conversion of 508,301 shares of our Series A preferred stock and 148,978 shares of our Series A-2 preferred stock held by Lookfar Investments, LLC (Lookfar), (e) 17,971,890 shares of our common stock issuable upon the conversion of 10,166,045 shares of our Series A preferred stock, 2,838,488 shares of our Series A-2 preferred stock and 4,967,357 shares of our Series A-3 preferred stock held by Meridian Small Cap Growth Fund (Meridian), (f) 12,111,070 shares of our common stock issuable upon the conversion of 2,780,627 shares of our Series A preferred stock, 814,975 shares of our Series A-2 preferred stock and 8,515,468 shares of our Series A-3 preferred stock held by THB Iron Rose, LLC (THB Iron Rose), and (g) 33,886 shares of our common stock issuable upon the conversion of 33,886 shares of our Series A preferred stock held by The Iron Rose, LLC Life Science Portfolio (THB Fund). ArrowMark Colorado Holdings LLC (ArrowMark Colorado) is an investment advisor to ArrowMark Opportunity Fund, ArrowMark Fund, THB Iron Rose and THB Fund. Dr. Tony Yao, one of our directors, is employed as a portfolio manager for ArrowMark Colorado and has direct voting and dispositive control over the shares held by ArrowMark Opportunity Fund, ArrowMark Fund, THB Iron Rose and THB Fund. Dr. Tony Yao may be considered the beneficial owner of the shares held by ArrowMark Opportunity Fund,

ArrowMark Fund, THB Iron Rose and THB Fund and disclaims beneficial ownership of such shares, except to the extent of any pecuniary interest therein. The principal business address of ArrowMark Opportunity Fund, ArrowMark Fund, THB Iron Rose and THB Fund is 100 Fillmore Street, Suite 325, Denver, Colorado 80206.

(3) Consists of (a) 19,693,178 shares of our common stock issuable upon the conversion of 15,435,445 shares of our Series A preferred stock, 2,838,489 shares of our Series A-2 preferred stock and 1,419,244 shares of our Series A-3 preferred stock and 5,526,163 shares of our common stock upon conversion of Convertible Notes held by B&S NexImmune Holdco, LLC, and (b) 2,227,297 shares of our common stock and 3,756,337 shares of our common stock issuable upon the conversion of 3,756,337 shares of our Series A preferred stock held by Joshua Barer. Joshua Barer is the sole manager of B&S NexImmune Holdco LLC and has sole voting and dispositive control over the shares held by B&S NexImmune Holdco LLC. Mr. Barer may be considered the beneficial owner of the shares held by B&S Holdco and disclaims beneficial ownership of such shares, except to the extent of any pecuniary interest therein. Sol J. Barer, Ph.D., one of our directors and the father of Joshua Barer, is a member of Barer & Son Capital, LLC, which is a member of B&S NexImmune Holdco LLC, but Sol J. Barer, Ph.D. does not have voting or dispositive control over the shares held by B&S NexImmune Holdco LLC. The principal business address of B&S NexImmune Holdco LLC and Mr. Barer is 2 Barer Lane, Mendham, New Jersey 07945.

(4) Consists of (a) 2,227,297 shares of our common stock and 20,854,812 shares of our common stock issuable upon the conversion of 13,758,589 shares of our Series A preferred stock, 4,257,734 shares of our Series A-2 preferred stock and 2,838,489 shares of our Series A-3 preferred stock held by Piedmont Capital Partners, LLC, (b) 2,838,489 shares of our common stock issuable upon the conversion of 2,838,489 shares of our Series A-3 preferred stock held by Piedmont Capital Partners II, LLC, and (c) 444,186 shares of our common stock and 4,802,990 shares of our common stock issuable upon the conversion of 3,241,822 shares of our Series A preferred stock, 567,697 shares of our Series A-2 preferred stock and 993,471 shares of our Series A-3 preferred stock held by Robert E. Long, III. Robert E. Long, III and Louise Brady have voting and dispositive control over the shares held by Piedmont Capital Partners, LLC and Piedmont Capital Partners II, LLC. Robert E. Long, III and Louise Brady may be considered the beneficial owner of the shares held by Piedmont Capital Partners, LLC and Piedmont Capital Partners II, LLC and disclaim beneficial ownership of such shares, except to the extent of any pecuniary interest therein. The principal business address of Piedmont Capital Partners, LLC and Piedmont Capital Partners II, LLC is 300 North Greene Street, Suite 1750, Greensboro, North Carolina 27401.

(5) Consists of (a) 121,867 shares of our common stock issuable upon the conversion of 121,867 shares of our Series A preferred stock and (b) options to purchase 7,464,022 shares of our common stock exercisable within 60 days of December 31, 2020 held by Mr. Carmer.

(6) Consists of (a) 9,800,108 shares of our common stock, (b) 13,815,067 shares of our common stock issuable upon the conversion of 13,815,067 shares of our Series A preferred stock (c) options to purchase 1,480,153 shares of our common stock exercisable within 60 days of December 31, 2020 held by Dr. Barer. Does not include the securities held by B&S NexImmune Holdco LLC discussed in footnote 3, as Dr. Barer has no voting or dispositive control over such securities.

(7) Consists of (a) 3,277,371 shares of our common stock issuable upon the conversion of 1,467,800 shares of our Series A preferred stock, 70,962 shares of our Series A-2 preferred stock, 459,074 shares of our Series A-3 preferred stock and 200,966 shares of our common stock upon conversion of convertible notes and (b) options to purchase 1,195,137 shares of our common stock exercisable within 60 days of December 31, 2020 held by Mr. Roemer.

(8) Consists of (a) 111,364 shares of our common stock and 1,238,770 shares of our common stock issuable upon the conversion of 776,332 shares of our Series A preferred stock, 178,590 shares of our Series A-2 preferred stock and 283,848 shares of our Series A-3 preferred stock and (b) options to purchase 473,111 shares of our common stock exercisable within 60 days of December 31, 2020 held by Dr. Bertram.

(9) Consists of (a) 480,792 shares of our common stock issuable upon the conversion of 338,868 shares of our Series A preferred stock, 70,962 shares of our Series A-2 preferred stock and 70,962 shares of our Series A-3 preferred stock and (b) options to purchase 473,111 shares of our common stock exercisable within 60 days of December 31, 2020 held by Mr. D’Angio.

(10) Consists of options to purchase 473,111 shares of our common stock exercisable within 60 days of December 31, 2020 held by Dr. Bing Yao.

(11) Consists of (a) the shares described in footnote 2 above, (b) 33,886 shares of our common stock issuable upon the conversion of 33,886 shares of our Series A preferred stock held by Dr. Tony Yao and (c) options to purchase 467,048 shares of our common stock exercisable within 60 days of December 31, 2020 held by Dr. Tony Yao.

(12) Consists of (a) 818,864 shares of our common stock. 254,465 shares of our common stock issuable upon the conversion of 254,465 shares of our Series A preferred stock and options to purchase 2,416,364 shares of our common stock exercisable within 60 days of December 31, 2020 held by Ms. Jones.

(13) Consists of options to purchase 770,219 shares of our common stock exercisable within 60 days of December 31, 2020.

(14) Consists of (a) 10,953,623 shares of our common stock, (b) 18,064,198 shares of our common stock issuable upon the conversion of 16,929,800 shares of Series A preferred stock, 320,514 shares of our Series A-2 preferred stock, 813,884 shares of our Series A-3 preferred stock, 202,437 shares of our common stock upon the conversion of convertible debt and (c) options to purchase 15,212,276 shares of our common stock exercisable within 60 days of December 31, 2020.

DESCRIPTION OF CAPITAL STOCK

General

Upon the completion of this offering, our authorized capital stock will consist of shares of common stock, par value $0.0001 per share, and shares of preferred stock, par value $0.0001 per share, all of which will be undesignated. As of December 31, 2020, there were 21,695,685 shares of our common stock issued and outstanding. This amount excludes our outstanding shares of preferred stock, including shares of preferred stock issuable upon the automatic conversion of all of our outstanding convertible promissory notes, which will automatically convert into 217,154,926 shares of our common stock upon completion of this offering. Based on the number of shares of our common stock outstanding as of December 31, 2020 and assuming (i) the conversion of all outstanding shares of our preferred stock and (ii) the issuance by us of shares of our common stock in this offering, there will be shares of common stock outstanding and no shares of preferred stock outstanding upon the completion of this offering. As of December 31, 2020, we had approximately 118 record holders of our capital stock.

The following description of our capital stock and provisions of our sixth amended and restated certificate of incorporation and amended and restated by-laws are summaries of material terms and provisions and are qualified by reference to our sixth amended and restated certificate of incorporation and amended and restated by-laws, copies of which have been filed with the SEC as exhibits to the registration statement of which this prospectus is a part. The descriptions of our common stock and preferred stock reflect the content of the sixth amended and restated certificate of incorporation and amended and restated by-laws that will become effective immediately prior to the completion of this offering.

Common Stock

Upon the completion of this offering, we will be authorized to issue one class of common stock. Holders of our common stock are entitled to one vote for each share of common stock held of record for the election of directors and on all matters submitted to a vote of stockholders. Holders of our common stock are entitled to receive dividends ratably, if any, as may be declared by our board of directors out of legally available funds, subject to any preferential dividend rights of any preferred stock then outstanding. Upon our dissolution, liquidation or winding up, holders of our common stock are entitled to share ratably in our net assets legally available after the payment of all our debts and other liabilities, subject to the preferential rights of any preferred stock then outstanding. Holders of our common stock have no preemptive, subscription, redemption or conversion rights. The rights, preferences and privileges of our holders of common stock are subject to, and may be adversely affected by, the rights of the holders of shares of any series of preferred stock that we may designate and issue in the future. Except as described under the "—Anti-Takeover Effects of Delaware Law, Our Amended and Restated Certificate of Incorporation and Our Amended and Restated By-Laws" section of this prospectus, the affirmative vote of a majority of the shares of common stock present in person or by proxy, is generally required to take action under our sixth amended and restated certificate of incorporation and amended and restated by-laws.

Preferred Stock

Upon the completion of this offering, our board of directors will be authorized, without action by our stockholders, to designate and issue up to an aggregate of shares of preferred stock in one or more series. Our board of directors can designate the rights, preferences and privileges of the shares of each series and any of its qualifications, limitations or restrictions. Our board of directors may authorize the issuance of preferred stock with voting or conversion rights that could adversely affect the voting power or other rights of the holders of common stock. The issuance of preferred stock, while providing flexibility in connection with possible future financings and acquisitions and other corporate purposes could, under certain circumstances, have the effect of restricting dividends on our common stock, diluting the voting power of our common stock, impairing the

liquidation rights of our common stock, or delaying, deferring or preventing a change in control of our company, which might harm the market price of our common stock. See also the "—Anti-Takeover Effects of Delaware Law, Our Amended and Restated Certificate of Incorporation and Our Amended and Restated By-Laws" section of this prospectus.

Our board of directors will make any determination to issue such shares based on its judgment as to our best interests and the best interests of our stockholders. Upon the completion of this offering, we will have no shares of preferred stock outstanding and we have no current plans to issue any shares of preferred stock following completion of this offering.

Stock Options

As of December 31, 2020, options to purchase an aggregate of 38,590,705 shares of our common stock at a weighted-average exercise price of $0.20 were outstanding.

Registration Rights

We entered into a Second Amended and Restated Investors' Rights Agreement, dated as of November 27, 2019, or the Investors' Rights Agreement, with certain holders of our capital stock. These shares will represent approximately % of our outstanding common stock after this offering, or % if the underwriters exercise their option to purchase additional shares in full, and excluding shares of common stock, if any, purchased by any holders of registration rights in this offering. These shares also may be sold under Rule 144 under the Securities Act, depending on their holding period and subject to restrictions in the case of shares held by persons deemed to be our affiliates.

Under the Investors' Rights Agreement, holders of registrable shares can demand that we file a registration statement or request that their shares be included on a registration statement that we are otherwise filing, in either case, registering the resale of their shares of common stock. These registration rights are subject to conditions and limitations, including the right, in certain circumstances, of the underwriters of an offering to limit the number of shares included in such registration and our right, in certain circumstances, not to effect a registration upon demand of the holders of registrable shares within 90 days following the effective date of any registration statement that we file covering a firm commitment underwritten public offering in which the holders of registrable shares were entitled to join and in which we effectively registered all registrable shares that were requested to be registered.

Demand Registration Rights

Following the date that is 180 days after the date of this prospectus, the holders of at least 25% of registrable securities then outstanding under the Investors' Rights Agreement may require us to file a registration statement under the Securities Act on a Form S-1 at our expense, subject to certain exceptions, with respect to at least 40% of the registrable securities then outstanding, and we are required to effect the registration as soon as practicable, and in any event within 60 days. Any time after we are eligible to use a registration statement on Form S-3, the holders of at least 20% of our registrable securities under the Investors' Rights Agreement may require us to file a registration statement on Form S-3 at our expense, subject to certain exceptions, with respect to the resale of their registrable shares, and we are required to effect the registration as soon as practicable, and in any event within 45 days.

Piggyback Registration Rights

If we propose to file a registration statement under the Securities Act for the purposes of a public offering of our securities (including, but not limited to, registration statements relating to a secondary offering of our securities but excluding (i) a registration statement relating to the sale of securities to employees pursuant to a

stock option, stock purchase, or similar plan; (ii) with respect to any corporate reorganization or transaction under Rule 145 of the Securities Act; (iii) a registration on any form that does not include substantially the same information as would be required to be included in a registration statement covering the sale of the registrable securities; or (iv) a registration in which the only common stock being registered is common stock issuable upon conversion of debt securities that are also being registered. The underwriters of the offering will have the right to limit the number of shares to be included in such registration.

Expenses of Registration

We will pay all registration expenses, other than underwriting discounts and commissions, related to any demand or piggyback registration. The Investors' Rights Agreement contains customary cross-indemnification provisions, pursuant to which we are obligated to indemnify the selling stockholders, in the event of misstatements or omissions in the registration statement attributable to us except in the event of fraud, and they are obligated to indemnify us for misstatements or omissions attributable to them.

Expiration of Registration Rights

The registration rights will terminate upon the earliest to occur of the closing of certain liquidation events, such time when all of the holder's registrable securities may be sold without limitation (and without the requirement for us to be in compliance with the current public information requirement) under Rule 144 of the Securities Act and the fifth anniversary of the closing date of this offering.

Anti-Takeover Effects of Delaware Law, Our Amended and Restated Certificate of Incorporation and Our Amended and Restated By-Laws

Our sixth amended and restated certificate of incorporation and amended and restated by-laws that will take effect in connection with the completion of this offering will include a number of provisions that may have the effect of encouraging persons considering unsolicited tender offers or other unilateral takeover proposals to negotiate with our board of directors rather than pursue non-negotiated takeover attempts. These provisions include the items described below.

Board Composition and Filling Vacancies

In accordance with our sixth amended and restated certificate of incorporation, our board of directors will be divided into three classes serving three-year terms, with one class being elected each year. Our sixth amended and restated certificate of incorporation will also provide that directors may be removed only for cause and then only by the affirmative vote of the holders of majority of the shares then entitled to vote at an election of directors. Furthermore, any vacancy on our board of directors, however occurring, including a vacancy resulting from an increase in the size of our board of directors, will only be able to be filled by the affirmative vote of a majority of our directors then in office, even if less than a quorum.

No Written Consent of Stockholders

Our sixth amended and restated certificate of incorporation will provide that all stockholder actions are required to be taken by a vote of the stockholders at an annual or special meeting, and that stockholders may not take any action by written consent in lieu of a meeting.

Meetings of Stockholders

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

Advance Notice Requirements

Our amended and restated by-laws will establish advance notice procedures with regard to stockholder proposals relating to the nomination of candidates for election as directors or new business to be brought before meetings of our stockholders. These procedures will provide that notice of stockholder proposals must be timely given in writing to our corporate secretary prior to the meeting at which the action is to be taken. Generally, to be timely, notice must be received at our principal executive offices not less than 90 days or more than 120 days prior to the first anniversary date of the annual meeting for the preceding year. The notice must contain certain information specified in our amended and restated by-laws. These provisions may have the effect of precluding the conduct of certain business at a meeting if the proper procedures are not followed. These provisions may also discourage or deter a potential acquirer from conducting a solicitation of proxies to elect the acquirer's own slate of directors or otherwise attempting to obtain control of our company.

Amendment to By-Laws and Certificate of Incorporation

As required by the Delaware General Corporation Law, any amendment of our sixth amended and restated certificate of incorporation must first be approved by a majority of our board of directors and, if required by law or our sixth amended and restated certificate of incorporation, thereafter be approved by a majority of the outstanding shares entitled to vote on the amendment, and a majority of the outstanding shares of each class entitled to vote thereon as a class, except that the amendment of the provisions relating to stockholder action, directors, limitation of liability, exclusive jurisdiction of Delaware Courts and the amendment of our amended and restated by-laws and sixth amended and restated certificate of incorporation must be approved by not less than 75% of the outstanding shares entitled to vote on the amendment, and not less than 75% of the outstanding shares of each class entitled to vote thereon as a class. Our amended and restated by-laws may be amended by the affirmative vote of a majority of the directors then in office, subject to any limitations set forth in the amended and restated by-laws; and may also be amended by the affirmative vote of at least 75% of the outstanding shares entitled to vote on the amendment, or, if the board of directors recommends that the stockholders approve the amendment, by the affirmative vote of the majority of the outstanding shares entitled to vote on the amendment, in each case voting together as a single class.

Blank Check Preferred Stock

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

Section 203 of the Delaware General Corporation Law

Upon completion of this offering, we will be subject to the provisions of Section 203 of the Delaware General Corporation Law. In general, Section 203 prohibits a publicly-held Delaware corporation from engaging in a "business combination" with an "interested stockholder" for a three-year period following the time that this stockholder becomes an interested stockholder, unless the business combination is approved in a prescribed

manner. A “business combination” includes, among other things, a merger, asset or stock sale or other transaction resulting in a financial benefit to the interested stockholder. An “interested stockholder” is a person who, together with affiliates and associates, owns, or did own within three years prior to the determination of interested stockholder status, 15% or more of the corporation’s voting stock.

Under Section 203, a business combination between a corporation and an interested stockholder is prohibited unless it satisfies one of the following conditions:

- before the stockholder became interested, the board of directors approved either the business combination or the transaction that resulted in the stockholder becoming an interested stockholder;
- upon consummation of the transaction that resulted in the stockholder becoming an interested stockholder, the interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction commenced, excluding for purposes of determining the voting stock outstanding, shares owned by persons who are directors and also officers, and employee stock plans, in some instances; or
- at or after the time the stockholder became interested, the business combination was approved by the board of directors of the corporation and authorized at an annual or special meeting of the stockholders by the affirmative vote of at least two-thirds of the outstanding voting stock that is not owned by the interested stockholder.

A Delaware corporation may “opt out” of these provisions with an express provision in its original certificate of incorporation or an express provision in its amended and restated certificate of incorporation or amended and restated by-laws resulting from a stockholders’ amendment approved by at least a majority of the outstanding voting shares. We have not opted out of these provisions. As a result, mergers or other takeover or change in control attempts of us may be discouraged or prevented.

Exclusive Jurisdiction of Certain Actions

Our amended and restated certificate of incorporation that will become effective upon the closing of this offering will provide that, unless we consent in writing to the selection of an alternative forum, the Court of Chancery of the State of Delaware (or, if the Chancery Court does not have jurisdiction, the federal district court for the District of Delaware or other state courts of the State of Delaware) will be the sole and exclusive forum for any state law claim for: (1) any derivative action or proceeding brought on our behalf; (2) any action asserting a claim of breach of a fiduciary duty or other wrongdoing by any of our directors, officers, employees or agents to us or our stockholders; (3) any action asserting a claim against us arising pursuant to any provision of the Delaware General Corporation Law or our certificate of incorporation or by-laws; (4) any action to interpret, apply, enforce or determine the validity of our certificate of incorporation or by-laws or (5) any action asserting a claim governed by the internal affairs doctrine. This provision will not apply to suits brought to enforce a duty or liability created by the Securities Act, Exchange Act or any other claim for which the U.S. federal courts have exclusive jurisdiction.

In addition, our sixth amended and restated certificate of incorporation to be effective immediately prior to the closing of this offering will provide that, unless we consent in writing to the selection of an alternative forum, to the fullest extent permitted by law, the federal district courts of the United States of America shall be the exclusive forum for the resolution of any complaint asserting a cause of action arising under the Securities Act.

Because the applicability of the exclusive forum provision is limited to the extent permitted by applicable law, we do not intend that the exclusive forum provision would apply to suits brought to enforce any duty or liability created by the Exchange Act or any other claim for which the federal courts have exclusive jurisdiction. We also acknowledge that Section 22 of the Securities Act creates concurrent jurisdiction for federal and state courts over all suits brought to enforce any duty or liability created by the Securities Act or the rules and regulations thereunder and that there is uncertainty as to whether a court would enforce an exclusive forum provision for actions arising under the Securities Act.

Nasdaq Global Market Listing

We intend to submit an application to list our common stock on The Nasdaq Global Market under the trading symbol "NEXI."

Transfer Agent and Registrar

The transfer agent and registrar for our common stock will be   . The transfer agent and registrar's address is   .

SHARES ELIGIBLE FOR FUTURE SALE

Prior to this offering, there has been no public market for our common stock, and we cannot assure investors that an active trading market for our common stock will develop or be sustained after this offering. Future sales of our common stock, including shares issued upon the exercise of outstanding options in the public market after this offering, or the perception that those sales may occur, could cause the prevailing market price for our common stock to fall or impair our ability to raise equity capital in the future. As described below, only a limited number of shares of our common stock will be available for sale in the public market for a period of several months after completion of this offering due to contractual and legal restrictions on resale described below. Future sales of our common stock in the public market either before (to the extent permitted) or after restrictions lapse, or the perception that those sales may occur, could adversely affect the prevailing market price of our common stock at such time and our ability to raise equity capital at a time and price we deem appropriate.

Sale of Restricted Shares

Upon the completion of this offering, based on the number of shares of our common stock outstanding as of December 31, 2020, and assuming (1) the conversion of our outstanding preferred stock into an aggregate of 217,154,926 shares of our common stock, including shares of preferred stock issuable upon the automatic conversion of all of our outstanding convertible promissory notes upon the listing of our common stock on the Nasdaq Global Market assuming the listing had occurred on December 31, 2020, (2) no exercise of the underwriters' option to purchase additional shares of common stock and (3) no exercise of outstanding options, we will have outstanding an aggregate of approximately   shares of common stock. Of these shares, all of the   shares of common stock to be sold in this offering, and any shares sold upon exercise of the underwriters' option to purchase additional shares will be freely tradable in the public market without restriction or further registration under the Securities Act unless the shares are held by any of our "affiliates" as such term is defined in Rule 144 of the Securities Act. All remaining shares of common stock held by existing stockholders immediately upon the completion of this offering will be "restricted securities" as such term is defined in Rule 144. These restricted securities were issued and sold by us, or will be issued and sold by us, in private transactions and are eligible for public sale only if registered under the Securities Act or if they qualify for an exemption from registration under the Securities Act, including the exemptions provided by Rule 144 or Rule 701, which rules are summarized below.

As a result of the lock-up agreements referred to below and the provisions of Rule 144 and Rule 701 under the Securities Act, the shares of our common stock (excluding the shares sold in this offering) that will be available for sale in the public market are as follows:

- beginning on the date of this prospectus, the   shares of common stock sold in this offering will be immediately available for sale in the public market;
- beginning 90 days after the date of this prospectus,   additional shares of common stock will become eligible for sale in the public market; and
- beginning 181 days after the date of this prospectus,   additional shares of common stock will become eligible for sale in the public market due to lock-up agreements between the holders of these shares and the underwriters, of which   shares will be held by affiliates and subject to the volume and other restrictions of Rule 144, as described below. However, Barclays Capital Inc. and Cantor Fitzgerald & Co., acting together, can waive the provisions of these lock-up agreements and allow these stockholders to sell their shares at any time.

Additionally, of the   shares of common stock issuable upon exercise of options outstanding as of December 31, 2020, approximately   shares will be vested and eligible for sale 180 days after the date of this prospectus; of the   shares of common stock issuable upon vesting of restricted stock units outstanding as of December 31, 2020, approximately   shares will be vested and eligible for sale 180

days after the date of this prospectus; and of the shares of common stock issuable upon exercise of warrants outstanding as of December 31, 2020, approximately shares will be vested and eligible for sale 180 days after the date of this prospectus.

Lock-Up Agreements

In connection with this offering, we, our directors, our executive officers and stockholders holding substantially all of our shares of common stock outstanding as of , 2021 (assuming conversion of all of our outstanding shares of preferred stock and all of our outstanding convertible promissory notes), and substantially all of our option holders who are not also stockholders have agreed, subject to certain exceptions, with the underwriters not to dispose of or hedge any shares of our common stock or securities convertible into or exchangeable for shares of common stock during the period from the date of the lock-up agreement continuing through the date 180 days after the date of this prospectus, except with the prior written consent of each of Barclays Capital Inc. and Cantor Fitzgerald & Co. as the representatives of the underwriters and certain other exceptions. The representatives of the underwriters have advised us that they have no current intent or arrangement to release any of the shares subject to the lock-up agreements prior to the expiration of the lock-up period. See the "Underwriting" section of this prospectus for additional information.

Following the lock-up periods set forth in the agreements described above, and assuming that the representatives of the underwriters do not release any parties from these agreements, all of the shares of our common stock that are restricted securities or are held by our affiliates as of the date of this prospectus will be eligible for sale in the public market in compliance with Rule 144 under the Securities Act.

Rule 144

In general, under Rule 144, as currently in effect, once we have been subject to the public company reporting requirements of the Exchange Act for at least 90 days, a person (or persons whose shares are required to be aggregated) who is not deemed to have been one of our "affiliates" for purposes of Rule 144 at any time during the three months preceding a sale, and who has beneficially owned restricted securities within the meaning of Rule 144 for at least six months, including the holding period of any prior owner other than one of our "affiliates," is entitled to sell those shares in the public market (subject to the lock-up agreement referred to above, if applicable) without complying with the manner of sale, volume limitations or notice provisions of Rule 144, but subject to compliance with the public information requirements of Rule 144. If such a person has beneficially owned the sales proposed to be sold for at least one year, including the holding period of any prior owner other than "affiliates," then such person is entitled to sell such shares in the public market without complying with any of the requirements of Rule 144 (subject to the lock-up agreement referred to above, if applicable). In general, under Rule 144, as currently in effect, once we have been subject to the public company reporting requirements of the Exchange Act for at least 90 days, our "affiliates," as defined in Rule 144, who have beneficially owned the shares proposed to be sold for at least six months are entitled to sell in the public market, upon expiration of any applicable lock-up agreements and within any three-month period, a number of those shares of our common stock that does not exceed the greater of:

- 1% of the number of common shares then outstanding, which will equal approximately shares of common stock immediately after this offering (calculated on the basis of the number of shares of our common stock outstanding as of , 2021, the assumptions described above and assuming no exercise of the underwriters' option to purchase additional shares and no exercise of outstanding options or warrants); or
- the average weekly trading volume of our common stock on The Nasdaq Global Market during the four calendar weeks preceding the filing of a notice on Form 144 with respect to such sale.

Such sales under Rule 144 by our "affiliates" or persons selling shares on behalf of our "affiliates" are also subject to certain manner of sale provisions, notice requirements and to the availability of current public

information about us. Notwithstanding the availability of Rule 144, the holders of substantially all of our restricted securities have entered into lock-up agreements as referenced above and their restricted securities will become eligible for sale (subject to the above limitations under Rule 144) upon the expiration of the restrictions set forth in those agreements.

Rule 701

In general, under Rule 701 as currently in effect, any of our employees, directors, officers, consultants or advisors who acquired common stock from us in connection with a written compensatory stock or option plan or other written agreement in compliance with Rule 701 under the Securities Act before the effective date of the registration statement of which this prospectus is a part (to the extent such common stock is not subject to a lock-up agreement) is entitled to rely on Rule 701 to resell such shares beginning 90 days after we become subject to the public company reporting requirements of the Exchange Act in reliance on Rule 144, but without compliance with the holding period requirements contained in Rule 144. Accordingly, subject to any applicable lock-up agreements, beginning 90 days after we become subject to the public company reporting requirements of the Exchange Act, under Rule 701 persons who are not our "affiliates," as defined in Rule 144, may resell those shares without complying with the minimum holding period or public information requirements of Rule 144, and persons who are our "affiliates" may resell those shares without compliance with Rule 144's minimum holding period requirements (subject to the terms of the lock-up agreement referred to below, if applicable).

Registration Rights

Based on the number of shares outstanding as of   , 2021, after the completion of this offering, the holders of approximately   million shares of our common stock, or their transferees, will, subject to any lock-up agreements they have entered into, be entitled to certain rights with respect to the registration of the offer and sale of those shares under the Securities Act. For a description of these registration rights, please see the "Description of Capital Stock—Registration Rights" section of this prospectus. If the offer and sale of these shares are registered, they will be freely tradable without restriction under the Securities Act.

Equity Incentive Plans

We intend to file with the SEC a registration statement on Form S-8 under the Securities Act covering the shares of common stock that we may issue upon exercise of outstanding options reserved for issuance under the 2018 Equity Incentive Plan. Such registration statement is expected to be filed and become effective as soon as practicable after the completion of this offering. Accordingly, shares registered under such registration statement will be available for sale in the open market following its effective date, subject to Rule 144 volume limitations and the lock-up agreements described above, if applicable.

CERTAIN MATERIAL U.S. FEDERAL INCOME TAX CONSEQUENCES TO NON-U.S. HOLDERS

The following is a summary of certain material U.S. federal income tax consequences of the ownership and disposition of our common stock to Non-U.S. Holders (defined below), but does not purport to be a complete analysis of all the potential tax considerations relating thereto. This summary is based upon the provisions of the Internal Revenue Code of 1986, as amended, or the Code, Treasury regulations promulgated thereunder, administrative rulings and judicial decisions, all as of the date hereof. These authorities may be changed or subject to differing interpretations, possibly with retroactive effect, so as to result in U.S. federal income tax consequences different from those set forth below. We have not sought and will not seek any ruling from the Internal Revenue Service, or the IRS, with respect to the statements made and the conclusions reached in the following summary, and there can be no assurance that the IRS or a court will agree with such statements and conclusions.

This summary also does not address the tax considerations arising under the laws of any U.S. state or local or any non-U.S. jurisdiction, the 3.8% Medicare tax on net investment income, special tax accounting rules under Section 451(b) of the Code or any alternative minimum tax consequences, or under U.S. Federal gift and estate tax laws, except to the limited extended provided below. In addition, this discussion does not address tax considerations applicable to a Non-U.S. Holder’s particular circumstances or to a Non-U.S. Holder that may be subject to special tax rules, including, without limitation:

- banks, insurance companies or other financial institutions;
- tax-exempt organizations, tax-qualified retirement plans, or government organizations;
- brokers of or dealers in securities or currencies;
- traders in securities that elect to use a mark-to-market method of accounting for their securities holdings;
- persons that own, or are deemed to constructively own, more than five percent of our capital stock (except to the extent specifically set forth below);
- certain U.S. expatriates, former citizens or former long-term residents of the United States;
- persons who hold our common stock as a position in a hedging transaction, “straddle,” “conversion transaction,” synthetic security, other integrated investment, or other risk reduction transaction;
- persons who do not hold our common stock as a capital asset within the meaning of Section 1221 of the Code (generally, for investment purposes);
- persons deemed to sell our common stock under the constructive sale provisions of the Code;
- real estate investment trusts or regulated investment companies;
- pension plans;
- pass-through entities such as partnerships, S corporations, disregarded entities for federal income tax purposes and limited liability companies (and investors therein);
- persons for whom our stock constitutes “qualified small business stock” within the meaning of Section 1202 of the Code or as “Section 1244 stock” for purposes of Section 1244 of the Code;
- integral parts or controlled entities of foreign sovereigns;
- tax-qualified retirement plans;
- “controlled foreign corporations” (including “specified foreign corporations”);
- persons that own, or have owned, actually or constructively, more than 5% of our common stock;

- passive foreign investment companies and corporations that accumulate earnings to avoid U.S. federal income tax; or
- persons that acquire our common stock as compensation for services.

In addition, if a partnership, including any entity or arrangement classified as a partnership for U.S. federal income tax purposes, holds our common stock, the tax treatment of a partner generally will depend on the status of the partner, the activities of the partnership, and certain determinations made at the partner level. Accordingly, partnerships that hold our common stock, and partners in such partnerships, should consult their tax advisors regarding the U.S. federal income tax consequences to them of the purchase, ownership, and disposition of our common stock.

You are urged to consult your tax advisor with respect to the application of the U.S. federal income tax laws to your particular situation, as well as any tax consequences of the purchase, ownership and disposition of our common stock arising under the U.S. federal estate or gift tax rules or under the laws of any U.S. state or local or any non-U.S. or other taxing jurisdiction or under any applicable tax treaty.

Definition of a Non-U.S. Holder

For purposes of this summary, a "Non-U.S. Holder" is any beneficial owner of our common stock that is not a "U.S. person," and is not a partnership, or an entity disregarded from its owner, each for U.S. federal income tax purposes. A U.S. person is any person that, for U.S. federal income tax purposes, is or is treated as any of the following: (i) an individual who is a citizen or resident of the United States; (ii) a corporation (or other entity taxable as a corporation for U.S. federal income tax purposes) created or organized under the laws of the United States, any state thereof, or the District of Columbia; (iii) an estate, the income of which is subject to U.S. federal income tax regardless of its source; or (iv) a trust that (1) is subject to the primary supervision of a U.S. court and the control of one or more U.S. persons (within the meaning of Section 7701(a)(30) of the Code), or (2) has a valid election in effect to be treated as a U.S. person for U.S. federal income tax purposes.

Distributions

As discussed under the "Dividend Policy" section of this prospectus, we do not anticipate paying any dividends on our capital stock in the foreseeable future. If we make distributions on our common stock, those payments will constitute dividends for U.S. income tax purposes to the extent paid from our current or accumulated earnings and profits, as determined under U.S. federal income tax principles. To the extent those distributions exceed both our current and our accumulated earnings and profits, they will constitute a return of capital and will first reduce a Non-U.S. Holder's basis in our common stock, but not below zero. Any excess will be treated as capital gain and will be treated as described in the "—Gain on Sale or Other Disposition of Common Stock" section of this prospectus. Any such distributions would be subject to the discussions below regarding back-up withholding and FATCA.

Subject to the discussion below on effectively connected income, any dividend paid to a Non-U.S. Holder generally will be subject to U.S. withholding tax either at a rate of 30% of the gross amount of the dividend or such lower rate as may be specified by an applicable income tax treaty. In order to receive a reduced treaty rate, a Non-U.S. Holder must provide us or our agent with an IRS Form W-8BEN (generally including a U.S. taxpayer identification number), IRS Form W-8-BEN-E or another appropriate version of IRS Form W-8 (or a successor form), which must be updated periodically, and which, in each case, must certify qualification for the reduced rate. Non-U.S. Holders should consult their tax advisors regarding their entitlement to benefits under any applicable income tax treaty.

Dividends paid to a Non-U.S. Holder that are effectively connected with the Non-U.S. Holder's conduct of a U.S. trade or business within the United States (and, if required by an applicable income tax treaty, are attributable to a permanent establishment maintained by the Non-U.S. Holder in the United States) generally are exempt from the withholding tax described above. In order to obtain this exemption, the Non-U.S. Holder must

provide the applicable withholding agent with an IRS Form W-8ECI or successor form or other applicable IRS Form W-8 certifying that the dividends are effectively connected with the Non-U.S. Holder's conduct of a trade or business within the United States. Such effectively connected dividends, although not subject to withholding tax, are taxed at the same rates applicable to U.S. persons, net of certain deductions and credits, subject to an applicable income tax treaty providing otherwise. In addition, if you are Non-U.S. Holder that is a corporation, dividends you receive that are effectively connected with your conduct of a U.S. trade or business (and, if an income tax treaty applies, are attributable to a permanent establishment maintained by you in the United States) may also be subject to a branch profits tax at a rate of 30% (or such lower rate as may be specified by an applicable income tax treaty) on such effectively connected dividends, as adjusted for certain items.

If you are eligible for a reduced rate of withholding tax pursuant to a tax treaty, you may be able to obtain a refund of any excess amounts currently withheld if you timely file an appropriate claim for refund with the IRS.

Gain on Sale or Other Disposition of Common Stock

Subject to the discussion below regarding backup withholding and FATCA, a Non-U.S. Holder generally will not be required to pay U.S. federal income tax on any gain realized upon the sale or other disposition of our common stock unless:

- the gain is effectively connected with the Non-U.S. Holder's conduct of a trade or business within the United States (and, if an income tax treaty applies, the gain is attributable to a permanent establishment maintained by the Non-U.S. Holder in the United States), in which case the Non-U.S. Holder will be required to pay tax on the net gain derived from the sale under same U.S. federal income tax rates applicable to U.S. persons, and for a Non-U.S. Holder that is a corporation, such Non-U.S. Holder may be subject to the branch profits tax at a 30% rate (or such lower rate as may be specified by an applicable income tax treaty) on such effectively connected dividends, as adjusted for certain items;
- the Non-U.S. Holder is an individual who is present in the United States for a period or periods aggregating 183 days or more during the calendar year in which the sale or disposition occurs and certain other conditions are met, in which case the Non-U.S. Holder will be required to pay a flat 30% tax on the gain derived from the sale, which tax may be offset by U.S. source capital losses (even though the Non-U.S. Holder is not considered a resident of the United States) (subject to applicable income tax or other treaties) provided that the Non-U.S. holder has timely filed U.S. federal income tax returns with respect to such losses; or
- our common stock constitutes a U.S. real property interest by reason of our status as a U.S. real property holding corporation, or USRPHC, for U.S. federal income tax purposes at any time within the shorter of the five-year period preceding the disposition or the Non-U.S. Holder's holding period for our common stock. Generally, a corporation is a USRPHC only if the fair market value of its U.S. real property interests equals or exceeds 50% of the sum of the fair market value of its worldwide real property interests plus its other assets used or held for use in a trade or business. We believe we are not currently and do not anticipate becoming a USRPHC. However, because the determination of whether we are a USRPHC depends on the fair market value of our U.S. real property interests relative to the fair market value of our other business assets, there can be no assurance that we will not become a USRPHC in the future. Even if we become a USRPHC, however, gain arising from the sale or other taxable disposition by a Non-U.S. Holder of our common stock will not be subject to U.S. federal income tax as long as our common stock is regularly traded on an established securities market, as defined by applicable Treasury Regulations, and such Non-U.S. Holder does not, actually or constructively, hold more than five percent of our common stock at any time during the applicable period that is specified in the Code.

Backup Withholding and Information Reporting

Generally, we must file information returns annually to the IRS in connection with any of our common stock paid to a Non-U.S. Holder, regardless of whether any tax was actually withheld. A similar report will be sent to the Non-U.S. Holder. Pursuant to applicable income tax treaties or other agreements, the IRS may make these reports available to tax authorities in the Non-U.S. Holder's country of residence.

Payments of dividends or of proceeds on the disposition of stock made to a Non-U.S. Holder may be subject to additional information reporting and backup withholding at a current rate of 24% unless such Non-U.S. Holder establishes an exemption, for example by properly certifying its non-U.S. status on an IRS Form W-8BEN, IRS Form W-8BEN-E, IRS Form W-8ECI, or another appropriate version of IRS Form W-8 (or a successor form). Notwithstanding the foregoing, backup withholding and information reporting may apply if either we or our paying agent has actual knowledge, or reason to know, that a holder is a U.S. person.

Backup withholding is not an additional tax; rather, the U.S. income tax liability of persons subject to backup withholding will be reduced by the amount of tax withheld. If withholding results in an overpayment of taxes, a refund or credit may generally be obtained from the IRS, provided that the required information is furnished to the IRS in a timely manner.

Foreign Account Tax Compliance Act

The Foreign Account Tax Compliance Act, or FATCA, imposes withholding tax on certain types of payments made to foreign financial institutions and certain other non-U.S. entities. FATCA imposes a 30% withholding tax on certain payments made to a "foreign financial institution" or to certain "non-financial foreign entities" (each as defined in the Code), unless (i) the foreign financial institution undertakes certain diligence and reporting obligations, (ii) the non-financial foreign entity either certifies it does not have any "substantial United States owners" (as defined in the Code) or furnishes identifying information regarding each substantial United States owner, or (iii) the foreign financial institution or non-financial foreign entity otherwise qualifies for an exemption from these rules. If the payee is a foreign financial institution and is subject to the diligence and reporting requirements in (i) above, it must enter into an agreement with the U.S. Treasury requiring, among other things, that it undertake to identify accounts held by "specified United States persons" or "United States-owned foreign entities" (each as defined in the Code), annually report certain information about such accounts, and withhold 30% on payments to account holders whose actions prevent it from complying with these reporting and other requirements. If the country in which a payee is resident has entered into an "intergovernmental agreement" with the United States regarding FATCA, that agreement may permit the payee to report to that country rather than to the U.S. Department of the Treasury. FATCA currently applies to dividends paid on our common stock. On December 13, 2018, the U.S. Treasury Department released proposed regulations under FATCA providing for the elimination of the federal withholding tax of 30% applicable to gross proceeds of a sale or other disposition of our common stock. Under these proposed Treasury Regulations (which may be relied upon by taxpayers prior to finalization), FATCA will not apply to gross proceeds from sales or other dispositions of our common stock.

Prospective investors should consult their own tax advisors regarding the possible impact of these rules on their investment in our common stock, and the possible impact of these rules on the entities through which they hold our common stock, including, without limitation, the process and deadlines for meeting the applicable requirements to prevent the imposition of this 30% withholding tax under FATCA.

Federal Estate Tax

Common stock owned (or treated as owned) by an individual who is not a citizen or a resident of the United States (as defined for U.S. federal estate tax purposes) at the time of death will be included in the individual's gross estate for U.S. federal estate tax purposes unless an applicable estate or other tax treaty provides otherwise, and therefore may be subject to U.S. federal estate tax.

THE PRECEDING DISCUSSION OF U.S. FEDERAL TAX CONSIDERATIONS IS FOR GENERAL INFORMATION ONLY. IT IS NOT TAX ADVICE. EACH PROSPECTIVE INVESTOR SHOULD CONSULT ITS TAX ADVISOR REGARDING THE PARTICULAR U.S. FEDERAL, STATE AND LOCAL AND NON-U.S. TAX CONSEQUENCES OF PURCHASING, HOLDING AND DISPOSING OF OUR COMMON STOCK, INCLUDING THE CONSEQUENCES OF ANY PROPOSED CHANGE IN APPLICABLE LAWS.

UNDERWRITING

Barclays Capital Inc., Cantor Fitzgerald & Co. and Raymond James & Associates, Inc. are acting as the representatives of the underwriters and book-running managers of this offering. Under the terms of an underwriting agreement, which will be filed as an exhibit to the registration statement of which this prospectus is a part, with respect to the shares being offered, each of the underwriters named below has severally agreed to purchase from us the respective number of shares of common stock shown opposite its name below:

Underwriters	Number of Shares
Barclays Capital Inc.	
Cantor Fitzgerald & Co.	
Raymond James & Associates, Inc.	
Allen & Company LLC	
Total	

The underwriting agreement provides that the underwriters' obligation to purchase shares of common stock depends on the satisfaction of the certain conditions contained in the underwriting agreement including:

- the obligation to purchase all of the shares of common stock offered hereby (other than those shares of common stock covered by their option to purchase additional shares as described below), if any of the shares are purchased;
- the representations and warranties made by us to the underwriters are true;
- there is no material change in our business or the financial markets; and
- we deliver customary closing documents to the underwriters.

Commissions and Expenses

The following table summarizes the underwriting discounts and commissions we will pay to the underwriters. These amounts are shown assuming both no exercise and full exercise of the underwriters' option to purchase additional shares. The underwriting fee is the difference between the initial price to the public and the amount the underwriters pay to us for the shares.

	No Exercise	Full Exercise
Per Share	$	$
Total	$	$

The representatives have advised us that the underwriters propose to offer the shares of common stock directly to the public at the offering price on the cover of this prospectus and to selected dealers, which may include the underwriters, at such offering price less a selling concession not in excess of $ per share. If all the shares are not sold at the initial offering price following the initial offering, the representatives may change the offering price and other selling terms.

The expenses of the offering that are payable by us are estimated to be approximately $ (excluding underwriting discounts and commissions). We have agreed to reimburse the underwriters for certain of their expenses incurred in connection with, among others, the review and clearance by the Financial Industry Regulatory Authority, Inc., or FINRA, in an amount of up to $, as set forth in the underwriting agreement.

Option to Purchase Additional Shares

We have granted the underwriters an option exercisable for 30 days after the date of this prospectus to purchase, from time to time, in whole or in part, up to an aggregate of shares from us at the offering

price less underwriting discounts and commissions. To the extent that this option is exercised, each underwriter will be obligated, subject to certain conditions, to purchase its pro rata portion of these additional shares based on the underwriter's percentage underwriting commitment in this offering as indicated in the above table.

Lock-Up Agreements

We and all of our directors and executive officers, and holders of substantially all of our outstanding stock have agreed that, for a period of 180 days after the date of this prospectus subject to certain limited exceptions as described below, we and they will not directly or indirectly, without the prior written consent of each of Barclays Capital Inc. and Cantor Fitzgerald & Co., (1) offer for sale, sell, pledge, or otherwise dispose of (or enter into any transaction or device that is designed to, or could be expected to, result in the disposition by any person at any time in the future of) any shares of common stock (including, without limitation, shares of common stock that may be deemed to be beneficially owned by us or them in accordance with the rules and regulations of the SEC and shares of common stock that may be issued upon exercise of any options or warrants) or securities convertible into or exercisable or exchangeable for common stock (other than the stock and shares issued pursuant to employee benefit plans, qualified stock option plans, or other employee compensation plans existing on the date of this prospectus or pursuant to currently outstanding options, warrants or rights not issued under one of those plans), or sell or grant options, rights or warrants with respect to any shares of common stock or securities convertible into or exchangeable for common stock (other than the grant of options pursuant to option plans existing on the date of this prospectus), (2) enter into any swap or other derivatives transaction that transfers to another, in whole or in part, any of the economic benefits or risks of ownership of shares of common stock, whether any such transaction described in clause (1) or (2) above is to be settled by delivery of common stock or other securities, in cash or otherwise, (3) make any demand for or exercise any right or confidentially submit or file or cause a registration statement to be filed or confidentially submitted, including any amendments thereto, with respect to the registration of any shares of common stock or securities convertible, exercisable or exchangeable into common stock or any of our other securities, or (4) publicly disclose the intention to do any of the foregoing.

The restrictions above do not apply to: (a) transactions relating to shares of common stock or other securities acquired in the open market after the completion of this offering, (b) bona fide gifts, sales or other dispositions of shares of any class of our capital stock, in each case that are made exclusively between and among a stockholder or members of a stockholder's family, or affiliates of a stockholder, including its partners (if a partnership) or members (if a limited liability company); provided that it will be a condition to any transfer described in this clause (b) that (i) the transferee/donee agrees to be bound by the terms of the lock-up agreement to the same extent as if the transferee/donee were a party thereto, (ii) each party (donor, donee, transferor or transferee) will not be required by law to make, and will agree to not voluntarily make, any filing or public announcement of the transfer or disposition prior to the expiration of the 180-day period referred to above, and (iii) the stockholder notifies Barclays Capital Inc. and Cantor Fitzgerald & Co. at least two business days prior to the proposed transfer or disposition, (c) the exercise of warrants or the exercise of stock options granted pursuant to our stock option/incentive plans or otherwise outstanding on the date of this prospectus; provided, that the restrictions will apply to shares of common stock issued upon such exercise or conversion, (d) the establishment of any contract, instruction or plan that satisfies all of the requirements of Rule 10b5-1, which we refer to as a Rule 10b5-1 Plan, under the Exchange Act; provided, however, that no sales of common stock or securities convertible into, or exchangeable or exercisable for, common stock, will be made pursuant to a Rule 10b5-1 Plan prior to the expiration of the lock-up period (as the same may be extended); provided further, that we are not required to report the establishment of such Rule 10b5-1 Plan in any public report or filing with the SEC under the Exchange Act during the lock-up period and do not otherwise voluntarily effect any such public filing or report regarding such Rule 10b5-1 Plan, (e) transfers of shares of common stock by will or intestate succession upon the death of the stockholder, (f) transfers pursuant to a court order or settlement agreement related to the distribution of assets in connection with the dissolution of a marriage or civil union, (g) transfers of shares of common stock to an immediate family member or to any trust for the direct or indirect benefit of the stockholder or the immediate family of the stockholder, or if the stockholder is a trust, to any beneficiary (including such

beneficiary's estate) of the stockholder, (h) receipt of shares of common stock in connection with the conversion of our outstanding preferred stock into shares of common stock or the exercise or exchange of any other securities, into our common stock, including the conversion of our convertible promissory notes into shares of common stock, provided that any such shares of common stock received upon such conversion, exercise or exchange shall remain subject to the terms of the lock-up agreement, (i) transfers of shares of common stock pursuant to a bona fide third-party tender offer, merger, consolidation or other similar transaction made to all holders of our capital stock involving a change of control after the completion of this offering; provided, that in the event that the tender offer, merger, consolidation or other such transaction is not completed, the shares of common stock owned by such stockholders shall remain subject to the terms of the lock-up agreement, (j) transfers of shares of common stock to us upon a vesting event of our securities or upon the exercise of stock options or warrants to purchase our securities on a "cashless" or "net exercise" basis to the extent permitted by the instruments representing such stock options or warrants so long as such "cashless exercise" or "net exercise" is effected solely by the surrender of outstanding stock options or warrants to us and our cancellation of all or a portion thereof to pay the exercise price and/or withholding tax obligations, excluding all methods of exercise that would involve a sale of any shares relating to stock options or warrants, whether to cover the applicable exercise price, withholding tax obligations or otherwise; provided that the shares received upon exercise or settlement of the option are subject to the terms of the lock-up agreement, no public disclosure or filing under the Exchange Act shall be voluntarily made during the 180-day period and any required filing under the Exchange Act made during the 180-day period shall clearly indicate in the footnotes thereto that the filing relates to the circumstances described in this clause (j), including that the securities remain subject to the terms of the lock-up agreement, (k) transfer of shares of common stock or securities convertible into, or exercisable or exchangeable for, shares of common stock to us in connection with the termination of a stockholder's employment with us, provided, that no public disclosure or filing under the Exchange Act shall be voluntarily made during the 180-day period and any required filing under the Exchange Act made during the 180-day period shall clearly indicate in the footnotes thereto that the filing relates to the circumstances described in this clause (k), and (l) transfers that are approved by the prior written consent of Barclays Capital Inc. and Cantor Fitzgerald & Co.

Barclays Capital Inc. and Cantor Fitzgerald & Co., in their sole discretion, may release the common stock and other securities subject to the lock-up agreements described above in whole or in part at any time. When determining whether or not to release common stock and other securities from lock-up agreements, Barclays Capital Inc. and Cantor Fitzgerald & Co. will consider, among other factors, the holder's reasons for requesting the release, the number of shares of common stock and other securities for which the release is being requested and market conditions at the time. At least three business days before the effectiveness of any release or waiver of any of the restrictions described above with respect to an officer or director of the Company, Barclays Capital Inc. and Cantor Fitzgerald & Co. will notify us of the impending release or waiver and we have agreed to announce the impending release or waiver in accordance with any method permitted by applicable law or regulation (which may include a press release), except where the release or waiver is effected solely to permit a transfer of common stock that is not for consideration and where the transferee has agreed in writing to be bound by the same terms as the lock-up agreements described above to the extent and for the duration that such terms remain in effect at the time of transfer.

Offering Price Determination

Prior to this offering, there has been no public market for our common stock. The initial offering price will be negotiated between the representatives and us. In determining the initial offering price of our common stock, the representatives will consider:

- the history and prospects for the industry in which we compete;
- our financial information;
- the ability of our management and our business potential and earning prospects;
- the prevailing securities markets at the time of this offering; and

- the recent market prices of, and the demand for, publicly traded shares of generally comparable companies.

Indemnification

We have agreed to indemnify the underwriters against certain liabilities, including liabilities under the Securities Act, and to contribute to payments that the underwriters may be required to make for these liabilities.

Stabilization, Short Positions and Penalty Bids

The representatives may engage in stabilizing transactions, short sales and purchases to cover positions created by short sales, and penalty bids or purchases for the purpose of pegging, fixing or maintaining the price of the common stock, in accordance with Regulation M under the Exchange Act:

- Stabilizing transactions permit bids to purchase the underlying security so long as the stabilizing bids do not exceed a specified maximum.
- A short position involves a sale by the underwriters of shares in excess of the number of shares the underwriters are obligated to purchase in the offering, which creates the syndicate short position. This short position may be either a covered short position or a naked short position. In a covered short position, the number of shares involved in the sales made by the underwriters in excess of the number of shares they are obligated to purchase is not greater than the number of shares that they may purchase by exercising their option to purchase additional shares. In a naked short position, the number of shares involved is greater than the number of shares in their option to purchase additional shares. The underwriters may close out any short position by either exercising their option to purchase additional shares and/or purchasing shares in the open market. In determining the source of shares to close out the short position, the underwriters will consider, among other things, the price of shares available for purchase in the open market as compared to the price at which they may purchase shares through their option to purchase additional shares. A naked short position is more likely to be created if the underwriters are concerned that there could be downward pressure on the price of the shares in the open market after pricing that could adversely affect investors who purchase in the offering.
- Syndicate covering transactions involve purchases of the common stock in the open market after the distribution has been completed in order to cover syndicate short positions.
- Penalty bids permit the representatives to reclaim a selling concession from a syndicate member when the common stock originally sold by the syndicate member is purchased in a stabilizing or syndicate covering transaction to cover syndicate short positions.

These stabilizing transactions, syndicate covering transactions and penalty bids may have the effect of raising or maintaining the market price of our common stock or preventing or retarding a decline in the market price of the common stock. As a result, the price of the common stock may be higher than the price that might otherwise exist in the open market. These transactions may be effected on the Nasdaq Global Market or otherwise and, if commenced, may be discontinued at any time.

Neither we nor any of the underwriters make any representation or prediction as to the direction or magnitude of any effect that the transactions described above may have on the price of the common stock. In addition, neither we nor any of the underwriters make any representation that the representatives will engage in these stabilizing transactions or that any transaction, once commenced, will not be discontinued without notice.

Electronic Distribution

A prospectus in electronic format may be made available on the Internet sites or through other online services maintained by one or more of the underwriters and/or selling group members participating in this

offering, or by their affiliates. In those cases, prospective investors may view offering terms online and, depending upon the particular underwriter or selling group member, prospective investors may be allowed to place orders online. The underwriters may agree with us to allocate a specific number of shares for sale to online brokerage account holders. Any such allocation for online distributions will be made by the representatives on the same basis as other allocations.

Other than the prospectus in electronic format, the information on any underwriter's or selling group member's web site and any information contained in any other web site maintained by an underwriter or selling group member is not part of this prospectus or the registration statement of which this prospectus is a part, has not been approved and/or endorsed by us or any underwriter or selling group member in its capacity as underwriter or selling group member and should not be relied upon by investors.

Listing on the Nasdaq Global Market

We intend to apply to list our common stock on the Nasdaq Global Market under the symbol "NEXI."

Stamp Taxes

If you purchase shares of common stock offered in this prospectus, you may be required to pay stamp taxes and other charges under the laws and practices of the country of purchase, in addition to the offering price listed on the cover page of this prospectus.

Other Relationships

The underwriters and certain of their affiliates are full service financial institutions engaged in various activities, which may include securities trading, commercial and investment banking, financial advisory, investment management, investment research, principal investment, hedging, financing and brokerage activities. The underwriters and certain of their affiliates have, from time to time, performed, and may in the future perform, various commercial and investment banking and financial advisory services for the issuer and its affiliates, for which they received or may in the future receive customary fees and expenses.

In the ordinary course of their various business activities, the underwriters and certain of their affiliates may make or hold a broad array of investments and actively trade debt and equity securities (or related derivative securities) and financial instruments (including bank loans) for their own account and for the accounts of their customers, and such investment and securities activities may involve securities and/or instruments of the Company or our affiliates. If the underwriters or their affiliates have a lending relationship with us, certain of those underwriters or their affiliates routinely hedge, and certain other of those underwriters or their affiliates may hedge, their credit exposure to us consistent with their customary risk management policies. Typically, the underwriters and their affiliates would hedge such exposure by entering into transactions which consist of either the purchase of credit default swaps or the creation of short positions in our securities or the securities of our affiliates, including potentially the shares of common stock offered hereby. Any such credit default swaps or short positions could adversely affect future trading prices of the shares of common stock offered hereby. The underwriters and certain of their affiliates may also communicate independent investment recommendations, market color or trading ideas and/or publish or express independent research views in respect of such securities or instruments and may at any time hold, or recommend to clients that they acquire, long and/or short positions in such securities and instruments.

Allen & Company LLC, an underwriter of this offering, beneficially owns an aggregate of approximately 4.0% of our common stock, on an as-converted basis and fully diluted basis, as of December 31, 2020. Such shares were acquired during the sale of our Series A Preferred Stock in January 2018, the sale of our Series A-2 Preferred Stock in January 2019 and the sale of our Series A-3 Preferred Stock in December 2019.

Selling Restrictions

General

Other than in the United States, no action has been taken by us or the underwriters that would permit a public offering of the securities offered by this prospectus in any jurisdiction where action for that purpose is required. The securities offered by this prospectus may not be offered or sold, directly or indirectly, nor may this prospectus or any other offering material or advertisements in connection with the offer and sale of any such securities be distributed or published in any jurisdiction, except under circumstances that will result in compliance with the applicable rules and regulations of that jurisdiction. Persons into whose possession this prospectus comes are advised to inform themselves about and to observe any restrictions relating to the offering and the distribution of this prospectus. This prospectus does not constitute an offer to sell or a solicitation of an offer to buy any securities offered by this prospectus in any jurisdiction in which such an offer or a solicitation is unlawful.

European Economic Area

In relation to each Member State of the European Economic Area (each a Relevant State), no shares have been offered or will be offered pursuant to the offering to the public in that Relevant State prior to the publication of a prospectus in relation to the shares which has been approved by the competent authority in that Relevant State or, where appropriate, approved in another Relevant State and notified to the competent authority in that Relevant State, all in accordance with the Prospectus Regulation, except that the shares may be offered to the public in that Relevant State at any time:

(a) to any legal entity which is a qualified investor as defined under Article 2 of the Prospectus Regulation;

(b) to fewer than 150 natural or legal persons (other than qualified investors as defined under Article 2 of the Prospectus Regulation), subject to obtaining the prior consent of representatives for any such offer; or

(c) in any other circumstances falling within Article 1(4) of the Prospectus Regulation,

provided that no such offer of the shares shall require us or any of the representatives to publish a prospectus pursuant to Article 3 of the Prospectus Regulation or supplement a prospectus pursuant to Article 23 of the Prospectus Regulation.

For the purposes of this provision, the expression an “offer to the public” in relation to the shares in any Relevant State means the communication in any form and by any means of sufficient information on the terms of the offer and any shares to be offered so as to enable an investor to decide to purchase or subscribe for any shares, and the expression “Prospectus Regulation” means Regulation (EU) 2017/1129.

United Kingdom

No shares have been offered or will be offered pursuant to the offering to the public in the United Kingdom prior to the publication of a prospectus in relation to the Shares which has been approved by the Financial Conduct Authority, except that the shares may be offered to the public in the United Kingdom at any time:

(a) to any legal entity which is a qualified investor as defined under Article 2 of the UK Prospectus Regulation;

(b) to fewer than 150 natural or legal persons (other than qualified investors as defined under Article 2 of the UK Prospectus Regulation), subject to obtaining the prior consent of the representatives for any such offer; or

(c) in any other circumstances falling within Section 86 of the FSMA.

provided that no such offer of the shares shall require the Issuer or any Manager to publish a prospectus pursuant to Section 85 of the FSMA or supplement a prospectus pursuant to Article 23 of the UK Prospectus Regulation.For the purposes of this provision, the expression an “offer to the public” in relation to the shares in

the United Kingdom means the communication in any form and by any means of sufficient information on the terms of the offer and any shares to be offered so as to enable an investor to decide to purchase or subscribe for any shares and the expression "UK Prospectus Regulation" means Regulation (EU) 2017/1129 as it forms part of domestic law by virtue of the European Union (Withdrawal) Act 2018.

Canada

The shares may be sold only to purchasers purchasing, or deemed to be purchasing, as principal that are accredited investors, as defined in National Instrument 45-106 Prospectus Exemptions or subsection 73.3(1) of the Securities Act (Ontario), and are permitted clients, as defined in National Instrument 31-103 Registration Requirements, Exemptions and Ongoing Registrant Obligations. Any resale of the shares must be made in accordance with an exemption from, or in a transaction not subject to, the prospectus requirements of applicable securities laws.

Securities legislation in certain provinces or territories of Canada may provide a purchaser with remedies for rescission or damages if this prospectus (including any amendment thereto) contains a misrepresentation, provided that the remedies for rescission or damages are exercised by the purchaser within the time limit prescribed by the securities legislation of the purchaser's province or territory. The purchaser should refer to any applicable provisions of the securities legislation of the purchaser's province or territory for particulars of these rights or consult with a legal advisor.

Pursuant to section 3A.3 of National Instrument 33-105 Underwriting Conflicts (NI 33-105), the underwriters are not required to comply with the disclosure requirements of NI 33-105 regarding underwriter conflicts of interest in connection with this offering.

Israel

This document does not constitute a prospectus under the Israeli Securities Law, 5728-1968, or the Securities Law, and has not been filed with or approved by the Israel Securities Authority. In the State of Israel, this document is being distributed only to, and is directed only at, and any offer of the securities offered hereby is directed only at, (i) a limited number of persons in accordance with the Securities Law and (ii) investors listed in the first addendum, or the Addendum, to the Israeli Securities Law, consisting primarily of joint investment in trust funds, provident funds, insurance companies, banks, portfolio managers, investment advisors, members of the Tel Aviv Stock Exchange, underwriters, venture capital funds, entities with equity in excess of NIS 50 million and "qualified individuals," each as defined in the Addendum (as it may be amended from time to time), collectively referred to as qualified investors (in each case purchasing for their own account or, where permitted under the Addendum, for the accounts of their clients who are investors listed in the Addendum). Qualified investors will be required to submit written confirmation that they fall within the scope of the Addendum, are aware of the meaning of same and agree to it.

LEGAL MATTERS

The validity of the shares of common stock offered by this prospectus will be passed upon for us by Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C., Boston, Massachusetts. Cooley LLP, New York, New York, is acting as counsel to the underwriters in connection with this offering.

EXPERTS

The financial statements of NexImmune, Inc. at December 31, 2019, and for the year then ended, appearing in this prospectus and the registration statement of which this prospectus is a part have been audited by Ernst & Young LLP, independent registered public accounting firm, as set forth in their report thereon (which contains an explanatory paragraph describing conditions that raise substantial doubt about our ability to continue as a going concern as described in Note 2 to the financial statements) appearing elsewhere herein, and are included in reliance upon such report given on the authority of such firm as experts in accounting and auditing.

The balance sheet of Neximmune, Inc. as of December 31, 2018, and the related statements of operations, comprehensive loss, changes in redeemable convertible preferred stock and stockholders' deficit, and cash flows for the year ended December 31, 2018 have been audited by EisnerAmper LLP, independent registered public accounting firm, as stated in their report which is incorporated herein, which report includes an explanatory paragraph about the existence of substantial doubt concerning our ability to continue as a going concern. Such financial statements have been incorporated herein in reliance on the report of such firm given upon their authority as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

We have filed with the SEC a registration statement on Form S-1, including exhibits and schedules, under the Securities Act that registers the shares of our common stock to be sold in this offering. This prospectus does not contain all the information contained in the registration statement and the exhibits and schedules filed as part of the registration statement. For further information with respect to us and our common stock, we refer you to the registration statement and the exhibits and schedules filed as part of the registration statement. Statements contained in this prospectus as to the contents of any contract or other document are not necessarily complete. If a contract or document has been filed as an exhibit to the registration statement, we refer you to the copies of the contract or document that has been filed. Each statement in this prospectus relating to a contract or document filed as an exhibit is qualified in all respects by the filed exhibit.

Upon the completion of this offering, we will file annual, quarterly and current reports, proxy statements and other information with the SEC under the Exchange Act. You can read our SEC filings, including the registration statement, at the SEC's website at www.sec.gov.

Our website address is *www.neximmune.com*. The information contained in, and that can be accessed through, our website is not incorporated into and shall not be deemed to be part of this prospectus. We have included our website address in this prospectus solely as an inactive textual reference.

INDEX TO FINANCIAL STATEMENTS

	Page
Years ended December 31, 2019 and 2018	
Report of Independent Registered Public Accounting Firm	F-2
Report of Independent Registered Public Accounting Firm	F-3
Balance Sheets as of December 31, 2019 and 2018	F-4
Statements of Operations for the Years Ended December 31, 2019 and 2018	F-5
Statements of Comprehensive Loss for the Years Ended December 31, 2019 and 2018	F-5
Statements of Changes in Redeemable Convertible Preferred Stock and Stockholders' Deficit for the Years Ended December 31, 2019 and 2018	F-6
Statements of Cash Flows for the Years Ended December 31, 2019 and 2018	F-7
Notes to Financial Statements	F-8
Nine Months Ended September 30, 2020 and 2019 (unaudited)	
Condensed Balance Sheets as of September 30, 2020 and December 31, 2019	F-29
Condensed Statements of Operations for the Nine Months Ended September 30, 2020 and 2019	F-30
Condensed Statements of Comprehensive Loss for the Nine Months Ended September 30, 2020 and 2019	F-31
Condensed Statements of Changes in Redeemable Convertible Preferred Stock and Stockholders' Deficit for the Nine Months Ended September 30, 2020 and 2019	F-32
Condensed Statements of Cash Flows for the Nine Months Ended September 30, 2020 and 2019	F-33
Notes to Condensed Financial Statements	F-34

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Shareholders and the Board of Directors of NexImmune, Inc.

Opinion on the Financial Statements

We have audited the accompanying balance sheet of NexImmune, Inc. (the Company) as of December 31, 2019, the related statements of operations, comprehensive loss, changes in redeemable convertible preferred stock and stockholders' deficit and cash flows for the year then ended, 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, 2019, and the results of its operations and its cash flows for the year then ended in conformity with U.S. generally accepted accounting principles.

The Company's Ability to Continue as a Going Concern

The accompanying financial statements have been prepared assuming that the Company will continue as a going concern. As discussed in Note 2 to the financial statements, the Company has generated recurring losses from operations, has used significant cash in operations, and has stated that substantial doubt exists about the Company's ability to continue as a going concern. Management's evaluation of the events and conditions and management's plans regarding these matters are also described in Note 2. The financial statements do not include any adjustments that might result from the outcome of this uncertainty.

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 audit. 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 audit in accordance with the standards of the PCAOB and in accordance with auditing standards generally accepted in the United States of America. 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. Our audit included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audit 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 audit provides a reasonable basis for our opinion.

/s/ Ernst & Young LLP

We have served as the Company's auditor since 2020.

Tysons, Virginia
July 13, 2020

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Stockholders of NexImmune, Inc.

Opinion on the Financial Statements

We have audited the accompanying balance sheet of NexImmune, Inc. (the "Company") as of December 31, 2018, and the related statements of operations, comprehensive loss, changes in redeemable convertible preferred stock and stockholder's deficit, and cash flows for the year then ended, 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 as of December 31, 2018, and the results of its operations and its cash flows for the year then ended, in conformity with accounting principles generally accepted in the United States of America.

Going Concern

The accompanying financial statements have been prepared assuming that the Company will continue as a going concern. As discussed in Note 2 to the financial statements, the Company has an accumulated deficit and has experienced continuing operating losses that raise substantial doubt about its ability to continue as a going concern. Management's plans in regard to these matters are also described in Note 2. The financial statements do not include any adjustments that might result from the outcome of this uncertainty.

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 audit. 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 audit in accordance with the standards of the PCAOB and in accordance with auditing standards generally accepted in the United States of America. 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. Our audit included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audit also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statement. We believe that our audit provides a reasonable basis for our opinion.

/s/ EisnerAmper LLP

We served as the Company's auditor from 2017 to 2019.

EISNERAMPER LLP
Philadelphia, Pennsylvania

November 5, 2019, except with respect to the 3rd, 33rd, 34th and 35th paragraphs of Note 3, and the 2nd paragraph of Note 13, as to which the date is July 13, 2020

Table of Contents

BALANCE SHEETS

	December 31, 2019	December 31, 2018
ASSETS		
Current assets:		
Cash and cash equivalents	$ 9,128,987	$ 425,995
Available-for-sale marketable securities	1,006,878	11,634,207
Restricted cash	67,500	-
Prepaid expenses and other current assets	833,187	273,465
Total current assets	11,036,552	12,333,667
Property and equipment, net	2,577,930	1,695,071
Related party advances	80,224	90,129
Other non-current assets	23,372	23,460
Total assets	$ 13,718,078	$ 14,142,327
LIABILITIES, REDEEMABLE CONVERTIBLE PREFERRED STOCK AND STOCKHOLDERS' DEFICIT		
Current liabilities:		
Accounts payable	$ 1,171,654	$ 860,702
Accrued expenses	1,853,372	2,142,001
Total current liabilities	3,025,026	3,002,703
Deferred rent, net of current portion	64,677	94,179
Other non-current liabilities	17,194	235,083
Total liabilities	3,106,897	3,331,965
Commitments and contingencies		
Redeemable convertible preferred stock		
Series A Redeemable Convertible Preferred Stock, $0.0001 par value, 121,735,303 shares authorized, issued and outstanding as of December 31, 2019 and 2018. Liquidation value of $40,169,716 and $37,509,818 as of December 31, 2019 and 2018, respectively.	35,047,435	35,047,435
Series A-2 Redeemable Convertible Preferred Stock, $0.0001 par value, 28,384,899 shares authorized, 22,047,361 shares issued and outstanding as of December 31, 2019, 0 share issued and outstanding as of December 31, 2018. Liquidation value of $8,217,709 and $0 as of December 31, 2019 and 2018, respectively.	7,685,865	-
Series A-3 Redeemable Convertible Preferred Stock, $0.0001 par value, 34,061,879 shares authorized, 31,209,734 shares issued and outstanding as of December 31, 2019, 0 share issued and outstanding as of December 31, 2018. Liquidation value of $11,038,966 and $0 as of December 31, 2019 and 2018, respectively.	10,887,449	-
Total redeemable convertible preferred stock	53,620,749	35,047,435
Stockholders' deficit		
Common Stock, $0.0001 par value, 246,180,160 shares authorized, 21,661,936 issued and outstanding as of December 31, 2019 and 20,173,448 shares issued and outstanding as of December 31, 2018	2,166	2,017
Additional paid-in-capital	4,703,768	2,959,754
Accumulated deficit	(47,716,008)	(27,169,297)
Accumulated other comprehensive income (loss)	506	(29,547)
Total stockholders' deficit	(43,009,568)	(24,237,073)
Total liabilities, redeemable convertible preferred stock and stockholders' deficit	$ 13,718,078	$ 14,142,327

See notes to financial statements

STATEMENTS OF OPERATIONS

	Year ended December 31,	
	2019	2018
Revenue	$ -	$ -
Operating expenses:		
Research and development	15,172,027	7,998,834
General and administrative	5,713,742	5,243,939
Total operating expenses	20,885,769	13,242,773
Loss from operations	(20,885,769)	(13,242,773)
Other income:		
Interest income, net	246,780	272,436
Other income, net	92,278	136,788
Other income, net	339,058	409,224
Net loss	(20,546,711)	(12,833,549)
Accumulated dividends on Redeemable Convertible Preferred Stock	(2,659,898)	(2,072,908)
Net loss available to common stockholders'	$ (23,206,609)	$ (14,906,457)
Basic and diluted net loss available to common stockholders per common share	$ (1.08)	$ (0.77)
Basic and diluted weighted-average number of common shares outstanding	21,416,665	19,377,217

STATEMENTS OF COMPREHENSIVE LOSS

	Year ended December 31,	
	2019	2018
Net loss	$ (20,546,711)	$ (12,833,549)
Other comprehensive loss:		
Unrealized gain (loss) on available-for-sale marketable securities, net of tax	30,053	(29,547)
Comprehensive loss	$ (20,516,658)	$ (12,863,096)

See notes to financial statements

Table of Contents

STATEMENTS OF CHANGES IN REDEEMABLE CONVERTIBLE PREFERRED STOCK AND STOCKHOLDERS' DEFICIT
Year Ended December 31, 2019 and 2018

	Redeemable Convertible Preferred Stock						Stockholders' Deficit					
	Series A		Series A-2		Series A-3		Common Stock		Additional Paid-In Capital	Accumulated Deficit	Accumulated Other Comprehensive Income/ (Loss)	Total Stockholders' Deficit
	Shares	Amount	Shares	Amount	Shares	Amount	Shares	Amount				
Balance at January 1, 2018	89,878,317	$25,864,375	-	$ -	-	$ -	19,354,099	$ 1,935	$1,637,989	$ (14,335,748)	$ -	$ (12,695,824)
Issuance of Series A Redeemable Convertible Preferred Stock, net of issuance costs of $217,940	31,856,986	9,183,060	-	-	-	-	-	-	-	-	-	-
Exercise of stock options	-	-	-	-	-	-	819,349	82	115,405	-	-	115,487
Stock-based compensation	-	-	-	-	-	-	-	-	1,206,360	-	-	1,206,360
Unrealized loss on marketable available-for-sale securities	-	-	-	-	-	-	-	-	-	-	(29,547)	(29,547)
Net loss	-	-	-	-	-	-	-	-	-	(12,833,549)	-	(12,833,549)
Balance at December 31, 2018	121,735,303	$35,047,435	-	-	-	-	20,173,448	$ 2,017	$2,959,754	$ (27,169,297)	$ (29,547)	$ (24,237,073)
Issuance of Series A-2 Redeemable Convertible Preferred Stock, net of issuance costs of $81,428	-	-	22,047,361	7,685,865	-	-	-	-	-	-	-	-
Issuance of Series A-3 Redeemable Convertible Preferred Stock, net of issuance costs of $107,748	-	-	-	-	31,209,734	10,887,449	-	-	-	-	-	-
Exercise of stock options	-	-	-	-	-	-	1,488,488	149	209,681	-	-	209,830
Stock-based compensation	-	-	-	-	-	-	-	-	1,534,333	-	-	1,534,333
Unrealized gain on marketable available-for-sale securities	-	-	-	-	-	-	-	-	-	-	30,053	30,053
Net loss	-	-	-	-	-	-	-	-	-	(20,546,711)	-	(20,546,711)
Balance at December 31, 2019	121,735,303	$35,047,435	22,047,361	$7,685,865	31,209,734	$10,887,449	21,661,936	$ 2,166	$4,703,768	$ (47,716,008)	$ 506	$ (43,009,568)

See notes to financial statements

STATEMENTS OF CASH FLOWS

	Year ended December 31,	
	2019	2018
Cash flows from operating activities		
Net loss	$ (20,546,711)	$ (12,833,549)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	436,365	204,646
Loss on asset disposal	2,480	-
Stock-based compensation	1,534,333	1,206,360
Changes in operating assets and liabilities:		
Prepaid expenses and other assets	(559,722)	(215,525)
Accounts payable	235,110	191,953
Accrued expenses, deferred rent and other	(517,496)	327,621
Net cash used in operating activities	(19,415,641)	(11,118,494)
Cash flows from investing activities		
Purchase of property and equipment	(1,245,862)	(937,768)
Employee advances	(2,146)	(153,052)
Collections on employee advances	12,051	112,923
Purchases of available-for-sale marketable securities	(7,073,779)	(17,612,621)
Proceeds from maturities and sales of available-for-sale marketable securities	17,731,162	5,948,867
Net cash provided by (used in) investing activities	9,421,426	(12,641,651)
Cash flows from financing activities		
Principal payments on capital leases	(18,437)	(7,279)
Proceeds from the issuance of Series A redeemable convertible preferred stock, net of issuance costs	-	9,183,060
Proceeds from the issuance of Series A-2 redeemable convertible preferred stock, net of issuance costs	7,685,865	-
Proceeds from the issuance of Series A-3 redeemable convertible preferred stock, net of issuance costs	10,887,449	-
Proceeds from the exercise of stock options	209,830	4,583
Net cash provided by financing activities	18,764,707	9,180,364
Net increase (decrease) in cash, cash equivalents and restricted cash	8,770,492	(14,579,781)
Net cash, cash equivalents and restricted cash at beginning of period	425,995	15,005,776
Net cash, cash equivalents and restricted cash at end of period	$ 9,196,487	$ 425,995
Supplemental disclosure of cash flow information:		
Cash paid during the year for interest	$ 3,219	$ 1,735
Supplemental disclosure of noncash investing and financing activities:		
Property and equipment purchases included in accounts payable and accrued expenses	$ 75,842	$ 158,649
Equipment acquired under capital lease	$ -	$ 57,864
Exercise of stock options in settlement of accrued expenses	$ -	$ 110,904

See notes to financial statements

NexImmune, Inc.

NOTES TO FINANCIAL STATEMENTS
For the years ended December 31, 2018 and 2019

1. Description of the Business

NexImmune, Inc. (the "Company" or "NexImmune"), a Delaware corporation headquartered in Gaithersburg, Maryland, was incorporated on June 7, 2011. The Company is an emerging biopharmaceutical company advancing a new generation of immunotherapies based on its proprietary Artificial Immune Modulation (AIM) technology. The AIM nanotechnology platform, originally developed at Johns Hopkins University, is the foundation for an innovative approach to immunotherapy in which the body's own immune system is stimulated to orchestrate a targeted T cell response against a disease. Central to the AIM technology are artificial AIM nanoparticles that present antigens to T cells eliciting a highly targeted therapy driven by the patient's immune system. These aAPC can be rapidly engineered to elicit a specific immune attack that can be directed toward any foreign substance or cell type in a patient's body. The Company's first product, for the treatment of cancer, is expected to enter clinical trials in 2020.

2. Basis of Presentation and Going Concern

The accompanying financial statements were prepared based on the accrual method of accounting in accordance with U.S. generally accepted accounting principles ("GAAP"). Any reference in these notes to applicable guidance is meant to refer to the authoritative GAAP as found in the Accounting Standards Codification ("ASC") and Accounting Standards Updates ("ASU") of the Financial Accounting Standards Board ("FASB").

As of December 31, 2019 and at the date these financial statements were available to be issued, our cash position and history of losses required management to assess our ability to continue as a going concern. The Company's operations are subject to certain risks and uncertainties including, among others, the risk associated with development of products that must receive regulatory approval before market launch. Since inception, the Company has incurred losses from operations, negative cash flows from operations and has relied on debt and equity investments to fund its operations. We expect that operating losses and negative cash flows from operations will continue for at least the next several years and we will need to access additional funds to achieve our strategic goals. If necessary, we may seek to raise substantial funds through the sale of our common stock, through debt financing or through establishing strategic collaboration agreements. We do not know whether additional financing will be available when needed, or whether it will be available on favorable terms, or at all. Whether, and when, the Company can attain profitability and positive cash flows from operations is uncertain. We are currently in the process of fundraising through the issuance of 6% Convertible Promissory Notes offering of up to $15 million and have raised $6.5 million through the date of this report (Note 16), however there is no commitment for the remaining amount. Based on our cash and short-term available-for-sale marketable securities as of the date of this report, we believe that we have adequate resources to fund our operations into the third quarter of 2020, without considering any potential future milestone payments that we may receive under any new collaborations we may enter into in the future, or any future capital raising transactions. If the Company were to raise the remaining $8.5 million through the issuance of 6% Convertible Promissory Notes, we still would not have sufficient cash and short-term available-for-sale marketable securities to maintain operations for the next twelve months. As a result, there is substantial doubt about the Company's ability to continue as a going concern. The financial statements do not include any adjustments to reflect the possible future effects on the recoverability and classification of assets or the amounts and classification of liabilities that may result from the outcome of this uncertainty. If future financing is not achieved, the Company may be required to curtail spending to reduce cash outflows.

NexImmune, Inc.

NOTES TO FINANCIAL STATEMENTS
For the years ended December 31, 2018 and 2019

3. Summary of Significant Accounting Policies

Use of Estimates

The preparation of the financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period.

On an ongoing basis, we evaluate our estimates, including those related to the recoverability of long-lived assets, stock-based compensation, the valuation of financial instruments, and the valuation of deferred tax assets and liabilities. We base our estimates on historical experience and on various other assumptions that we believe to be reasonable under the circumstances. Although actual results could differ from those estimates, management does not believe that such differences would be material.

Reclassifications

Certain amounts in the prior period financial statements have been reclassified to conform to the presentation of the current period financial statements. These reclassifications had no effect on the previously reported net loss.

Concentrations of credit risk

Financial instruments which potentially subject the Company to credit risk consist principally of cash and marketable debt securities. All cash is held in United States financial institutions that are federally insured. At times, the Company may maintain cash balances in excess of the federally insured amount. The Company has not experienced any losses in such accounts and management believes it is not exposed to any significant credit risk. Our investments in marketable debt securities have been issued by corporate entities and government-sponsored enterprises with high credit ratings. We mitigate investment risks by investing in highly rated securities with relatively short maturities that we believe do not subject us to undue investment or credit risk. If any of these financial institutions fail to perform their obligations under the terms of these financial instruments, our maximum exposure to potential losses would be equal to the amounts reported on our balance sheet.

Segment and Geographic Information

Operating segments are defined as components of an entity about which separate discrete information is available for evaluation by the chief operating decision maker, or decision-making group, in deciding how to allocate resources and in assessing performance. The Company views its operations as and manages its business in one operating segment operating exclusively in the United States.

Cash and Cash Equivalents

Cash and cash equivalents consist of investment in money market funds with commercial banks and financial institutions. The Company considers all investments in highly liquid financial instruments with an original maturity of three months or less at the date of purchase to be cash equivalents. Cash equivalents are stated at amortized cost, plus accrued interest, which approximates fair value.

NexImmune, Inc.

NOTES TO FINANCIAL STATEMENTS
For the years ended December 31, 2018 and 2019

Marketable securities

Marketable securities consist of debt securities with maturities greater than three months from the date of purchase that include commercial paper and corporate notes. Marketable securities consist of Level 1 financial instruments in the fair-value hierarchy. Classification of marketable securities between current and non-current is dependent upon the maturity date at the balance sheet date taking into consideration the Company's ability and intent to hold the investment to maturity. As of December 31, 2019 and 2018 all of the marketable securities are classified as current.

Interest and dividend income are recorded when earned and included in interest income in the statement of operations. Premiums and discounts, if any, on marketable securities are amortized or accreted to maturity and included in interest income in the statement of operations. The specific identification method is used in computing realized gains and losses on the sale of the Company's marketable securities.

The Company classifies its marketable securities as available-for-sale. We determine the appropriate classification of the securities at the time they are acquired and evaluate the appropriateness of such classifications at each balance sheet date. As of December 31, 2019 and 2018, all marketable securities were classified as available-for-sale. Marketable securities that are classified as available-for-sale are measured at fair value in the balance sheet, and unrealized gains and losses on marketable securities are reported as a component of accumulated other comprehensive loss in stockholders' deficit until realized. Marketable securities are evaluated periodically to determine whether the carrying value of a marketable security exceeds its fair value and the decline in value is determined to be other-than-temporary. Management reviews criteria, such as the general market conditions, magnitude and duration in which the fair value has been less than the carrying value, the investment issuer's financial condition and business outlook, as well as the Company's ability to hold the securities until the recovery of its amortized cost basis, to determine whether the decline in value is other-than-temporary. If a decline in value is determined to be other-than-temporary, the value of the marketable security is reduced, and the impairment is recorded as other income (expense) in the statement of operations.

Restricted cash

The following table provides a reconciliation of cash, cash equivalents, and restricted cash reported within the balance sheet that sum to the total of the same amounts shown in the statement of cash flows.

	2019	2018
Cash	$ 9,128,987	$ 425,995
Restricted cash	67,500	-
Total	$ 9,196,487	$ 425,995

Amounts included in restricted cash represent those required as collateral on corporate credit cards.

Fair value measurements

The Company's financial instruments include cash and cash equivalents, marketable securities, accounts payable and accrued expenses. The fair values of the cash and cash equivalents, accounts payable and accrued expenses approximated their carrying values as of December 31, 2019 and 2018, due to their short-term maturities. For a description of the fair value of marketable securities, refer to the related disclosures in Note 4.

NexImmune, Inc.

NOTES TO FINANCIAL STATEMENTS
For the years ended December 31, 2018 and 2019

The Company accounts for recurring and nonrecurring fair value measurements in accordance with ASC 820, *Fair Value Measurements* ("ASC 820"). ASC 820 defines fair value, establishes a fair value hierarchy for assets and liabilities measured at fair value, and requires expanded disclosures about fair value measurements. The ASC hierarchy ranks the quality of reliability of inputs, or assumptions, used in the determination of fair value, and requires assets and liabilities carried at fair value to be classified and disclosed in one of the following three categories:

Level 1—Fair value is determined by using unadjusted quoted prices that are available in active markets for identical assets and liabilities.

Level 2—Fair value is determined by using inputs, other than Level 1 quoted prices that are directly and indirectly observable. Inputs can include quoted prices for similar assets and liabilities in active markets or quoted prices for identical assets and liabilities in inactive markets. Related inputs can also include those used in valuation or other pricing models that can be corroborated by observable market data.

Level 3—Fair value is determined by inputs that are unobservable and not corroborated by market data. Use of these inputs involves significant and subjective judgments to be made by a reporting entity.

In instances where the determination of the fair value measurement is based on inputs from different levels of fair value hierarchy, the fair value measurement will fall within the lowest level input that is significant to the fair value measurement in its entirety. The Company periodically evaluates financial assets and liabilities subject to fair value measurements to determine the appropriate level at which to classify them each reporting period. This determination requires the Company to make subjective judgments as to the significance of inputs used in determining fair value and where such inputs lie within the ASC 820 hierarchy. The Company uses specific identification for securities sold or reclassified out of accumulated other comprehensive income.

Property and equipment

Property and equipment are stated at cost, less accumulated depreciation and amortization. Major replacements and improvements that extend the useful lives of assets are capitalized, while general repairs and maintenance are charged to expense as incurred. Property and equipment are depreciated using the straight-line method over the estimated useful lives of the assets. Leasehold improvements are amortized over the estimated useful lives of the assets or the related lease term, whichever is shorter. Upon retirement or disposal, the cost and related accumulated depreciation are removed from the balance sheet and the resulting gain or loss is recognized within operating expenses.

The estimated useful lives of property, plant and equipment by major category are as follows:

	Estimated Useful Life
Laboratory equipment	7 years
Computer equipment and software	3 years
Furniture and fixtures	7 years
Leasehold Improvements	Shorter of lease term or useful life

Impairment of long-lived assets

The Company evaluates the carrying value of its long-lived asset group for potential impairment whenever events or changes in circumstances indicate that the carrying amount of such assets may not be recoverable.

NexImmune, Inc.

NOTES TO FINANCIAL STATEMENTS
For the years ended December 31, 2018 and 2019

Recoverability is determined by comparing future undiscounted cash flows associated with such assets to the related carrying value. An impairment loss may be recognized when the estimated undiscounted future cash flow is less than the carrying amount of the asset. If these cash flows are less than the carrying value of such asset group, the Company then determines the fair value of the underlying asset group. Any impairment loss to be recognized is measured as the amount by which the carrying value of the asset group exceeds the fair value of the asset group. No impairments were recognized during 2019 or 2018.

Redeemable convertible preferred stock

The Company's redeemable convertible preferred stock is classified outside of stockholders' deficit because the shares contain deemed liquidation rights that are a contingent redemption feature not solely within the control of the Company.

The Company's policy is to accrete the carrying value and related issuance costs of the redeemable convertible preferred stock to its redemption value when such redemption becomes probable.

Research and development

Research and development costs are expensed as incurred. Research and development expenses include personnel costs associated with research and development activities, including share-based compensation, as well as costs for third-party contractors to perform research, conduct clinical trials and manufacture drug supplies and materials. The Company accrues for costs incurred by external service providers, based on its estimates of services performed and costs incurred. These estimates include the level of services performed by the third parties, and other indicators of the services completed. Based on the timing of amounts invoiced by service providers, the Company may also record payments made to those providers as prepaid expenses that will be recognized as expenses in future periods as the related services are rendered. As of December 31, 2019 and 2018, approximately $569,000 and $86,000, respectively, was recorded as prepaid expenses related to research and development expenses.

Clinical trial expenses

The Company makes payments in connection with clinical trials under contracts with contract research organizations that support conducting and managing clinical trials. The financial terms of these agreements are subject to negotiation and vary from contract to contract and may result in uneven payment flows. Generally, these agreements set forth the scope of work to be performed at a fixed fee, unit price or on a time and materials basis. A portion of the obligation to make payments under these contracts depends on factors such as the successful enrollment or treatment of patients or the completion of other clinical trial milestones.

Expenses related to clinical trials are accrued based on estimates and/or representations from service providers regarding work performed, including actual level of patient enrollment, completion of patient studies and progress of the clinical trials. Other incidental costs related to patient enrollment or treatment are accrued when reasonably certain. If the amounts the Company is obligated to pay under clinical trial agreements are modified (for instance, as a result of changes in the clinical trial protocol or scope of work to be performed), the accruals are adjusted accordingly. Revisions to contractual payment obligations are charged to expense in the period in which the facts that give rise to the revision become reasonably certain.

NexImmune, Inc.

NOTES TO FINANCIAL STATEMENTS
For the years ended December 31, 2018 and 2019

Stock-based compensation

The Company records compensation expense associated with stock options and other forms of equity compensation based on the estimated fair value at the grant date, which is recorded over the requisite service period. Our policy is to account for forfeitures as they occur. The Company uses the Black-Scholes-Merton option pricing (Black-Scholes) model to estimate the fair value of stock options. The Black-Scholes model requires input based assumptions that are highly subjective, judgmental and sensitive in the determination of stock-based compensation cost.

Fair value of Common Stock—Given the lack of an active public market for the common stock, the Company has from time to time engaged an independent valuation firm to assist management in determining the fair value of the common stock. In the absence of a public trading market, and as a clinical stage company with no revenues, the Company believes that it is appropriate to consider a range of factors to determine the fair market value of the common stock at each grant date. In determining the fair value of its common stock, the Company uses methodologies, approaches, and assumptions consistent with the American Institute of Certified Public Accountants' (AICPA) Audit and Accounting Practice Aid Series: Valuation of Privately Held Company Equity Securities Issued as Compensation. In addition, the Company considered various objective and subjective factors, along with input from an independent third-party valuation firm. The factors included (1) the Company's achievement of clinical and operational milestones; (2) the significant risks associated with the Company's stage of development; (3) capital market conditions for life science companies, particularly similarly situated, privately held, early-stage life science companies; (4) the Company's available cash, financial condition, and results of operations; (5) the most recent sales of the Company's redeemable convertible preferred stock; and (6) the preferential rights of the outstanding redeemable convertible preferred stock.

Expected volatility—The expected volatility was based on the historical volatility of comparable public companies from a representative peer group selected based on industry and market capitalization data. The historical volatility is calculated based on a period of time commensurate with the expected term assumption.

Risk-free interest rate—The risk-free interest rate was based on the continuous rates provided by the U.S. Treasury with a term approximating the expected term of the option.

Expected dividend yield—The expected dividend yield was 0% because the Company has not historically paid and does not expect to pay any dividends for the foreseeable future.

Expected term—The Company uses the simplified method as prescribed by the SEC Staff Accounting Bulletin No. 107, Share-Based-Payment, to calculate the expected term for options granted to employees as it does not have sufficient historical exercise data to provide a reasonable basis upon which to estimate the expected term.

Stock-based payments issued to nonemployees for goods and services are measured at their estimated fair value and are treated the same as those granted to employees under the guidelines of ASU 2018-07, *Compensation—Stock Compensation (Topic 718)*, except that expenses are recognized when service is rendered.

See Note 12 for a further discussion on stock-based compensation.

Income taxes

Income taxes are accounted for under the asset and liability method. Deferred tax assets and liabilities are recognized for the estimated future tax consequences attributable to temporary differences between the financial

statement carrying amounts of existing assets and liabilities and their respective tax basis. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in income in the period that includes the enactment date. Deferred tax expense or benefit is the result of changes in deferred tax assets and liabilities.

Valuation allowances are established when necessary to reduce deferred tax assets where, based upon the available evidence, the Company concludes it is more-likely-than-not that the deferred tax assets will not be realized. In evaluating its ability to recover deferred tax assets, the Company considers all available positive and negative evidence, including its operating results, on-going tax planning and forecasts of future taxable income on a jurisdiction-by-jurisdiction basis. The Company recorded a valuation allowance against all estimated net deferred tax assets as of December 31, 2019 and 2018.

Liabilities are provided for tax benefits for which realization is uncertain. Such benefits are only recognized when the underlying tax position is considered more-likely-than-not to be sustained on examination by a taxing authority, assuming they possess full knowledge of the position and facts. Recognized income tax positions are measured at the largest amount that is greater than more-likely-than-not of being realized. Changes in the recognition or measurement are reflected in the period in which the change in estimate occurs. Interest and penalties related to uncertain tax positions are recorded in the provision of income taxes. There were no uncertain tax positions nor income tax related interest and penalties recorded as of or for the year ended December 31, 2019 and 2018.

Net Loss Per Share Attributable to Common Stockholders

Basic net loss per common share is determined by dividing net loss attributable to common stockholders by the weighted-average number of common shares outstanding during the period, without consideration of common stock equivalents. Diluted net loss per share is computed by dividing net loss attributable to common stockholders by the weighted-average number of common stock and common stock equivalents outstanding for the period. The Company adjusts net loss to arrive at the net loss attributable to common stockholders to reflect the amount of dividends accumulated during the period on the Company’s redeemable convertible preferred stock. Such dividends are only payable if and when declared by the Board of Directors (Note 11). The treasury stock method is used to determine the dilutive effect of the Company’s stock option grants and warrants and the if-converted method is used to determine the dilutive effect of the Company’s redeemable convertible preferred stock. For the years ended December 31, 2019 and 2018, the Company had a net loss attributable to common stockholders, and as such, all outstanding stock options and shares of redeemable convertible preferred stock were excluded from the calculation of diluted loss per share. The following table sets forth the computation of basic and diluted earnings per share for the years ended December 31, 2019 and 2018:

	2019	2018
Net loss	$ (20,546,711)	$ (12,883,549)
Accumulated dividends on Redeemable Convertible Preferred Stock	(2,659,898)	(2,072,908)
Net loss attributable to common stockholders	$ (23,206,609)	$ (14,956,457)
Basic and diluted net loss per common share	$ (1.08)	$ (0.77)
Basic and diluted weighted average common shares outstanding	21,416,665	19,377,217

NexImmune, Inc.

NOTES TO FINANCIAL STATEMENTS
For the years ended December 31, 2018 and 2019

The following potentially dilutive securities outstanding at December 31, 2019 and 2018 have been excluded from the computation of diluted weighted average common shares outstanding, as the effect would be anti-dilutive:

	2019	2018
Stock options	29,470,734	28,182,628
Redeemable convertible preferred stock	174,992,398	121,735,303
Warrants	250,000	250,000
Total	204,713,132	150,167,931

Shares of redeemable convertible preferred stock also participate in dividends with shares of common stock (if and when declared) and therefore are deemed participating securities. The holders of redeemable convertible preferred stock do not contractually share in losses and therefore no additional net loss per share has been disclosed under the two-class method.

Revenue recognition

Under ASC 606, the Company will recognize revenue when it transfers control of promised goods or services to customers in an amount that reflects what the Company expects to receive in exchange for the goods or services, and the performance obligation(s) under the related contracts are satisfied. To determine revenue recognition for contracts with customers the Company performs the following five steps: (i) identify the promised goods or services in the contract; (ii) identify the performance obligations in the contract, including whether they are distinct in the context of the contract; (iii) determine the transaction price, including the constraint on variable consideration; (iv) allocate the transaction price to the performance obligations in the contract; and (v) recognize revenue when (or as) we satisfy each performance obligation.

Recent accounting standards and pronouncements

Recently Adopted

In May 2014, FASB issued ASU 2014-09, *Revenue from Contracts with Customers (Topic 606)*, which supersedes nearly all existing revenue recognition guidance under Topic 605, *Revenue Recognition*. The new standard requires a company to recognize revenue when it transfers goods and services to customers in an amount that reflects the consideration that the company expects to receive for those goods or services. ASU 2014-09 defines a five-step process that includes identifying the contract with the customer, identifying the performance obligations in the contract, determining the transaction price, allocating the transaction price to the performance obligations in the contract and recognizing revenue when (or as) the entity satisfies the performance obligations. The Company applied ASU 2014-09 on a modified retrospective basis as of January 1, 2018, having no impact to the Company's financial position or results of operations.

In November 2016, the FASB issued ASU No. 2016-18, *Restricted Cash (Topic 230)*, which provides guidance on the classification and presentation of restricted cash in the statement of cash flows and requires that a statement of cash flows explain the change during the period in the total of cash, cash equivalents and amounts generally described as restricted cash or restricted cash equivalents. The standard is effective for fiscal years beginning after December 15, 2018, and interim periods within fiscal years beginning after December 15, 2019. Early adoption is permitted, including adoption in an interim period. The Company adopted this guidance on January 1, 2019. The impact of the adoption was not material to the Company's statement of cash flows.

NexImmune, Inc.

NOTES TO FINANCIAL STATEMENTS
For the years ended December 31, 2018 and 2019

In January 2017, the FASB issued ASU No. 2017-01, *Business Combinations (Topic 805)*. The standard provides guidance for evaluating whether transactions should be accounted for as acquisitions (or disposals) or assets or businesses. The standard is effective for annual periods beginning after December 15, 2018, and interim periods within annual periods beginning after December 15, 2019. The Company adopted this guidance on January 1, 2019 and will apply the guidance prospectively to any business combinations that occur. There was no impact to the financial statements for the year ended December 31, 2019 related to this guidance.

In June 2018, the FASB issued ASU 2018-07, *Compensation—Stock Compensation (Topic 718)*, which provides guidance with respect to the accounting for nonemployee stock-based payment awards. The guidance generally aligns the accounting for nonemployee awards to that for employees. The standard is effective for fiscal years beginning after December 15, 2019, and interim periods within fiscal years beginning after December 15, 2020. Early adoption is permitted. The Company early adopted this guidance on January 1, 2018. While the adoption did not result in a material change to the Company's financial statements, stock-based awards to non-employees are no longer marked to fair value at each reporting date after the adoption date.

In November 2018, the FASB issued ASU 2018-18, *Collaborative Arrangements (Topic 808): Clarifying the Interaction Between Topic 808 and Topic 606*. The standards clarify that certain transactions between participants of a collaborative arrangement should be accounted for as revenue under Topic 606 when the counterparty in the collaborative arrangement is customer in the context of a unit of account. Additionally, the standard precludes entities from presenting consideration received from a participant in a collaborative arrangement with revenue recognized under Topic 606 if the participant is not a customer. The standard is effective for fiscal years beginning after December 15, 2020, and interim periods within fiscal years beginning after December 15, 2021. Early adoption is permitted, including adoption in any interim period for periods for which financial statements have not yet been made available for issuance. The Company early adopted this standard effective January 1, 2019 and applied retrospectively to all relevant contracts that were not completed as of the date of adoption. As of January 1, 2019, the Company had no contracts within the scope of Topic 808, thus the adoption of this standard required no cumulative-effect adjustments and did not have a material impact on the Company's financial position of results of operations.

Not Yet Adopted

In February 2016, the FASB issued ASU No. 2016-02, *Leases (Topic 842)*. The guidance requires lessees to recognize assets and liabilities related to long-term leases on the balance sheet and expands disclosure requirements regarding leasing arrangements. In July 2018, the FASB issued additional guidance, which offers a transition option to entities adopting the new lease standards, and a package of practical expedients an entity can elect to utilize to reduce the level of effort required for adoption. Under the transition option, entities can elect to apply the new guidance using a modified retrospective approach at the beginning of the year in which the new lease standard is adopted, rather than to the earliest comparative period presented in their financial statements. In November 2019, the FASB issued ASU 2019-10 deferring the effective date for private entities for fiscal years beginning after December 15, 2020 and interim periods within fiscal years beginning after December 15, 2021. In June 2020, the FASB issued ASU 2020-05 which further defers the effective date for private entities for fiscal years beginning after December 15, 2021 and interim periods within fiscal years beginning after December 15, 2022. The Company is currently reviewing its leases and other contracts to determine the impact the adoption of this guidance will have on the financial statements. The Company currently expects that the adoption of this guidance will change the way it accounts for its operating leases, and will result in recording right-of-use assets and lease liabilities in the balance sheets, and result in additional lease-related disclosures in the footnotes to the financial statements. The Company expects that it will adopt this guidance utilizing the modified retrospective approach and elect the package of practical expedients.

NexImmune, Inc.

NOTES TO FINANCIAL STATEMENTS
For the years ended December 31, 2018 and 2019

In June 2016, the FASB issued ASU 2016-13, *Financial Instruments – Credit Losses (Topic 326)*, which modifies the measurement of expected credit losses on certain financial instruments. In addition, for available-for-sale debt securities, the standard eliminates the concept of other-than-temporary impairment and requires the recognition of an allowance for credit losses rather than reductions in the amortized cost of the securities. The standard is effective for fiscal year beginning after December 15, 2022, and interim periods beginning after December 15, 2022 and requires a modified-retrospective approach with a cumulative-effect adjustment to retained earnings as of the beginning of the first reporting period. Early adoption is permitted. Based on the composition of the Company's investment portfolio, current market conditions and historical credit loss activity, the adoption of ASU 2016-13 is not expected to have a material impact on its financial position, results of operations or the related disclosures.

In July 2017, the FASB issued ASU 2017-11, *Earnings Per Share (Topic 260); Distinguishing Liabilities from Equity (Topic 480); Derivatives and Hedging (Topic 815): (Part I) Accounting for Certain Financial Instruments with Down Round Features, (Part II) Replacement of the Indefinite Deferral for Mandatorily Redeemable Financial Instruments of Certain Nonpublic Entities and Certain Mandatorily Redeemable Noncontrolling Interests with a Scope Exception.* ASU 2017-11 simplifies the accounting for freestanding financial instruments or equity-linked embedded features with down round features by no longer requiring entities to consider down round features when determining whether these instruments or embedded features are considered indexed to the entity's own stock. It also requires entities that present EPS pursuant to ASC 260 to recognize the effect of a down round feature in a freestanding equity-classified financial instrument only when it is triggered. The effect of triggering such a feature will be recognized as a dividend and reduction to income available to common shareholders in basic EPS. For public business entities the guidance is effective for fiscal years beginning after December 15, 2018 and interim periods within those years. For all other entities, it is effective for fiscal years beginning after December 15, 2019, and interim periods within fiscal years beginning after December 15, 2020. Early adoption is permitted, including adoption in an interim period. The Company does not expect the adoption of this standard will have a material effect on the 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*, which provides guidance with respect to the disclosure requirements for fair value measurements. The guidance intends to improve the effectiveness of the disclosures relating to recurring and nonrecurring fair value measurements. The guidance is effective for interim and fiscal years beginning after December 15, 2019. Early adoption is permitted. Portions of the guidance are to be adopted prospectively while other portions are to be adopted retroactively. The Company is currently evaluating the impact that this guidance will have on the financial statements.

In August 2018, the FASB issued ASU No. 2018-15, Intangibles—Goodwill and Other—Internal-Use Software *(Subtopic 350-40): Customer's Accounting for Implementation Costs Incurred in a Clout Computing Arrangement That Is a Service Contract*. This new standard requires a customer in a cloud computing arrangement that is a service contract to follow the internal-use software guidance in ASC 350-40, Accounting for Internal-Use Software, to determine which implementation costs to capitalize as assets and amortize over the term of the hosting arrangement or expense as incurred. This standard is effective for annual periods beginning after December 15, 2020, and interim periods within fiscal years beginning after December 15, 2021. Early adoption is permitted, including adoption in any interim period. Entities have the option to apply this standard prospectively to all implementation costs incurred after the date of adoption or retrospectively. The Company is evaluating this new standard but does not expect it to have a significant impact on its financial statement presentation or results.

NexImmune, Inc.

NOTES TO FINANCIAL STATEMENTS
For the years ended December 31, 2018 and 2019

4. Fair Value Measurements

The following table represents the Company's fair value hierarchy for its financial assets and liabilities measured at fair value on a recurring basis:

	Fair Value at December 31, 2019			Fair Value at December 31, 2018		
	Level 1	Level 2	Level 3	Level 1	Level 2	Level 3
Assets						
Corporate debt securities	$1,006,878	$ -	$ -	$11,634,207	$ -	$ -
	$1,006,878	$ -	$ -	$11,634,207	$ -	$ -

During the years ended December 31, 2019 and 2018, the Company did not have any transfers between levels.

5. Marketable Securities

Available-for-sale marketable securities as of December 31, 2019 and 2018 were as follows:

	December 31, 2019				December 31, 2018			
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
Corporate debt securities	$1,006,372	$ 506	$	$1,006,878	$ 11,663,754	$ -	$ (29,547)	$ 11,634,207
Securities due within one year				$1,006,878				$ 9,655,147
Securities due in one to two years				-				1,979,060
Total				$1,006,878				$ 11,634,207

The Company owned 1 and 12 available-for-sale marketable securities as of December 31, 2019 and 2018, respectively. These securities had an unrealized gain of $506 as of December 31, 2019 and a combined unrealized loss of $29,547 as of December 31, 2018, due to temporary market conditions. There were no unrealized losses at December 31, 2019 and 2018, respectively, that the Company determined to be other-than-temporary. During the years ended December 31, 2019 and 2018, the Company recognized gains of $5,520 and losses of $287 in 2019 and gains of $521 and losses of $97 in 2018, which are reported as other income in the accompanying statement of operations as a result of sales of available-for-sale marketable securities. These amounts are consistent with the amounts reclassified out of accumulated other comprehensive income into earnings for the respective periods.

NexImmune, Inc.

NOTES TO FINANCIAL STATEMENTS
For the years ended December 31, 2018 and 2019

6. Prepaid Expenses and Other Current Assets

Prepaid expenses and other current assets consist of the following at December 31, 2019 and 2018:

	2019	2018
Prepaid research and development expenses	$ 568,747	$ 86,267
Prepaid maintenance agreements	130,515	44,481
Prepaid insurance	88,437	45,950
Prepaid other	39,067	23,143
Accrued interest	6,421	73,624
	$ 833,187	$ 273,465

7. Property and Equipment

Property and equipment consist of the following at December 31, 2019 and 2018:

	2019	2018
Laboratory equipment	$ 3,019,401	$ 1,789,726
Computer equipment and software	185,279	138,167
Furniture and fixtures	47,877	36,801
Leasehold Improvements	132,065	100,965
	3,384,622	2,065,659
Less accumulated depreciation and amortization	(806,692)	(370,588)
Property and equipment, net	$ 2,577,930	$ 1,695,071

Depreciation and amortization expense was $436,365 and $204,646 for the years ended December 31, 2019 and 2018, respectively. Included above is laboratory equipment of $82,301 partially financed under a capital lease arrangement after an upfront payment of $14,167 and trade-in allowance of old equipment that had a net book value of $9,970. Amortization expense on the capital lease equipment was $11,757 and $5,879 for the years ended December 31, 2019 and 2018, respectively, and is included in accumulated depreciation and amortization. Accumulated amortization on the capital lease equipment was $17,636 and $5,879 as of December 31, 2019 and 2018, respectively.

8. Accrued Expenses

A summary of the components of accrued expenses is as follows as of December 31, 2019 and 2018:

	2019	2018
Accrued legal expenses	$ 167,533	$ 271,937
Accrued salaries, benefits and related expenses	1,040,423	952,193
Accrued severance	207,968	371,128
Other accrued expenses	437,448	546,743
	$ 1,853,372	$ 2,142,001

The accrued severance relates to a former executive of the Company who resigned effective December 31, 2018. The terms of the agreement provided severance pay including Cobra insurance continuation for a period of

18 months. The total payments were discounted at 5% and the present value of the payments is recorded in accrued expenses as of December 31, 2019 and 2018. The total accrual is included in current liabilities as of December 31, 2019. The total amount accrued as of December 31, 2018 was $568,128; $371,128 is included in current liabilities on the accompanying balance sheet and $197,000 is included in other noncurrent liabilities.

9. Commitments and Contingencies

Lease Obligations

In June 2017, the Company entered into a lease agreement for office and laboratory space for a term of five years commencing on July 1, 2017, and terminating on June 30, 2022. The initial term of the lease contains a portion of rent abatement during the first year and was subject to a 3% escalation starting after the second year of the lease. The lease contains an extension option for five additional years. Future minimum lease payments under noncancelable operating leases as of December 31, 2019 are as follows:

	Operating Leases
2020	$ 390,951
2021	402,137
2022	202,873
Thereafter	-
Total minimum lease payments	$ 995,961

For operating leases that contain rent escalation or rent concession provisions, the Company records the total rent payable during the lease term on a straight-line basis over the term of the lease. The Company records the difference between the rent paid and the straight-line rent as a deferred rent liability in the accompanying balance sheet. Rent expense for the year ended December 31, 2019 and 2018 totaled $359,207 and $358,806, respectively, and was included in operating expenses on the accompanying statement of operations.

Rent expense was recorded in the following financial statement line items within the statement of operations for the years ended December 31, 2019 and 2018:

	2019	2018
Research and development expenses	$ 269,405	$ 269,104
General and administrative expenses	89,802	89,702
Total rent expense	$ 359,207	$ 358,806

Sublease

The Company has one sublease agreement and recorded $111,637 and $139,595 for the years ended December 31, 2019 and 2018, respectively, in sublease income which was included in other income on the accompanying statements of operations. The agreement extends through December 2020.

Maryland Biotechnology Center Grant

The Company entered into a Translational Research Award Agreement effective May 23, 2012 with the Department of Business & Economic Development with the State of Maryland, Maryland Biotechnology Center

("MBC"). The mission of MBC is to integrate entrepreneurial strategies to stimulate the transformation of scientific discovery and intellectual assets into capital formation and business development. Under the agreement, MBC provided $200,000 to NexImmune for research on its artificial aAPC for cancer immunotherapy. In 2013, an amendment increased the amount by $125,000 for a total grant of $325,000. This grant was recorded as income in 2012 and 2013, as the Company incurred the expenses which qualified it for the grant.

The Company must repay the funds through annual payments calculated at 3% of annual revenues for the preceding year. Payments shall continue for 10 years after the first payment date and may total up to 200% of the total grant amount. The end date of the agreement is defined as January 31, 2024, or when any and all repayments due to MBC have been made. If the Company does not earn any revenue, the grant does not need to be repaid. Through December 31, 2019, no revenue has been recorded, therefore, no payments to MBC are due.

Johns Hopkins University Exclusive License Agreement

The Company entered into an Exclusive License Agreement with Johns Hopkins University ("JHU") effective June 2011, which was amended and restated in January 2017, under which there are license fees, royalties, and milestone payments. As part of the agreement, the Company acquired a perpetual, exclusive license from JHU covering its invention related to Antigen Specific T cells. In consideration for the Exclusive Licence Agreement, the Company made an upfront payment of $155,000 and issued 464,748 shares of Common Stock to JHU.

JHU was also entitled to milestone fees of $75,000 in connection with clinical trial milestones. For the first licensed product or licensed service in the therapeutic field, the Company may be required to pay JHU additional aggregate milestone fees of $1.6 million for clinical and regulatory milestone fees. The Company may be required to pay JHU reduced milestone fees for the second and third licensed products or licensed services in the therapeutic field in connection with clinical and regulatory milestones. In the diagnostic field, the Company may be required to pay JHU aggregate milestone fees of $400,000 for the first licensed product or licensed service and reduced milestone fees for the second and third licensed products or licensed services in connection with regulatory and commercial milestones. The Company may be required to pay JHU aggregate milestone fees of $100,000 for commercial milestones for the first licensed product or licensed service in the non-clinical field. The Company may also be required to pay royalties in the low to upper mid-single digits on net sales of therapeutic products, diagnostic products and non-clinical products. The Company is required to make minimum annual royalty payments of $100,000 to JHU under the A&R JHU License Agreement, which started in the low five figures in the first year of the agreement and increased to the low six figures in the third year and for each subsequent year of the agreement. The Company may also be required to pay JHU a low double digit percentage of any non-royalty sublicense consideration we receive.

The Company will record a liability when such events become probable. The Company has not reached any of the milestones or transacted its first commercial sale as of December 31, 2019.

The Company must make minimum royalty payments, which began upon the 4th anniversary of the agreement and upon every anniversary thereafter during the term of the agreement, which offset future royalties per above owed to JHU. The Company has incurred $175,000 in cumulative minimum royalties from inception. Future annual minimum royalties consist of $100,000 due in 2020 and each year thereafter during the term of the agreement. The Company records milestones, royalties and minimum royalties at the time when payments become probable. During the year ended December 31, 2019 and 2018, the Company incurred $100,000 and $50,000, respectively, related to minimum royalties owed, included in research and development expenses on the accompanying statement of operations. The Company has accrued $50,000, or half of the royalty due in June 2020, as of December 31, 2019.

NexImmune, Inc.

NOTES TO FINANCIAL STATEMENTS
For the years ended December 31, 2018 and 2019

Contingencies

From time to time, the Company may be subject to various litigation and related matters arising in the ordinary course of business. The Company records a provision for a liability when it believes that it is both probable that a liability has been incurred and the amount can be reasonably estimated. Significant judgment is required to determine both probability and the estimated amount. As of December 31, 2019 and 2018, the Company was not involved in any material legal proceedings.

10. Capital lease

During 2018, the Company entered into an equipment financing agreement in the amount of $57,864, for the purpose of acquiring research and development equipment. The term of the note is 36 months and bears an interest rate of 7.6% per annum. Future minimum lease payments under this agreement as of December 31, 2019 are as follows:

	Capital Lease
2020	$ 21,648
2021	12,628
Total minimum lease payments	34,276
Less: amount representing imputed interest	(2,128)
Present value of minimum lease payments	32,148
Less: current portion	(19,888)
Capital lease obligations, less current portion	$ 12,260

The current portion of the capital lease is included in accrued expenses on the accompanying balance sheet, and the non-current portion of the capital lease is included in other non-current liabilities on the accompanying balance sheet as of December 31, 2019 and 2018.

11. Series A Redeemable Convertible Preferred Stock and Stockholders' Deficit

Series A Redeemable Convertible Preferred Stock

During December 2017, the Company amended its Certificate of Incorporation to authorize and designate 121,735,324 shares as Series A Redeemable Convertible Preferred Stock ("Series A Preferred Stock") and issued 52,860,040 shares of Series A Preferred Stock at an issue price of $0.2951 per share for proceeds of $15,599,000 net of issuance costs of $659,309. In December 2017, the Company issued an additional 37,018,277 shares of Series A Preferred stock in exchange for convertible debt including accrued interest thereon totaling $10,924,684.

During 2018, an additional 31,856,986 shares of Series A Preferred stock at an issue price of $0.2951 per share were issued to investors resulting in proceeds of $9,401,000 net of issuance costs of $217,940.

In January 2019, the Company amended its Certificate of Incorporation to authorize and designate 121,735,303 shares of Series A Redeemable Convertible Preferred Stock and 28,384,899 shares of Series A-2 Redeemable Convertible Preferred Stock. The Company issued 22,047,361 shares of Series A-2 Redeemable

Convertible Preferred Stock during January and February 2019, at an issue price of $0.3523 per share, resulting in proceeds of $7,685,865 net of issuance costs of $81,428.

In November 2019, the Company amended its Certificate of Incorporation to authorize and designate 34,061,879 shares of Series A-3 Redeemable Convertible Preferred Stock. The Company issued 31,209,734 shares of Series A-3 Redeemable Convertible Preferred Stock during November and December 2019, at an issue price of $0.3523 per share resulting in proceeds of $10,887,449 net of issuance costs of $107,748.

Below is a summary of the terms and conditions, and the rights and powers included in the Fifth Amended and Restated Certificate of Incorporation of NexImmune, Inc governing the Series A Redeemable Convertible Preferred Stock, the Series Redeemable A-2 Convertible Preferred Stock and Series A-3 Redeemable Convertible Preferred Stock, collectively ("Series A Redeemable Convertible Preferred Stock"):

Dividends—Holders of the Series A Redeemable Convertible Preferred Stock shares are entitled to receive cumulative, non-compounding dividends at the rate of 6% per annum if declared by the Board of Directors. Holders of Series A Redeemable Convertible Preferred Stock shares will also participate in dividends on common stock on an as-converted basis. As of December 31, 2019 and 2018, undeclared cumulative dividends on the Series A Redeemable Convertible Preferred Stock shares was approximately $4.7 million and $2.1 million, respectively.

Liquidation Preference—In the event of a liquidation, winding up or sale of the Company, the holders of Series A Redeemable Convertible Preferred Stock will receive payment of an amount equal to the original purchase price per share plus any accrued but unpaid dividends on such share, whether or not declared, and thereafter will participate in future proceeds with the holders of all other classes and series of stock on an as converted basis. The Company has not adjusted the carrying values of the preferred stock to the liquidation preferences of such shares because it is uncertain whether or when an event would occur that would obligate the Company to pay the liquidation preferences to holders of shares of Series A Redeemable Convertible Preferred Stock, and at the balance sheet date these circumstances were not probable. Subsequent adjustments to the carrying values of the liquidation preferences will be made only when it becomes probable that such a liquidation event will occur. As of December 31, 2019 and 2018, the liquidation value of the Series A Redeemable Convertible Preferred Stock was approximately $59 million and $38 million respectively.

Voting Rights—Each holder of Series A Redeemable Convertible Preferred Stock shares shall be entitled to cast the number of votes equal to the number of whole shares of common stock into which the share of Series A Redeemable Convertible Preferred Stock is convertible on any matter presented to the stockholders of the Company for their action or consideration.

Conversion Rights—Each share of Series A Redeemable Convertible Preferred Stock shares shall be convertible, at the option of the holder, into shares of common stock at the conversion price in effect at the time of the conversion. A mandatory conversion would be triggered by an underwritten public offering resulting in at least $40 million of gross proceeds, or by a vote of at least 66.67% of the then outstanding shares of Series A Redeemable Convertible Preferred Stock. The Series A Preferred Stock conversion price is initially equal to its original issue price, subject to adjustment as specified in the amended and restated Certificate of Incorporation, including dilutive issuances.

Redemption Rights—In the event of a deemed liquidation event, which includes a qualified merger or sale of the Company, where the Corporation does not effect a dissolution of the Corporation within ninety (90) days after such Deemed Liquidation Event, then the holders of Series A Redeemable Convertible

Preferred Stock shares will be sent a redemption notice that outlines the terms of the redemption at the option of the holders, and the Corporation shall use the consideration received by the Corporation for such Deemed Liquidation Event together with any other assets of the Corporation available for distribution to its stockholders to redeem all outstanding shares of Series A Redeemable Convertible Preferred Stock at a price per share equal to the Series A Redeemable Convertible Liquidation Amount, as applicable. The Company does not deem the redemption to be probable as of December 31, 2019 and 2018.

Anti-Dilution Protection – The holders of the Series A Redeemable Convertible Preferred Stock have anti-dilution protection for splits, dividends and similar recapitalizations. Subject to certain exclusions, anti-dilution protection for additional sales of securities by the Company for consideration per unit less than the applicable conversion price per unit then the Applicable Conversion Price shall be reduced on a weighted average basis.

Due to the Deemed Liquidation provision, which is outside of the Company's control, the Series A Redeemable Convertible Preferred Stock shares are classified outside of stockholders' deficit.

Issuances of Common Stock

During 2019 and 2018, the Company issued 1,488,488 and 819,349 shares of common stock, respectively, from the exercise of stock options.

Warrants to Acquire Common Stock

In 2013, the Company issued warrants to purchase an aggregate of 250,000 shares of common stock. The exercise price was determined to be 80% of the implied price per share of common stock in a qualified financing of at least $1 million. Based upon the Series A Redeemable Convertible Preferred Stock sale which exceeded the $1 million threshold, the exercise price of the warrants would be $0.12. All warrants remain outstanding as of December 31, 2019. No warrants were exercised or expired during the years ended December 31, 2019 and 2018. The warrants can be exercised on or prior to December 23, 2020.

12. Stock-Based Compensation

During January 2017, the Company adopted the 2017 Equity Incentive Plan (the "2017 Plan"), which provides for granting of restricted stock, options to purchase shares of common stock and other awards to employees, directors and consultants. In March 2017, the Company amended the 2017 Plan to increase the number of available shares to 11,409,305. The 2017 Plan has a termination date of January 2027. In June 2018, the Company adopted the 2018 Equity Incentive Plan (the "2018 Plan") which provides for granting of restricted stock, options to purchase shares of common stock, and other awards to employees, directors and consultants, and reserved 30,071,484 shares for this purpose. The 2018 Plan was amended in July 2018 to increase the number of available shares to 31,234,675. The 2018 Plan has a termination date of June 2028. As of December 31, 2019, there were 11,759,297 shares available to grant under the 2018 Plan and 46,112 shares available to grant under the 2017 Plan.

The number of options to be granted under the 2017 and 2018 Plans, the option exercise prices, and other terms of the options are determined by the Board of Directors in accordance with the terms of the Equity Incentive Plans. Generally, stock options are granted at fair value, become exercisable over a period of one to four years, expire in ten years or less and are subject to the employee's continued employment.

NexImmune, Inc.

NOTES TO FINANCIAL STATEMENTS
For the years ended December 31, 2018 and 2019

Stock-based compensation expense was recorded in the following financial statement line items within the statement of operations for the years ended December 31, 2019 and 2018:

	2019	2018
Research and development expenses	$ 408,646	$ 323,715
General and administrative expenses	1,125,687	882,645
Total stock-based compensation expense	$ 1,534,333	$ 1,206,360

The following is a summary of option activity under the Company's Stock Option Plans:

	Stock Options	Weighted Average Exercise Price	Weighted Average Remaining Contractual Term (years)	Aggregate Intrinsic Value (millions)
Outstanding as of January 1, 2019	28,182,628	$ 0.15		
Granted	7,762,123	$ 0.25		
Exercised	(1,488,488)	$ 0.14		
Cancelled	(3,369,846)	$ 0.15		
Forfeited	(1,615,683)	$ 0.18		
Outstanding as of December 31, 2019	29,470,734	$ 0.17	8.26	$ 2.3
Vested or expected to vest as of December 31, 2019	28,530,734	$ 0.17	8.22	$ 2.3
Exercisable as of December 31, 2019	21,867,008	$ 0.16	7.99	$ 2.0
Shares unvested as of December 31, 2019	7,603,726	$ 0.21	9.05	$ 0.3

The weighted average fair value of the options granted during the years ended December 31, 2019 and 2018 was $0.19 and $0.12, respectively. The options were valued using the Black-Scholes option-pricing model for the year ended December 31, 2019 and 2018 with the following assumptions:

	2019	2018
Expected volatility	100%	100%
Risk-free interest rate	1.6% to 2.5%	2.1% to 2.9%
Expected dividend yield	0%	0%
Expected term	5.0 to 6.1 years	5.8 to 6.3 years

The total fair value of stock options vested during the years ended December 31, 2019 and 2018 was approximately $1.1 million, and $2.3 million, respectively. The intrinsic value of stock options exercised for the years ended December 31, 2019 and 2018 was approximately $162,000 and $89,000, respectively.

As of December 31, 2019, there was $878,238 of total unrecognized compensation expense related to unvested options that will be recognized over a weighted average period of 1.98 years.

NexImmune, Inc.

NOTES TO FINANCIAL STATEMENTS
For the years ended December 31, 2018 and 2019

13. Income Taxes

The Company's provision for income taxes consists of the following for the years ended December 31, 2019 and 2018:

	2019	2018
Current income tax provision:		
Federal	$ -	$ -
State	-	-
Total	-	-
Deferred income tax benefit:		
Federal	4,384,418	2,445,431
State	1,270,414	758,957
Total	5,654,832	3,204,388
Change in valuation allowance	(5,654,832)	(3,204,388)
Total provision (benefit) for income taxes	$ -	$ -

A reconciliation of the statutory U.S. income tax rate to the effective income tax rate as of December 31, 2019 and 2018 is as follows:

	2019	2018
U.S. Federal statutory rate	21.00%	21.00%
State taxes	6.52%	6.52%
Permanent differences	(1.80)%	(2.19)%
Other adjustments	1.80%	(0.36)%
Change in Valuation Allowance	(27.52)%	(24.97)%
Provision for income taxes	0.00%	0.00%

The significant components of the Company's deferred tax assets (liabilities) as of December 31, 2019 and 2018 were as follows:

	2019	2018
Deferred tax assets:		
Net operating loss carryforward	$ 11,559,358	$ 6,461,717
Accrued compensation	241,171	46,570
Stock compensation	155,372	100,723
Research and development credits	291,022	-
Gross deferred income tax assets	12,246,923	6,609,010
Less: Valuation allowance	(11,890,569)	(6,235,736)
Total deferred income tax assets	356,354	373,274
Deferred tax liabilities:		
Depreciation and amortization	(356,354)	(373,274)
Total deferred tax liabilities	(356,354)	(373,274)
Net deferred tax assets	$ -	$ -

NexImmune, Inc.

NOTES TO FINANCIAL STATEMENTS
For the years ended December 31, 2018 and 2019

At December 31, 2019 and 2018, the Company had net operating loss carryforwards for income tax purposes of approximately $42.0 million and $23.4 million, respectively, which are available to offset future federal taxable income, if any. At December 31, 2019 and 2018, the Company had net operating loss carryforwards for income tax purposes of approximately $42.0 million and $23.4 million, respectively, which are available to offset future state taxable income, if any. At December 31, 2019 and 2018, the Company also had federal research and development tax credit carryforwards of $291,000 and $0, respectively, available to potentially offset future federal income taxes. Approximately $10.5 million of the federal NOL was generated prior to 2018 and will be expiring between 2035 and 2037, while the remaining $31.5 million will be carried forward indefinitely. The state NOL will expire in increments through 2037, beginning in 2035. The federal research and development tax credit carryforwards, if not utilized, will expire beginning in 2037.

However, the deductibility of such net operating losses and tax credits may be limited. Under Section 382 and 383 of the Internal Revenue Code of 1986, as amended (the "Code"), and corresponding provisions of state law, if a corporation undergoes an "ownership change," which generally occurs if the percentage of the corporation's stock owned by 5% stockholders increases by more than 50% over a three-year period, the corporation's ability to use its pre-change NOL carryforwards and other pre-change tax attributes to offset its post-change income may be limited.

The Company has not determined if it has experienced Section 382 and Section 383 ownership changes in the past and if a portion of its NOL and tax credit carryforwards are subject to an annual limitation under Section 382 and 383. In addition, the Company may experience ownership changes in the future as a result of subsequent shifts in its stock ownership, some of which may be outside of its control. If the Company determines that an ownership change has occurred and its ability to use its historical NOL and tax credit carryforwards is materially limited, it would harm the Company's future operating results by effectively increasing the Company's future tax obligations. The Company's tax returns for all years from 2011 remain subject to examination by Federal and the State of Maryland taxing authorities.

The Company recognizes the effect of income tax positions only if those positions more likely than not of being sustained. At December 31, 2019, the Company had no gross unrecognized tax benefits and did not recognize any interest or penalties related to uncertain tax positions at December 31, 2019.

At December 31, 2019, the Company's net deferred income tax assets are not more likely than not to be utilized due to the lack of sufficient sources of future taxable income and cumulative book losses which have resulted over the years. The net change in valuation allowance for the year ended December 31, 2019 was an increase of $5.6 million.

On March 27, 2020, Congress enacted the Coronavirus Aid, Relief and Economic Security Act ("CARES Act") to provide certain relief as a result of the COVID-19 pandemic. The Company is currently evaluating how the provisions in the CARES Act will impact the financial statements.

14. Employee Benefit Plan

The Company has a defined contribution plan under the Internal Revenue Code Section 401(k). The plan covers all employees who meet minimum age and service requirements and allows participants to defer a portion of their annual compensation on a pre-tax basis. The Company may contribute a matching contribution at its discretion. During the year ended December 31, 2019 and 2018, the Company made contributions of $72,778 and $21,689, respectively, to the plan.

NexImmune, Inc.

NOTES TO FINANCIAL STATEMENTS
For the years ended December 31, 2018 and 2019

15. Related Party Transactions

The former CFO of the Company during a portion of 2019 and all 2018, is also the president of Noble Life Sciences, Inc. ("Noble Life Sciences" or "Noble"). He is also the CFO of Convergene, Inc. A former advisor to the Company's Board of Directors during 2018, is on the Board of Directors of Noble. Noble performs consulting and research services for NexImmune. The Company recorded in research and development expenses approximately $31,000 and $102,000 for these research services during the years ended December 31, 2019 and 2018, respectively. The Company sublet a portion of their facility to Convergene, Inc during 2018. Total sublease income for the year ended December 31, 2018 was $1,755 which was collected in 2018. There was no sublease income from Convergene in 2019.

In June 2017, the Company made an unsecured, noninterest-bearing advance to an officer of the Company in the amount of $50,000 with no terms for repayment. In December 2018, approximately $38,000 was repaid as of December 31, 2018. The balance of approximately $12,000 was repaid in 2019.

In April 2018, the Company entered into a Loan Agreement and Promissory Note agreement to lend $150,000 to an officer of the Company. The loan was to be repaid to the Company in two equal installments of $75,000 plus accrued interest on March 30, 2019 and March 30, 2020. The loan bears an interest rate of 2.72%, compounded annually. In December 2018, approximately $75,000 was repaid. The balance of approximately $81,000, including accrued interest of approximately $2,700, and $78,000, including accrued interest of approximately $3,000, is included in employee advances as of December 31, 2019 and 2018, respectively.

In 2016, the Company agreed with several employees and a board advisor to accrue and postpone salary and consulting payments due totaling approximately $800,000, of which approximately $615,000 was paid in December 2018, and approximately $111,000 was settled through the exercise of stock options. The remaining balance of approximately $74,000 was paid during 2019.

16. Subsequent Events

The Company has evaluated subsequent events through July 13, 2020, which is the date the financial statements were available to be issued.

In April 2020, the remaining balance of approximately $81,000, including accrued interest thereon of approximately $2,700, was repaid on a note due from an officer.

During 2020, the Company issued 9.8 million options to employees and board members to purchase common stock of the Company at an exercise price of $0.30 per share under its 2018 Plan.

The Company applied for a loan in the first quarter of 2020 under the Paycheck Protection Program offered by the U.S. Small Business Administration (SBA). The Company received $843,619 on May 1, 2020 under this program. A portion of this loan, up to 100%, may be forgiven and will be calculated on payroll and other costs incurred over an eight-week period beginning of the date of the loan, or May 1, 2020. The SBA has now extended this period from 8 to 24 weeks.

During April 2020, the Board of Directors authorized the Company to offer 6% Convertible Promissory Notes of up to $15 million according to the terms set forth in a Note Purchase Agreement. The Company has issued $6.5 million gross proceeds of these Notes as of July 13, 2020. Approximately $2.9 million of these proceeds were received from current and former members of the Board of Directors.

Table of Contents

NexImmune Inc.

Condensed Balance Sheets

	September 30, 2020 (unaudited)	December 31, 2019
Assets		
Current assets		
Cash and cash equivalents	$ 1,980,313	$ 9,128,987
Marketable securities	-	1,006,878
Restricted cash	67,500	67,500
Prepaid expenses and other current assets	1,742,350	833,187
Total current assets	3,790,163	11,036,552
Property and equipment, net	2,880,428	2,577,930
Related party advances	-	80,224
Other non-current assets	23,373	23,372
Total assets	$ 6,693,964	$ 13,718,078
Liabilities, Redeemable Convertible Preferred Stock and Stockholders' Deficit		
Current liabilities		
Accounts payable	$ 2,149,954	$ 1,171,654
Accrued expenses	2,273,121	1,853,372
Derivative liability	879,492	-
Convertible notes issued to related parties	2,498,446	-
Convertible notes	7,243,517	-
Total current liabilities	15,044,530	3,025,026
Deferred rent, net of current	35,293	64,677
Other non-current liabilities	848,554	17,194
Total liabilities	15,928,377	3,106,897
Commitments and contingencies	-	-
Redeemable convertible preferred stock		
Series A Redeemable Convertible Preferred Stock, $0.0001 par value, 121,735,303 shares authorized, 121,735,303 shares issued and outstanding as of September 30, 2020 and December 31, 2019	35,047,435	35,047,435
Series A-2 Redeemable Convertible Preferred Stock, $0.0001 par value, 28,384,899 shares authorized, 22,047,361 shares issued and outstanding as of September 30, 2020 and December 31, 2019	7,685,865	7,685,865
Series A-3 Redeemable Convertible Preferred Stock, $0.0001 par value, 34,061,879 shares authorized, 31,209,734 shares issued and outstanding as of September 30, 2020, and December 31, 2019	10,887,449	10,887,449
Total redeemable convertible preferred stock	53,620,749	53,620,749
Stockholders' deficit		
Common Stock, $0.0001 par value, 246,180,160 shares authorized, 21,666,623 issued and outstanding as of September 30, 2020 and 21,661,936 shares issued and outstanding as of December 31, 2019	2,167	2,166
Additional paid-in-capital	6,713,447	4,703,768
Accumulated deficit	(69,570,776)	(47,716,008)
Accumulated other comprehensive loss	-	506
Total stockholders' deficit	(62,855,162)	(43,009,568)
Total liabilities, redeemable convertible preferred stock and stockholders' deficit	$ 6,693,964	$ 13,718,078

The accompanying notes are an integral part of these condensed financial statements.

NexImmune Inc.

Condensed Statements of Operations

	For the Nine Months Ended September 30,	
	2020	**2019**
Revenue	$ -	$ -
Operating expenses		
Research and development	13,394,483	11,472,874
General and administrative	7,406,054	4,244,894
Total operating expenses	20,800,537	15,717,768
Loss from operations	(20,800,537)	(15,717,768)
Other income (expenses)		
Interest income	20,680	227,862
Interest expense	(743,996)	(6,589)
Change in fair value of derivative liability	(397,244)	-
Other	66,329	71,709
Other income (expense), net	(1,054,231)	292,982
Net loss	(21,854,768)	(15,424,786)
Accumulated dividends on Redeemable Convertible Preferred Stock	(2,456,413)	(1,945,111)
Net loss available to common stockholders	$ (24,311,181)	$ (17,369,897)
Basic and diluted net loss per common share	$ (1.12)	$ (0.81)
Basic and diluted weighted-average number of common shares outstanding	21,662,672	21,348,440

The accompanying notes are an integral part of these condensed financial statements.

NexImmune Inc.

Condensed Statements of Comprehensive Loss

	For the Nine Months Ended September 30,	
	2020	**2019**
Net loss	$ (21,854,768)	$ (15,424,786)
Other comprehensive loss:		
Unrealized gain (loss) on available-for-sale securities, net of tax	(506)	30,869
Comprehensive loss	$ (21,855,274)	$ (15,393,917)

The accompanying notes are an integral part of these condensed financial statements.

NexImmune Inc.

Condensed Statements of Changes in Redeemable Convertible Preferred Stock and Stockholders' Deficit

	Redeemable Convertible Preferred Stock						Stockholders' Deficit					
	Series A		Series A-2		Series A-3		Common Stock		Additional Paid-in Capital	Accumulated Deficit	Accumulated Other Comprehensive Income (Loss)	Total Stockholders' Deficit
	Shares	Amount	Shares	Amount	Shares	Amount	Shares	Amount				
December 31, 2018	121,735,303	$35,047,435					20,173,448	$ 2,017	$2,959,754	$ (27,169,297)	$ (29,547)	$ (24,237,073)
Issuance of Series A-2 redeemable Convertible Preferred Stock, net of issuance costs of $81,428	-	-	22,047,361	7,685,865	-	-	-	-	-	-	-	-
Exercise of stock options	-	-	-	-	-	-	1,282,334	128	180,544			$ 180,672
Stock-based compensation	-	-	-	-	-	-			1,329,364			$ 1,329,364
Unrealized gain on available-for-sale securities	-	-	-	-	-	-					30,869	$ 30,869
Net Loss	-	-	-	-	-	-				(15,424,786)		$ (15,424,786)
September 30, 2019	121,735,303	$35,047,435	$22,047,361	$ 7,685,865	-	$ -	21,455,782	$ 2,145	$4,469,662	$ (42,594,083)	$ 1,322	$ (38,120,954)
December 30, 2019	121,735,303	$35,047,435	22,047,361	$7,685,865	31,209,734	$10,887,449	21,661,936	$ 2,166	$4,703,768	$ (47,716,008)	$ 506	$ (43,009,568)
Exercise of stock options	-	-	-	-	-	-	4,687	1	838	-	-	$ 839
Stock-based compensation	-	-	-	-	-	-	-	-	943,210	-	-	$ 943,210
Unrealized gain on available-for-sale securities	-	-	-	-	-	-	-	-	-	-	(506)	$ (506)
Beneficial conversion feature on convertible notes	-	-	-	-	-	-	-	-	1,065,631	-	-	$ 1,065,631
Net Loss	-	-	-	-	-	-	-	-	-	(21,854,768)	-	$ (21,854,768)
September 30, 2020	121,735,303	$35,047,435	22,047,361	$7,685,865	31,209,734	$10,887,449	21,666,623	$ 2,167	$6,713,447	$ (69,570,776)	$ -	$ (62,855,162)

The accompanying notes are an integral part of these condensed financial statements.

NexImmune Inc.

Condensed Statements of Cash Flows

	For the Nine Months ended September 30, 2020	2019
Cash flows from operating activities:		
Net loss	$ (21,854,768)	$ (15,424,786)
Adjustments to reconcile net loss to net cash used in operation activities:		
Depreciation and amortization	448,108	304,728
(Gain) loss on asset disposal	(152)	261
Non-cash interest expense	555,449	-
Stock-based compensation	943,210	1,329,364
Change in fair value of derivative liability	397,244	-
Changes in operating assets and liabilities:		
Prepaid expenses and other current assets	(909,163)	(690,492)
Accounts payable	817,769	(5,197)
Accrued expenses, deferred rent and other	389,388	106,516
Net cash used in operating activities	(19,212,915)	(14,379,606)
Cash flows from investing activities:		
Purchase of property and equipment	(638,857)	(1,161,132)
Proceeds from disposal of equipment	550	-
Collection on employee advances	80,224	10,447
Purchases of available-for-sale securities	-	(7,059,064)
Proceeds from maturities and sales of available-for-sale securities	1,006,371	15,023,876
Net cash provide by (used in) investing activities	448,288	6,814,127
Cash flows from financing activities:		
Principal payments on capital leases	(14,773)	(13,696)
Proceeds from the issuance of Series A-2 redeemable convertible preferred stock, net of issuance costs	-	7,685,865
Proceeds from the issuance of convertible notes from related parties	2,900,460	-
Proceeds from the issuance of convertible notes	8,017,826	-
Issuance costs on convertible notes	(132,017)	-
Proceeds from long term debt	843,619	-
Proceeds from the exercise of stock options	838	180,672
Net cash provided by financing activities	11,615,953	7,852,841
Net (decrease) increase in cash and cash equivalents	(7,148,674)	287,362
Net cash, cash equivalents and restricted cash at the beginning of period	9,196,487	425,995
Net cash, cash equivalents and restricted cash at the end of period	$ 2,047,813	$ 713,357
Supplemental disclosure of cash flow information:		
Cash paid during the year for interest	$ 1,871	$ 2,540
Supplemental disclosure of noncash investing and financing activities:		
Property and equipment purchases included in accounts payable and accrued expenses	$ 112,147	$ 145,248

The accompanying notes are an integral part of these condensed financial statements.

1. Description of the Business

NexImmune, Inc. (the “Company” or “NexImmune”), a Delaware corporation headquartered in Gaithersburg, Maryland, was incorporated on June 7, 2011. The Company is a clinical-stage biotechnology company developing unique approaches to T cell immunotherapies based on its proprietary Artificial Immune Modulation (AIM) technology. The AIM technology is designed to generate a targeted T cell-mediated immune response and is initially being developed as a cell therapy for the treatment of hematologic cancers. AIM nanoparticles (AIM-np) act as synthetic dendritic cells to deliver immune-specific signals to targeted T cells and can direct the activation or suppression of cell-mediated immunity. The Company initiated two clinical trials during 2020 for the treatment of cancer.

2. Basis of Presentation and Going Concern

Basis of Presentation

The accompanying unaudited condensed financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America (“U.S. GAAP”) for interim financial information and the applicable rules and regulations of the Securities and Exchange Commission (“SEC”). The balance sheet as of December 31, 2019 was derived from the Company’s audited financial statements. Accordingly, they do not include all of the information and footnotes required by GAAP for annual financial statements. In our management’s opinion, the accompanying unaudited condensed financial statements contain all adjustments, including normal, recurring adjustments, necessary to fairly present our financial position as of September 30, 2020 and December 31, 2019, our statements of operations, comprehensive loss, changes in redeemable convertible preferred stock and stockholders’ deficit and statements of cash flows for the nine-month periods ended September 30, 2020 and 2019. Results as of and for the nine months ended September 30, 2020 are not necessarily indicative of the results that may be expected for the year ending December 31, 2020.

The condensed financial statements and notes thereto should be read in conjunction with the financial statements and notes included in the Company’s financial statements as of and for the year ended December 31, 2019.

Going Concern

As of September 30, 2020, and at the date these condensed financial statements were available to be issued, our cash position and history of losses required management to assess our ability to continue as a going concern. The Company’s operations are subject to certain risks and uncertainties including, among others, the risk associated with development of products that must receive regulatory approval before market launch. Since inception, the Company has incurred losses from operations, negative cash flows from operations and has relied on debt and equity investments to fund its operations. We expect that operating losses and negative cash flows from operations will continue for at least the next several years and we will need to access additional funds to achieve our strategic goals. If necessary, we may seek to raise substantial funds through the sale of our common stock, through debt financing or through establishing strategic collaboration agreements. Whether, and when, the Company can attain profitability and positive cash flows from operations is uncertain. We are currently in the process of fundraising through the issuance of 6% Convertible Notes (“Convertible Notes”) offering of up to $50,000,000 and have raised $15,678,286 through the date of this report. There is no commitment for the remaining amount. Based on our cash as of the date of this report, we believe that we have adequate resources to fund our operations into the first quarter of 2021, without considering any potential future milestone payments that we may receive under any new collaborations, or any future capital financing transactions. As a result, there is substantial doubt about the Company’s ability to continue as a going concern and maintain operations for the next twelve months. The condensed financial statements do not include any adjustments to reflect the possible future effects on the recoverability and classification of assets or the amounts and classification of liabilities that may result from the outcome of this uncertainty. If future financing is not achieved, the Company may be required to curtail spending to reduce cash outflows.

3. Summary of Significant Accounting Policies

Use of Estimates

The preparation of the condensed financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the condensed financial statements and the reported amounts of revenues and expenses during the reporting period.

On an ongoing basis, we evaluate our estimates, including those related to the recoverability of long-lived assets, stock-based compensation, the valuation of financial instruments, and the valuation of deferred tax assets and liabilities. We base our estimates on historical experience and on various other assumptions that we believe to be reasonable under the circumstances. Actual results could differ from those estimates.

Concentrations of credit risk

Financial instruments which potentially subject the Company to credit risk consist principally of cash and marketable debt securities. All cash is held in United States financial institutions that are federally insured. At times, the Company may maintain cash balances in excess of the federally insured amount. The Company has not experienced any losses in such accounts and management believes it is not exposed to any significant credit risk. Our investments in marketable debt securities have been issued by corporate entities and government-sponsored enterprises with high credit ratings. We mitigate investment risks by investing in highly rated securities with relatively short maturities that we believe do not subject us to undue investment or credit risk. If any of these financial institutions fail to perform their obligations under the terms of these financial instruments, our maximum exposure to potential losses would be equal to the amounts reported on our balance sheet.

Segment and Geographic Information

The Company operates in a single business segment operating exclusively in the United States.

Cash and Cash Equivalents

Cash and cash equivalents consist of investment in money market funds with commercial banks and financial institutions. The Company considers all investments in highly liquid financial instruments with an original maturity of three months or less at the date of purchase to be cash equivalents. Cash equivalents are recorded at amortized cost, plus accrued interest, which approximates fair value.

Marketable Securities

Marketable securities consist of debt securities with maturities greater than three months from the date of purchase that include commercial paper and corporate notes. Classification of marketable securities between current and non-current is based on the maturity date at the balance sheet date after taking into consideration the Company’s ability and intent to hold the investment to maturity.

Interest and dividend income are recorded when earned and included in interest income in the accompanying condensed statements of operations. Premiums and discounts, if any, on marketable securities are amortized or accreted to maturity and included in interest income (expense) in the accompanying condensed statements of operations. The specific identification method is used in computing realized gains and losses on the sale of the Company’s marketable securities.

The Company classifies its marketable securities as available-for-sale. We determine the appropriate classification of the securities at the time they are acquired and evaluate the appropriateness of such classifications at each balance sheet date. As of September 30, 2020, there were no marketable securities held by

the Company. As of December 31, 2019, all marketable securities were classified as available-for-sale. Marketable securities that are classified as available-for-sale are measured at fair value in the balance sheet, and unrealized gains and losses on marketable securities are reported as a component of accumulated other comprehensive loss in stockholders' deficit until realized. Marketable securities are evaluated periodically to determine whether the carrying value of a marketable security exceeds its fair value and the decline in value is determined to be other-than-temporary. Management reviews criteria, such as the general market conditions, magnitude and duration in which the fair value has been less than the carrying value, the investment issuer's financial condition and business outlook, as well as the Company's ability to hold the securities until the recovery of its amortized cost basis, to determine whether the decline in value is other-than-temporary. If a decline in value is determined to be other-than-temporary, the value of the marketable security is reduced, and the impairment is recorded as other income (expense) in the accompanying condensed statements of operations.

Restricted Cash

Amounts included in restricted cash represent those required as collateral on corporate credit cards. The following table provides a reconciliation of cash, cash equivalents, and restricted cash reported within the balance sheet that sum to the total of the same amounts shown in the statement of cash flows.

	September 30, 2020
Cash	$ 1,980,313
Restricted cash	67,500
	$ 2,047,813

Fair value measurements

The Company's financial instruments include cash and cash equivalents, marketable securities, accounts payable, accrued expenses and derivative liabilities. The fair values of the cash and cash equivalents, accounts payable and accrued expenses approximated their carrying values as of September 30, 2020 and December 31, 2019, due to their short-term maturities. For a description of the fair value of marketable securities, refer to Note 4. The Convertible Notes as discussed in Note 12 contain embedded derivative features that are required to be bifurcated and remeasured to fair value at each reporting period.

The Company accounts for recurring and nonrecurring fair value measurements in accordance with ASC 820, Fair Value Measurements ("ASC 820"). ASC 820 defines fair value, establishes a fair value hierarchy for assets and liabilities measured at fair value, and requires expanded disclosures about fair value measurements. The ASC hierarchy ranks the quality of reliability of inputs, or assumptions, used in the determination of fair value, and requires assets and liabilities carried at fair value to be classified and disclosed in one of the following three categories:

Level 1— Fair value is determined by using unadjusted quoted prices that are available in active markets for identical assets and liabilities.

Level 2— Fair value is determined by using inputs, other than Level 1 quoted prices that are directly and indirectly observable. Inputs can include quoted prices for similar assets and liabilities in active markets or quoted prices for identical assets and liabilities in inactive markets. Related inputs can also include those used in valuation or other pricing models that can be corroborated by observable market data.

Level 3— Fair value is determined by inputs that are unobservable and not corroborated by market data. Use of these inputs involves significant judgments to be made by a reporting entity.

In instances where the determination of the fair value measurement is based on inputs from different levels of fair value hierarchy, the fair value measurement will fall within the lowest level input that is significant to the fair value measurement in its entirety. The Company periodically evaluates financial assets and liabilities subject to fair value measurements to determine the appropriate level at which to classify them each reporting period. This determination requires the Company to make judgments as to the significance of inputs used in determining fair value and where such inputs lie within the ASC 820 hierarchy. The Company uses specific identification for securities sold or reclassified out of accumulated other comprehensive income.

During 2020, a derivative liability was recorded as a result of the issuance of Convertible Notes (Note 12). The Company determined the fair value of the derivative liability upon issuance, and then re-measured its fair value at September 30, 2020. The fair value measurement of the derivative liability is classified as Level 3 under the fair value hierarchy. The fair value of the derivative liability was determined using a binomial lattice model by calculating and comparing the fair value of the Convertible Notes with and without the embedded features required to be accounted for as free-standing financial instrument.

Key inputs into this valuation model are (1) the probability of various events which result in conversion prior to the maturity of the Convertible Notes; (2) the estimated timing of conversion; (3) time period to maturity; (4) the fair value of the Company's stock underlying the Convertible Notes within each scenario; (5) the expected volatility of the Company's stock through the various events resulting in conversion; (6) the risk-adjusted discount rate; and (7) the Company's stock dividend yield.

The recurring Level 3 fair value measurements of the embedded features of the Convertible Notes include the following significant unobservable inputs as of September 30, 2020:

Unobservable Input	Assumptions
Probabilities of conversion provisions	5%-50%
Estimated timing of conversion (yrs)	0.38-0.56
Time period to maturity (yrs)	0.56
Fair value of the Company's stock	$0.25-$0.39
Stock price volatility	95%
Risk-adjusted discount rate	26.91%
Dividend yield	0%

Property and equipment

Property and equipment are stated at cost, less accumulated depreciation and amortization. Major replacements and improvements that extend the useful lives of assets are capitalized, while general repairs and maintenance are charged to expense as incurred. Property and equipment are depreciated using the straight-line method over the estimated useful lives of the assets. Leasehold improvements are amortized over the estimated useful lives of the assets or the related lease term, whichever is shorter. Upon retirement or disposal, the cost and related accumulated depreciation are removed from the balance sheet and the resulting gain or loss is recognized within operating expenses.

The estimated useful lives of property, plant and equipment by major category are as follows:

	Estimated Useful Life
Laboratory equipment	7 years
Computer equipment and software	3 years
Furniture and fixtures	7 years
Leasehold improvements	Shorter of lease term or useful life

Impairment of long-lived assets

The Company evaluates the carrying value of its long-lived asset group for potential impairment whenever events or changes in circumstances indicate that the carrying amount of such assets may not be recoverable. Recoverability is determined by comparing future undiscounted cash flows associated with such assets to the related carrying value. An impairment loss may be recognized when the estimated undiscounted future cash flow is less than the carrying amount of the asset. If these cash flows are less than the carrying value of such asset group, the Company then determines the fair value of the underlying asset group. Any impairment loss to be recognized is measured as the amount by which the carrying value of the asset group exceeds the fair value of the asset group. No impairments of long-lived assets were recognized during the nine months ended September 30, 2020 and 2019.

Redeemable convertible preferred stock

The Company's redeemable convertible preferred stock is classified outside of stockholders' deficit because the shares contain deemed liquidation rights which represent a contingent redemption feature not solely within the control of the Company.

The Company's policy is to accrete the carrying value and related issuance costs of the redeemable convertible preferred stock to its redemption value when such redemption becomes probable.

Convertible Instruments and Embedded Derivatives

The Company applies the accounting standards for derivatives and hedging and for distinguishing liabilities from equity when accounting for hybrid contracts that contain conversion options and other embedded features. The Company bifurcates embedded features from their host instruments and accounts for them as free-standing derivative financial instruments according to certain criteria.

The Company's derivative instrument related to certain features embedded within the Company's Convertible Notes as discussed in Note 12. The derivative is accounted for as a derivative liability and remeasured to fair value as of each balance sheet date. The related remeasurement adjustments are recognized in the accompanying condensed statements of operations.

If the conversion feature does not require derivative treatment, the instrument is evaluated for any beneficial conversion feature ("BCF"). The intrinsic value of a BCF inherent to a convertible instrument is treated as a discount to the convertible instrument. This discount is amortized over the period from the date of issuance to the stated maturity using the effective interest method. Beneficial conversion features that are contingent upon the occurrence of a future event are recorded upon the occurrence of the event. The BCF is measured as a reduction of the carrying amount of the convertible note equal to the intrinsic value of the conversion feature and is credited to additional paid-in-capital.

Upon any change to the Company's debt arrangements, the Company evaluates the amendment to determine whether a debt modification or extinguishment has occurred, including whether the amendment should be accounted for as a trouble debt restructuring.

Research and development

Research and development costs are expensed as incurred. Research and development expenses include personnel costs associated with research and development activities, including share-based compensation, as well as costs for third-party contractors to perform research, conduct clinical trials and manufacture drug supplies and materials. The Company accrues for costs incurred by external service providers, based on its estimates of services performed and costs incurred. These estimates include the level of services performed by the third parties, and other indicators of the services completed. Based on the timing of amounts invoiced by service providers, the Company may also record payments made to those providers as prepaid expenses that will be

recognized as expenses in future periods as the related services are rendered. As of September 30, 2020, and December 31, 2019, approximately $1,407,000 and $569,000, respectively, was recorded as prepaid expenses related to research and development expenses.

Clinical trial expenses

The Company makes payments in connection with clinical trials under contracts with research organizations that support conducting and managing clinical trials. The financial terms of these agreements are subject to negotiation and vary from contract to contract and may result in uneven cash flows. Generally, these agreements set forth the scope of work to be performed at a fixed fee, unit price or on a time and materials basis. A portion of the obligation to make payments under these contracts depends on factors such as the successful enrollment or treatment of patients or the completion of other clinical trial milestones.

Expenses related to clinical trials are accrued based on estimates and/or representations from service providers regarding work performed, including actual level of patient enrollment, completion of patient studies and progress of the clinical trials. Other incidental costs related to patient enrollment or treatment are accrued when reasonably certain. If the amounts the Company is obligated to pay under clinical trial agreements are modified (for instance, as a result of changes in the clinical trial protocol or scope of work to be performed), the accruals are adjusted accordingly. Revisions to contractual payment obligations are charged to expense in the period in which the facts that give rise to the revision become reasonably certain.

Stock-based compensation

The Company records compensation expense associated with stock options and other forms of equity compensation based on the estimated fair value at the grant date, which is recognized over the requisite service period. The Company's policy is to account for forfeitures as they occur. The Company uses the Black-Scholes-Merton option pricing ("Black-Scholes") model to estimate the fair value of stock options. The Black-Scholes model requires the following input-based assumptions that are highly subjective in the determination of stock-based compensation cost:

Fair value of Common Stock: Given the lack of an active public market for the common stock, the Company has from time to time engaged an independent valuation firm to assist management in determining the fair value of its common stock. In the absence of a public trading market, and as a clinical stage company with no revenues, the Company believes that it is appropriate to consider a range of factors to determine the fair market value of the common stock at each grant date. In determining the fair value of its common stock, the Company uses methodologies, approaches, and assumptions consistent with the American Institute of Certified Public Accountants' (AICPA) Audit and Accounting Practice Aid Series: Valuation of Privately Held Company Equity Securities Issued as Compensation. In addition, the Company considered various objective and subjective factors, along with input from an independent third-party valuation firm. The factors included (1) the Company's achievement of clinical and operational milestones; (2) the significant risks associated with the Company's stage of development; (3) capital market conditions for life science companies, particularly similarly situated, privately held, early-stage life science companies; (4) the Company's available cash, financial condition, and results of operations; (5) the most recent sales of the Company's redeemable convertible preferred stock and issuance of Convertible Notes; and (6) the preferential rights of the outstanding redeemable convertible preferred stock.

Expected volatility: The expected volatility was based on the historical volatility of comparable public companies from a representative peer group selected based on industry and market capitalization data. The historical volatility is calculated based on a period of time commensurate with the expected term assumption.

Risk-free interest rate: The risk-free interest rate was based on the U.S. Treasury rates for a term approximating the expected term of the option.

Expected dividend yield: The expected dividend yield was 0% because the Company has not historically paid and does not expect to pay any dividends for the foreseeable future.

Expected term: The Company uses the simplified method as prescribed by the SEC Staff Accounting Bulletin No. 107, Share-Based-Payment, to calculate the expected term for options granted to employees as it does not have sufficient historical exercise data to provide a reasonable basis upon which to estimate the expected term.

Stock-based payments issued to nonemployees for goods and services are measured at their estimated fair value and are treated the same as those granted to employees under the guidelines of ASU 2018-07, Compensation – Stock Compensation (Topic 718), except that expenses are recognized when service is rendered.

Income taxes

Income taxes are accounted for under the asset and liability method. Deferred tax assets and liabilities are recognized for the estimated future tax consequences attributable to temporary differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax basis. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in income in the period that includes the enactment date. Deferred tax expense or benefit is the result of changes in deferred tax assets and liabilities.

Valuation allowances are established when necessary to reduce deferred tax assets where, based upon the available evidence, the Company concludes it is more-likely-than-not that the deferred tax assets will not be realized. In evaluating its ability to recover deferred tax assets, the Company considers all available positive and negative evidence, including its operating results, on-going tax planning and forecasts of future taxable income on a jurisdiction-by-jurisdiction basis. The Company recorded a valuation allowance against all estimated net deferred tax assets as of September 30, 2020 and December 31, 2019.

Liabilities are provided for tax benefits for which realization is uncertain. Such benefits are only recognized when the underlying tax position is considered more-likely-than-not to be sustained on examination by a taxing authority, assuming they possess full knowledge of the position and facts. Recognized income tax positions are measured at the largest amount that is greater than more-likely-than-not of being realized. Changes in the recognition or measurement are reflected in the period in which the change in estimate occurs. Interest and penalties related to uncertain tax positions are recorded in the provision of income taxes. There were no uncertain tax positions or income tax related interest and penalties recorded during the nine-months ended September 30, 2020 and 2019.

Net Loss Per Share Attributable to Common Stockholders

Basic net loss per common share is determined by dividing net loss attributable to common stockholders by the weighted-average number of common shares outstanding during the period, without consideration of common stock equivalents. Diluted net loss per share is computed by dividing net loss attributable to common stockholders by the weighted-average number of common stock and common stock equivalents. The Company adjusts net loss to arrive at the net loss attributable to common stockholders to reflect the amount of dividends accumulated during the period on the Company's redeemable convertible preferred stock. Such dividends are only payable if and when declared by the Board of Directors (Note 12). The treasury stock method is used to determine the dilutive effect of the Company's stock option grants and warrants and the if-converted method is used to determine the dilutive effect of the Company's redeemable convertible preferred stock and Convertible Notes. For the nine months ended September 30, 2020 and 2019, the Company had a net loss attributable to common stockholders, and as such, all outstanding stock options and shares of redeemable convertible preferred stock were excluded from the calculation of diluted loss per share. Under the if converted method, convertible instruments that are in the money, are assumed to have been converted as of the beginning of the period or when issued, if later. Optional Conversion 2 is used to determine the dilutive effect of the Company's Convertible

Notes (Note 12). Additionally, the effects of any interest expense and changes in fair value of bifurcated derivatives is added back to the numerator of the diluted net loss per share calculation if the conversion of the Convertible Notes is dilutive. The following table sets forth the computation of basic and diluted earnings per share for the nine months ended September 30, 2020 and 2019:

	September 30,	
	2020	2019
Net loss	$ (21,854,768)	$ (15,424,786)
Accumulated dividends on Redeemable Convertible Preferred Stock	(2,456,413)	(1,945,111)
Net loss attributable to common stockholder	$ (24,311,181)	$ (17,369,897)
Basic and diluted net loss per common share	$ (1.12)	$ (0.81)
Basic and diluted weighted average common shares outstanding	21,662,672	21,348,440

The following potentially dilutive securities outstanding for the nine months ended September 30, 2020 and 2019 have been excluded from the computation of diluted weighted average common shares outstanding, as the effect would be antidilutive:

	September 30, 2020	September 30, 2019
Stock options	38,664,737	31,167,730
Redeemable convertible preferred stock	174,992,398	143,782,664
Warrants	250,000	250,000
Convertible Notes	30,161,282	-
Total	244,068,417	175,200,394

Shares of redeemable convertible preferred stock also participate in dividends with shares of common stock (if and when declared) and therefore are deemed participating securities. The holders of redeemable convertible preferred stock do not contractually share in losses and therefore no additional net loss per share has been disclosed under the two-class method.

Emerging growth company status

The Company is an “emerging growth company” (EGC), as defined in the Jumpstart Our Business Startups Act (JOBS Act), and may take advantage of certain exemptions from various reporting requirements that are applicable to other public companies that are not EGCs. The Company may take advantage of these exemptions until it is no longer an EGC under Section 107 of the JOBS Act, which provides that an EGC can take advantage of the extended transition period afforded by the JOBS Act for the implementation of new or revised accounting standards. The Company has elected to use the extended transition period for complying with new or revised accounting standards, and as a result of this election, the financial statements may not be comparable to companies that comply with public company FASB standards’ effective dates. The Company may take advantage of these exemptions up until the last day of the fiscal year following the fifth anniversary of an offering or such earlier time that it is no longer an EGC.

Recent accounting standards and pronouncements

Recently Adopted

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*, which provides guidance with respect to the disclosure requirements for fair value measurements. The guidance intends to improve the

effectiveness of the disclosures relating to recurring and nonrecurring fair value measurements. The Company adopted ASU 2018-13 on January 1, 2020 and the standard did not have a material impact on its condensed financial statements and related disclosures.

In December 2019, the FASB issued ASU 2019-12, *Income Taxes (Topic 740): Simplifying the Accounting for Income Taxes*, which provided final guidance that simplifies the accounting for income taxes by eliminating certain exceptions to the guidance in ASC 740 related to the approach for intra-period tax allocation that is applicable to the Company, the methodology for calculating income taxes in an interim period and the recognition of deferred tax liabilities for outside basis differences among other changes. For public business entities, the amendments in this update are effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2020. Early adoption of the amendments is permitted, including adoption in any interim period for public business entities for periods for which financial statements have not yet been issued. An entity that elects early adoption must adopt all the amendments in the same period. The Company elected to early adopt ASU 2019-12 as of January 1, 2020 on a prospective basis. Management concluded the adoption did not have any material impact to income taxes reported on the condensed financial statements for the nine months ended September 30, 2020.

Not Yet Adopted

In February 2016, the FASB issued ASU No. 2016-02, *Leases (Topic 842)*. The guidance requires lessees to recognize assets and liabilities related to long-term leases on the balance sheet and expands disclosure requirements regarding leasing arrangements. In July 2018, the FASB issued additional guidance, which offers a transition option to entities adopting the new lease standards, and a package of practical expedients an entity can elect to utilize to reduce the level of effort required for adoption. Under the transition option, entities can elect to apply the new guidance using a modified retrospective approach at the beginning of the year in which the new lease standard is adopted, rather than to the earliest comparative period presented in their financial statements. In November 2019, the FASB issued ASU 2019-10 deferring the effective date for private entities for fiscal years beginning after December 15, 2020 and interim periods within fiscal years beginning after December 15, 2021. In June 2020, the FASB issued ASU 2020-05 which further defers the effective date for private entities for fiscal years beginning after December 15, 2021 and interim periods within fiscal years beginning after December 15, 2022. The Company is currently reviewing its leases and other contracts to determine the impact the adoption of this guidance will have on the condensed financial statements. The adoption of this guidance will change the way the Company accounts for its operating leases, and will result in recording right-of-use assets and lease liabilities in the balance sheets, and result in additional lease-related disclosures in the footnotes to the condensed financial statements. The Company expects that it will adopt this guidance utilizing the modified retrospective approach and elect the package of practical expedients.

In June 2016, the FASB issued ASU 2016-13, *Financial Instruments – Credit Losses (Topic 326)*, which modifies the measurement of expected credit losses on certain financial instruments. In addition, for available-for-sale debt securities, the standard eliminates the concept of other-than-temporary impairment and requires the recognition of an allowance for credit losses rather than reductions in the amortized cost of the securities. The standard is effective for fiscal year beginning after December 15, 2022, and interim periods beginning after December 15, 2022 and requires a modified-retrospective approach with a cumulative-effect adjustment to retained earnings as of the beginning of the first reporting period. Early adoption is permitted. Based on the composition of the Company's investment portfolio, current market conditions and historical credit loss activity, the adoption of ASU 2016-13 is not expected to have a material impact on its consolidated financial position, results of operations or the related disclosures.

In July 2017, the FASB issued ASU 2017-11, Earnings Per Share (Topic 260); Distinguishing Liabilities from Equity (Topic *480); Derivatives and Hedging (Topic 815): (Part I) Accounting for Certain Financial Instruments with Down Round Features, (Part II) Replacement of the Indefinite Deferral for Mandatorily Redeemable Financial Instruments of Certain Nonpublic Entities and Certain Mandatorily Redeemable Noncontrolling Interests with a Scope Exception*. ASU 2017-11 simplifies the accounting for freestanding

financial instruments or equity-linked embedded features with down round features by no longer requiring entities to consider down round features when determining whether these instruments or embedded features are considered indexed to the entity's own stock. It also requires entities that present EPS pursuant to ASC 260 to recognize the effect of a down round feature in a freestanding equity-classified financial instrument only when it is triggered. The effect of triggering such a feature will be recognized as a dividend and reduction to income available to common shareholders in basic EPS. For public business entities the guidance is effective for fiscal years beginning after December 15, 2018 and interim periods within those years. For all other entities, it is effective for fiscal years beginning after December 15, 2019, and interim periods within fiscal years beginning after December 15, 2020. Early adoption is permitted, including adoption in an interim period. The Company does not expect the adoption of this standard will have a material effect on the condensed financial statements.

In August 2018, the FASB issued ASU No. 2018-15, Intangibles—Goodwill and Other—Internal-Use Software (*Subtopic 350-40): Customer's Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement That Is a Service Contract*. This new standard requires a customer in a cloud computing arrangement that is a service contract to follow the internal-use software guidance in ASC 350-40, Accounting for Internal-Use Software, to determine which implementation costs to capitalize as assets and amortize over the term of the hosting arrangement or expense as incurred. This standard is effective for annual periods beginning after December 15, 2020, and interim periods within fiscal years beginning after December 15, 2021. Early adoption is permitted, including adoption in any interim period. Entities have the option to apply this standard prospectively to all implementation costs incurred after the date of adoption or retrospectively. The Company is evaluating this new standard but does not expect it to have a significant impact on its financial statement presentation or results.

In August 2020, FASB issued ASU 2020-06, *Debt—Debt with Conversion and Other Options (Subtopic 470-20) and Derivatives and Hedging—Contracts in Entity's Own Equity (Subtopic 815-40): Accounting for Convertible Instruments and Contracts in an Entity's Own Equity*, which simplifies the accounting for convertible instruments by removing the separation models for (1) convertible debt with a cash conversion feature and (2) convertible instruments with a beneficial conversion feature and simplifies the guidance for determining whether a conversion feature is a derivative . As a result, a convertible debt instrument will be accounted for as a single liability measured at its amortized cost. These changes will reduce reported interest expense and increase reported net income for entities that have issued a convertible instrument that was bifurcated according to previously existing rules. Also, ASU 2020-06 requires the application of the if-converted method for calculating diluted earnings per share and the treasury stock method will be no longer available. The new guidance is effective for fiscal years beginning after December 15, 2021, with early adoption permitted no earlier than fiscal years beginning after December 15, 2020. The Company is currently evaluating the impact of ASU 2020-06 on its condensed financial statements.

4. Fair Value Measurements

The following table represents the Company's fair value hierarchy for its financial assets and liabilities measured at fair value on a recurring basis:

Description	Fair Value at September 30, 2020 Level 1	Level 2	Level 3
Liability:			
Derivative liability	$ -	$ -	$879,492
	$ -	$ -	$879,492

Description	Fair Value at December 31, 2019 Level 1	Level 2	Level 3
Assets:			
Corporate debt security	$1,006,878	$ -	$ -
	$1,006,878	$ -	$ -

During the nine months ended September 30, 2020 and 2019, the Company did not have any transfers between levels. There were no Level 3 recurring fair value measurements as of December 31, 2019. The following table presents activity related to the Company's fair value measurements categorized as Level 3 of the valuation hierarchy, valued on a recurring basis:

Balance as of December 31, 2019	$ -
Fair value of derivative liabilities issued	482,248
Incremental expense related to fair value changes in derivative liability	397,244
Balance as of September 30, 2020	$879,492

5. Marketable Security

There were no available-for-sale securities as of September 30, 2020. Available-for-sale marketable security as of December 31, 2019 was as follows:

	As of December 31, 2019			
Description	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
Corporate debt security	$1,006,372	$ 506	$ -	$1,006,878

The Company owned one available-for-sale marketable security as of December 31, 2019 which is due within one year. The security had an unrealized gain of $506 as of December 31, 2019, due to temporary market conditions. There were no unrealized losses as of December 31, 2019, that the Company determined to be other-than-temporary. As a result of the sale of available-for-sale marketable securities, the Company records a gain or loss which is reported as other income (expense) in the accompanying condensed statements of operations. During the nine months ended September 30, 2020, did not record any gains or losses. During the nine months ended September 30, 2019, Company recognized gains of $5,520 and losses of $287. These amounts are consistent with the amounts reclassified out of accumulated other comprehensive income into earnings for the respective periods.

6. Prepaid Expenses and Other Current Assets

Prepaid expenses and other current assets consist of the following as of September 30, 2020 and December 31, 2019:

	September 30, 2020	December 31, 2019
Prepaid research and development expenses	$ 1,406,935	$ 568,747
Prepaid maintenance agreements	157,664	130,515
Prepaid insurance	103,742	88,437
Prepaid other	74,009	39,067
Accrued interest	-	6,421
	$ 1,742,350	$ 833,187

7. Property and Equipment

Property and equipment consist of the following at September 30, 2020 and December 31, 2019:

	September 30, 2020	December 31, 2019
Laboratory equipment	$ 3,674,325	$3,019,401
Computer equipment and software	270,605	185,279
Furniture and fixtures	47,877	47,877
Leasehold improvements	140,080	132,065
	4,132,887	3,384,622
Less: accumulated depreciation and amortization	(1,252,459)	(806,692)
Property and equipment, net	$ 2,880,428	$2,577,930

Depreciation and amortization expense was $448,107 and $302,509 for the nine months ended September 30, 2020 and 2019, respectively. Included above is laboratory equipment of $82,301 financed under a capital lease arrangement. Amortization expense on the capital lease equipment was $8,818 for nine months ended September 30, 2020 and 2019. Amortization expense is included in accumulated depreciation and amortization. Accumulated amortization on the capital lease equipment was $26,454 and $17,636 as of September 30, 2020 and December 31, 2019, respectively.

8. Accrued Expenses

A summary of the components of accrued expenses is as follows as of September 30, 2020 and December 31, 2019:

	September 30, 2020	December 31, 2019
Accrued legal expenses	$ 135,033	$ 167,533
Accrued salaries, benefits and related expenses	1,507,513	1,040,423
Accrued severance	77,086	207,968
Accrued Interest	186,675	-
Other accrued expenses	366,814	437,448
	$ 2,273,121	$ 1,853,372

The accrued severance relates to two former executives of the Company. The terms of the agreement provided severance pay including Cobra insurance continuation for a period of 18 months and 12 months, respectively.

9. Other Non-Current Liabilities

A summary of the components of other non-current liabilities is as follows as of September 30, 2020 and December 31, 2019:

	September 30, 2020	December 31, 2019
Paycheck Protection Program loan (Note 10)	$ 843,619	$ -
Security deposit	4,935	4,935
Capital lease (non-current)	-	12,259
	$ 848,554	$ 17,194

10. Commitments and Contingencies

Lease Obligations

In June 2017, the Company entered into a lease agreement for office and laboratory space for a term of five years commencing on July 1, 2017, and terminating on June 30, 2022. The initial term of the lease contains a portion of rent abatement during the first year and was subject to a 3% escalation starting after the second year of the lease. The lease contains an extension option for five additional years. Future minimum lease payments under noncancelable operating leases as of September 30, 2020 are as follows:

	Operating Leases
2020	$ 99,172
2021	402,137
2022	202,873
Thereafter	-
Total minimum lease payments	$ 704,182

For operating leases that contain rent escalation or rent concession provisions, the Company records the total rent payable during the lease term on a straight-line basis over the term of the lease. The Company records the difference between the rent paid and the straight-line rent as a deferred rent liability in the accompanying condensed balance sheet. Rent expense was $270,053 and $269,016 for nine months ended September 30, 2020 and 2019, respectively. Rent expense was included in operating expenses on the accompanying condensed statements of operations.

Rent expense was recorded in the following financial statement line items within the accompanying condensed statements of operations for the nine months ended September 30, 2020 and 2019:

	September 30, 2020	September 30, 2019
Research and development expenses	$ 201,762	$ 201,762
General and administrative expenses	68,291	67,254
Total rent expense	$ 270,053	$ 269,016

Sublease

The Company has one sublease agreement and recorded $83,457 and $84,622 for nine months ended September 30, 2020 and 2019, respectively, in sublease income. Sublease income was included in other income on the accompanying condensed statements of operations. The agreement extends through December 2020.

Maryland Biotechnology Center Grant

The Company entered into a Translational Research Award Agreement effective May 23, 2012 with the Department of Business & Economic Development with the State of Maryland, Maryland Biotechnology Center (“MBC”). The mission of MBC is to integrate entrepreneurial strategies to stimulate the transformation of scientific discovery and intellectual assets into capital formation and business development. Under the agreement, MBC provided $200,000 to NexImmune for research on its artificial aAPC for cancer immunotherapy. In 2013, an amendment increased the amount by $125,000 for a total grant of $325,000. This grant was recorded as income in 2012 and 2013, as the Company incurred the expenses which qualified it for the grant.

The Company must repay the funds through annual payments calculated at 3% of annual revenues for the preceding year. Payments shall continue for 10 years after the first payment date and may total up to 200% of the total grant amount. The end date of the agreement is defined as January 31, 2024, or when any and all repayments due to MBC have been made. If the Company does not earn any revenue, the grant does not need to be repaid. Through September 30, 2020, no revenue has been recorded, therefore, no payments to MBC are due.

Johns Hopkins University Exclusive License Agreement

The Company entered into an Exclusive License Agreement with Johns Hopkins University (“JHU”) effective June 2011, which was amended and restated in January 2017, under which there are license fees, royalties, and milestone payments. As part of the agreement, the Company acquired a perpetual, exclusive license from JHU covering its invention related to Antigen Specific T cells. In consideration for the Exclusive License Agreement, the Company made an upfront payment of $155,000 and issued 464,748 shares of common stock

JHU was also entitled to milestone fees of $75,000 in connection with clinical trial milestones. For the first licensed product or licensed service in the therapeutic field, the Company may be required to pay JHU additional aggregate milestone fees of $1.6 million for clinical and regulatory milestone fees. The Company may be required to pay JHU reduced milestone fees for the second and third licensed products or licensed services in the therapeutic field in connection with clinical and regulatory milestones. In the diagnostic field, the Company may be required to pay JHU aggregate milestone fees of $400,000 for the first licensed product or licensed service and reduced milestone fees for the second and third licensed products or licensed services in connection with regulatory and commercial milestones. The Company may be required to pay JHU aggregate milestone fees of $100,000 for commercial milestones for the first licensed product or licensed service in the non-clinical field. The Company may also be required to pay royalties in the low to upper mid-single digits on net sales of therapeutic products, diagnostic products and non-clinical products. The Company is required to make minimum annual royalty payments of $100,000 to JHU under the A&R JHU License Agreement, which started in the low five figures in the first year of the agreement and increased to the low six figures in the third year and for each subsequent year of the agreement. The Company may also be required to pay JHU a low double digit percentage of any non-royalty sublicense consideration we receive.

The Company will record a liability when such events become probable. The Company has not reached any of the milestones or transacted its first commercial sale as of September 30, 2020.

The Company must make minimum royalty payments, which began upon the 4th anniversary of the agreement and upon every anniversary thereafter during the term of the agreement, which offset future royalties per above owed to JHU. The Company has incurred $300,000 in cumulative minimum royalties from inception. Future annual minimum royalties of $100,000 are due each year during the term of the agreement. The Company records milestones, royalties and minimum royalties at the time when payments become probable. During the nine months ended September 30, 2020 and 2019, the Company incurred $75,000 and $125,000, respectively, related to minimum royalties owed. The royalties were included in research and development expenses on the accompanying condensed statements of operations. The Company has accrued royalties of $25,000 and $50,000 as of September 30, 2020 and December 31, 2019, respectively.

Paycheck Protection Program Loan

On April 23, 2020, the Company applied for an unsecured $843,619 loan under the Paycheck Protection Program (the “PPP Loan”). The Paycheck Protection Program (or “PPP”) was established under the Coronavirus Aid, Relief, and Economic Security Act (the “CARES Act”) and is administered by the U.S. Small Business Administration (“SBA”). On May 1, 2020, the PPP loan was approved and funded. NexImmune entered into a promissory note with JP Morgan Chase evidencing the unsecured $843,619 loan. The Company treats the PPP loan as debt under ASC 470. The use of loan proceeds must be for payroll costs, payment of interest on covered mortgage obligations, rent and utility costs over either an eight-week or 24-week period, at the Company’s option, following the Borrower’s receipt of the loan proceeds. The Company elected to use the proceeds over a 24-week period.

The PPP Loan has a maturity date of April 23, 2022 and accrues interest at an annual rate of 0.98%. Interest and principal payments are deferred for the first six months of the loan. Thereafter, monthly interest and principal payments are due until the loan is fully satisfied. The promissory note evidencing the PPP Loan contains customary events of default resulting from, among other things, default in the payments.

The PPP Loan indebtedness may be forgiven in whole or in part upon request and the Company must provide documentation in accordance with the SBA requirements and the Company must certify that the amounts requested to be forgiven qualify under those requirements. The SBA may approve or deny the Company’s loan forgiveness application, in whole or part. The amount of potential loan forgiveness may be reduced if the Borrower fails to maintain employee and salary levels during the applicable eight-week or 24-week period following receipt of the loan proceeds. As of September 30, 2020, the Company has not applied for forgiveness.

Contingencies

From time to time, the Company may be subject to various litigation and related matters arising in the ordinary course of business. The Company records a provision for a liability when it believes that it is both probable that a liability has been incurred and the amount can be reasonably estimated. Significant judgment is required to determine both probability and the estimated amount. As of September 30, 2020 and December 31, 2019, the Company was not involved in any material legal proceedings.

11. Capital Lease

During 2018, the Company entered into an equipment financing agreement in the amount of $57,864, for the purpose of acquiring R&D equipment. The term of the note is 36 months and bears an interest rate of 7.6% per annum.

	Capital Lease
2020	$ 5,412
2021	12,628
Total minimum lease payments	18,040
Less: amount representing imputed interest	(666)
Present value of minimum lease payments	17,374
Less: current portion	(17,374)
Capital lease obligations, less current portion	$ -

The current portion of the capital lease is included in accrued expenses on the accompanying balance sheet, and the non-current portion of the capital lease is included in other long term liabilities on the accompanying balance sheet as of September 30, 2020 and December 31, 2020.

12. Convertible Notes

During April 2020, the Company authorized the sale of up to $15,000,000 6% Convertible Notes (“Agreement”). The Agreement specified an initial closing date of April 23, 2020 and allowed additional closings within 90 days of the initial closing. The Convertible Notes mature on April 23, 2021.

The terms of the Convertible Notes require a mandatory conversion upon certain qualified financing events (“Mandatory Conversion”) and allow for conversion at the option of the holder upon certain non-qualified financing events (“Optional Conversion 1”). Upon Mandatory Conversion and Optional Conversion 1, the outstanding principal amount and all accrued and unpaid interest will automatically convert into the Company’s preferred stock of the same series issued in such equity financing and will be equal to the number of preferred stock obtained by dividing (a) all principal and accrued but unpaid interest under such Convertible Note by (b) the price per share paid by the other purchasers of the preferred stock sold in such equity financing multiplied by 80%.

If the Mandatory Conversion and Optional Conversion 1 have not occurred by the maturity date, the outstanding principal amount plus all accrued and unpaid interest will be converted at the option of the holder into Company’s common stock at the price per share obtained by dividing $85 million by the Company’s fully-diluted capitalization (“Optional Conversion 2”).

If the Company (i) consummates a change in control or (ii) the Company’s common stock becomes publicly listed on a stock exchange, the outstanding principal amount plus all accrued and unpaid interest will automatically convert into shares of the Company’s most senior series of capital stock outstanding at the time of such change in control or public listing, at a price equal to the lower of (a) 90% of the price per share paid by the purchasers of such stock in such a transaction and (b) the price per share obtained by dividing $125 million by the Company’s fully-diluted capitalization (“Change in Control”).

The Agreement was amended in July 2020 to allow the sale of up to $50,000,000 convertible notes and to allow for additional closings within 150 days of the initial closing date. The Agreement was amended in September 2020 to allow for additional closings within 190 days of the initial closing date. In addition, the provisions of Mandatory Conversion and Optional Conversion 1 were amended to allow for conversion upon an equity financing at a price equal to the lower of (a) 80% of the price per share paid by the purchasers of such stock in such a transaction and (b) the price per share obtained by dividing $125,000,000 by the Company’s fully-diluted capitalization. The Company evaluated the amendments and concluded that the amendments represented a debt modification.

In October 2020, the Agreement was further amended to allow additional closings through December 31, 2020. During the nine-month period ended September 2020, the Company issued convertible notes with a principal amount of $10,918,286. Subsequent to September 30, 2020, the Company issued convertible notes with a principal amount of $4,760,000.

The Company evaluated the Convertible Notes and determined that the Mandatory Conversion feature, Optional Conversion 1 feature and Change in Control meet the definition of an embedded derivative liability that is required to be bifurcated from the host instrument and measured at fair value. The fair value of the derivative liability at issuance and as of September 30, 2020 and December 31, 2019 was $482,248, $879,492 and $0, respectively.

The Company amortizes the debt issuance costs of $183,893 and debt discount of $1,547,880, comprising of the initial value of the derivative liability of $482,248 and the BCF of $1,065,632, over the term of the Convertible Notes using the effective interest method. The debt issuance costs and debt discount amortization expense for the nine months ended September 30, 2020 was $555,450 and is included in interest expense in the accompanying condensed statements of operations. The interest expense at 6% of the Convertible Notes’ principal amount for the nine months ended September 30, 2020 was $183,185.

The carrying value of the Convertible Notes consists of the following:

	September 30, 2020	December 31, 2019
Convertible Notes principal amount	$10,918,286	$ -
Unamortized discount	(1,042,084)	-
Unamortized debt issuance costs	(134,239)	-
	$ 9,741,963	$ -

The carrying value of the Convertible Notes issued to related and non-related parties as of September 30, 2020 was $2,498,446 and $7,243,517, respectively.

13. Series A Preferred Stock

Series A Redeemable Convertible Preferred Stock

During December 2017, the Company amended its Certificate of Incorporation to authorize and designate 121,735,324 shares as Series A Redeemable Convertible Preferred Stock (“Series A Preferred Stock”) and issued 52,860,040 shares of Series A Preferred Stock at an issue price of $0.2951 per share for proceeds of $15,599,000 net of issuance costs of $659,309. In December 2017, the Company issued an additional 37,018,277 shares of Series A Preferred stock in exchange for convertible debt including accrued interest thereon totaling $10,924,684.

During 2018, an additional 31,856,986 shares of Series A Preferred stock at an issue price of $0.2951 per share were issued to investors resulting in proceeds of $9,401,000 net of issuance costs of $217,940.

In January 2019, the Company amended its Certificate of Incorporation to authorize and designate 121,735,303 shares of Series A Redeemable Convertible Preferred Stock and 28,384,899 shares of Series A-2 Redeemable Convertible Preferred Stock. The Company issued 22,047,361 shares of Series A-2 Redeemable Convertible Preferred Stock during January and February 2019, at an issue price of $0.3523 per share, resulting in proceeds of $7,685,865 net of issuance costs of $81,428.

In November 2019, the Company amended its Certificate of Incorporation to authorize and designate 34,061,879 shares of Series A-3 Redeemable Convertible Preferred Stock. The Company issued 31,209,734 shares of Series A-3 Redeemable Convertible Preferred Stock during November and December 2019, at an issue price of $0.3523 per share resulting in proceeds of $10,887,449 net of issuance costs of $107,748.

Below is a summary of the terms and conditions, and the rights and powers included in the Fifth Amended and Restated Certificate of Incorporation of NexImmune, Inc governing the Series A Redeemable Convertible Preferred Stock, the Series Redeemable A-2 Convertible Preferred Stock and Series A-3 Redeemable Convertible Preferred Stock, collectively (“Series A Redeemable Convertible Preferred Stock”):

Dividends—Holders of the Series A Redeemable Convertible Preferred Stock shares are entitled to receive cumulative, non-compounding dividends at the rate of 6% per annum if declared by the Board of Directors. Holders of Series A Redeemable Convertible Preferred Stock shares will also participate in dividends on common stock on an as-converted basis. As of September 30, 2020 and December 31, 2019, undeclared cumulative dividends on the Series A Redeemable Convertible Preferred Stock shares was approximately $7,186,367 and $4,741,390, respectively.

Liquidation Preference—In the event of a liquidation, winding up or sale of the Company, the holders of Series A Redeemable Convertible Preferred Stock will receive payment of an amount equal to the original purchase price per share plus any accrued but unpaid dividends on such share, whether or not declared, and thereafter will participate in future proceeds with the holders of all other classes and series of stock on an as converted basis. The Company has not adjusted the carrying values of the preferred stock to the liquidation

preferences of such shares because it is uncertain whether or when an event would occur that would obligate the Company to pay the liquidation preferences to holders of shares of Series A Redeemable Convertible Preferred Stock, and at the balance sheet date these circumstances were not probable. Subsequent adjustments to the carrying values of the liquidation preferences will be made only when it becomes probable that such a liquidation event will occur. As of September 30, 2020 and December 31, 2019, the liquidation value of the Series A Redeemable Convertible Preferred Stock was approximately $62,000,000 and $59,000,000, respectively.

Voting Rights—Each holder of Series A Redeemable Convertible Preferred Stock shares shall be entitled to cast the number of votes equal to the number of whole shares of common stock into which the share of Series A Redeemable Convertible Preferred Stock is convertible on any matter presented to the stockholders of the Company for their action or consideration.

Conversion Rights—Each share of Series A Redeemable Convertible Preferred Stock shares shall be convertible, at the option of the holder, into shares of common stock at the conversion price in effect at the time of the conversion. A mandatory conversion would be triggered by an underwritten public offering resulting in at least $40,000,000 of gross proceeds, or by a vote of at least 66.67% of the then outstanding shares of Series A Redeemable Convertible Preferred Stock. The Series A Preferred Stock conversion price is initially equal to its original issue price, subject to adjustment as specified in the amended and restated Certificate of Incorporation, including dilutive issuances.

Redemption Rights—In the event of a deemed liquidation event, which includes a qualified merger or sale of the Company ("Deemed Liquidation Event"), where the Corporation does not effect a dissolution of the Corporation within ninety days after such Deemed Liquidation Event, then the holders of Series A Redeemable Convertible Preferred Stock shares will be sent a redemption notice that outlines the terms of the redemption at the option of the holders, and the Corporation shall use the consideration received by the Corporation for such Deemed Liquidation Event together with any other assets of the Corporation available for distribution to its stockholders to redeem all outstanding shares of Series A Redeemable Convertible Preferred Stock at a price per share equal to the Series A Redeemable Convertible Liquidation Amount, as applicable. The Company does not deem the redemption to be probable as of September 30, 2020 and December 31, 2019.

Anti-Dilution Protection – The holders of the Series A Redeemable Convertible Preferred Stock have anti-dilution protection for splits, dividends and similar recapitalizations. Subject to certain exclusions, anti-dilution protection for additional sales of securities by the Company for consideration per unit less than the applicable conversion price per unit then the applicable conversion price will be reduced on a weighted average basis.

Due to the deemed liquidation provision, which is outside of the Company's control, the Series A Redeemable Convertible Preferred Stock shares are classified outside of stockholders' deficit.

Issuances of Common Stock

During the nine months ended September 30, 2020 and 2019, the Company issued 4,687 and 1,282,334 shares of common stock, respectively, from the exercise of stock options.

Warrants to Acquire Common Stock

In 2013, the Company issued warrants to purchase an aggregate of 250,000 shares of common stock. The exercise price was determined to be 80% of the implied price per share of common stock in a qualified financing of at least $1,000,000. Based upon the Series A Redeemable Convertible Preferred Stock sale which exceeded the $1,000,000 threshold, the exercise price of the warrants would be $0.12. All warrants remain outstanding as of September 30, 2020. No warrants were exercised or expired during 2020 and 2019. The warrants can be exercised on or prior to December 23, 2020.

14. Stock-Based Compensation

During January 2017, the Company adopted the 2017 Equity Incentive Plan (the “2017 Plan”), which provides for granting of restricted stock, options to purchase shares of common stock and other awards to employees, directors and consultants. In March 2017, the Company amended the 2017 Plan to increase the number of available shares to 11,409,305. The 2017 Plan has a termination date of January 2027. In June 2018, the Company adopted the 2018 Equity Incentive Plan (the “2018 Plan”) which provides for granting of restricted stock, options to purchase shares of common stock, and other awards to employees, directors and consultants, and reserved 30,071,484 shares for this purpose. The 2018 Plan was amended in July 2018 to increase the number of available shares to 31,234,675. The 2018 Plan has a termination date of June 2028. As of September 30, 2020, there were 1,578,692 shares available to grant under the 2018 Plan and 46,112 shares available to grant under the 2017 Plan.

The number of options to be granted under the 2017 and 2018 Plans, the option exercise prices, and other terms of the options are determined by the Board of Directors in accordance with the terms of the 2018 Plan. Generally, stock options are granted at fair value, become exercisable over a period of one to four years, expire in ten years or less and are subject to the employee’s continued employment.

Stock-based compensation expense was recorded in the following financial statement line items within the accompanying condensed statements of operations for the nine months ended September 30, 2020 and 2019:

	September 30, 2020	September 30, 2019
Research and development expenses	$ 228,833	$ 350,925
General and administrative expenses	714,377	978,439
Total stock-based compensation expense	$ 943,210	$ 1,329,364

The following is a summary of option activity under the Company’s Stock Option Plans:

	Stock Options	Weighted Average Exercise Price	Weighted Average Remaining Contractual Term (years)	Aggregate Intrinsic Value (millions)
Outstanding as of January 1, 2020	29,470,734	$ 0.17		
Granted	9,771,642	0.30		
Exercised	(4,687)	0.18		
Cancelled	(386,949)	0.15		
Forfeited	(186,003)	0.17		
Outstanding as of September 30, 2020	38,664,737	$ 0.20	7.7	$ 3.7
Vested or expected to vest as of September 30, 2020	38,664,737	$ 0.20	7.7	$ 3.7
Exercisable as of September 30, 2020	25,628,553	$ 0.17	7.0	$ 3.4
Shared unvested as of September 30, 2020	13,036,184	$ 0.28	9.2	$ 0.3

The weighted average fair value of the options granted during the nine months ended September 30, 2020 and 2019 was $0.23 and $0.19, respectively. The options were valued using the Black-Scholes option-pricing model for the September 30, 2020 and 2019 with the following assumptions:

	September 30, 2020	September 30, 2019
Expected volatility	100%	100%
Risk-free interest rate	0.70% to 0.74%	1.6% to 2.5%
Expected dividend yield	0%	0%
Expected term	5.4 to 6.0 years	5.0 to 6.1 years

The total fair value of stock options vested during the nine months September 30, 2020 and 2019 was approximately $646,545, and $966,598, respectively. The intrinsic value of stock options exercised for the nine months ended September 30, 2020 and 2019 was approximately $568 and $140,000, respectively.

As of September 30, 2020, there was $2,354,982 of total unrecognized compensation expense related to unvested options that will be recognized over a weighted average period of 2.6 years.

15. Income Taxes

The Company has not recorded any tax provision or benefit for the nine months ended September 30, 2020 and 2019. The Company has provided a valuation allowance for the full amount of its net deferred tax assets since realization of any future benefit from deductible temporary differences, NOL carryforwards, and research and development credits is not more-likely-than-not to be realized at September 30, 2020 and December 31, 2019. The effective tax rate for the nine months ended September 30, 2020 and 2019 is 0.0%.

We recognize deferred tax assets to the extent that it is believed that these assets are more likely than not to be realized. We have evaluated all positive and negative evidence and determined that we will continue to assess a full valuation allowance on our net deferred assets as of September 30, 2020. We have determined that it is not more likely than not that the Company will realize the benefits of its deferred taxes in the U.S.

The Company assesses uncertain tax positions in accordance with ASC 740-10, Accounting for Uncertainties in Income Taxes. The Company has not recorded any accruals related to uncertain tax positions as of September 30, 2020 or December 31, 2019. We file U.S. and state income tax returns in jurisdictions with varying statutes of limitations. The 2011 through 2019 tax years remain subject to examination by federal and state tax authorities.

16. Employee Benefit Plan

The Company has a defined contribution plan under the Internal Revenue Code Section 401(k). The plan covers all employees who meet minimum age and service requirements and allows participants to defer a portion of their annual compensation on a pre-tax basis. The Company may contribute a matching contribution at its discretion. During the nine months ended September 30, 2020 and 2019, the Company made contributions of $125,552 and $42,887, respectively, to the plan.

17. Related Party Transactions

During 2020, the Company issued $2,900,460 of Convertible Notes to various Board members and other related parties with the same terms and conditions as described in Note 12. The carrying value of the Convertible Notes issued to related parties as of September 30, 2020 was $2,498,446.

Noble Life Sciences, Inc. (“Noble”) performs consulting and research services for NexImmune. The former CFO of the Company is the president of Noble. A former advisor to the Company’s Board of Directors is also on the Board of Directors of Noble. The Company recorded in research and development expenses approximately $0 and $31,000 for these research services during the nine months September 30, 2020 and 2019, respectively.

In April 2018, the Company entered into a Loan Agreement and Promissory Note agreement to lend $150,000 to an officer of the Company. The loan was to be repaid to the Company in two equal installments of $75,000 plus accrued interest on March 30, 2019 and March 30, 2020. The loan bears an interest rate of 2.72%, compounded annually. In December 2018, approximately $75,000 was repaid. The balance of approximately $81,000, including accrued interest of approximately $2,700 was repaid in April 2020.

In 2016, the Company agreed with several employees and a board advisor to postpone salary and consulting payments totaling approximately $800,000, of which approximately $615,000 was paid in December 2018, and approximately $111,000 was settled through the exercise of stock options. The remaining balance of approximately $74,000 was paid during the nine months ended September 30, 2019.

18. Subsequent Events

The Company has evaluated subsequent events through December 11, 2020, which is the date the condensed financial statements were available to be issued.

Through December 11, 2020, the Company raised an additional $4,760,000 by issuing Convertible Notes as discussed in Note 12.

Shares

NexImmune, Inc.

Common Stock

Prospectus

, 2021

Joint Book-Running Managers

Barclays

Cantor

Raymond James

Allen & Company LLC

PART II
INFORMATION NOT REQUIRED IN PROSPECTUS

ITEM 13. OTHER EXPENSES OF ISSUANCE AND DISTRIBUTION.

The following table sets forth all costs and expenses, other than underwriting discounts and commissions, paid or payable by the Registrant in connection with the sale of the common stock being registered. All amounts shown are estimates except for the SEC registration fee and the FINRA filing fee:

	Amount
SEC registration fee	$
FINRA filing fee	
Initial Nasdaq Global Market listing fee	
Blue sky qualification fees and expenses	
Printing and engraving expenses	
Legal fees and expenses	
Accounting fees and expenses	
Transfer agent and registrar fees and expenses	
Miscellaneous expenses	
Total	$

ITEM 14. INDEMNIFICATION OF DIRECTORS AND OFFICERS.

Section 145(a) of the Delaware General Corporation Law provides, in general, that a corporation may indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative (other than an action by or in the right of the corporation), because he or she is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by the person in connection with such action, suit or proceeding, if he or she acted in good faith and in a manner he or she reasonably believed to be in or not opposed to the best interests of the corporation and, with respect to any criminal action or proceeding, had no reasonable cause to believe his or her conduct was unlawful.

Section 145(b) of the Delaware General Corporation Law provides, in general, that a corporation may indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action or suit by or in the right of the corporation to procure a judgment in its favor because the person is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, against expenses (including attorneys' fees) actually and reasonably incurred by the person in connection with the defense or settlement of such action or suit if he or she acted in good faith and in a manner he or she reasonably believed to be in or not opposed to the best interests of the corporation, except that no indemnification shall be made with respect to any claim, issue or matter as to which he or she shall have been adjudged to be liable to the corporation unless and only to the extent that the Court of Chancery or other adjudicating court determines that, despite the adjudication of liability but in view of all of the circumstances of the case, he or she is fairly and reasonably entitled to indemnity for such expenses that the Court of Chancery or other adjudicating court shall deem proper.

Section 145(g) of the Delaware General Corporation Law provides, in general, that a corporation may purchase and maintain insurance on behalf of any person who is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise against any liability asserted against such

person and incurred by such person in any such capacity, or arising out of his or her status as such, whether or not the corporation would have the power to indemnify the person against such liability under Section 145 of the Delaware General Corporation Law.

Our Sixth Amended and Restated Certificate of Incorporation, or the Charter, which will become effective upon completion of the offering, will provide that no director of our company shall be personally liable to us or our stockholders for monetary damages for any breach of fiduciary duty as a director, except for liability (1) for any breach of the director's duty of loyalty to us or our stockholders, (2) for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law, (3) in respect of unlawful dividend payments or stock redemptions or repurchases, or (4) for any transaction from which the director derived an improper personal benefit. In addition, our Charter will provide that if the Delaware General Corporation Law is amended to authorize the further elimination or limitation of the liability of directors, then the liability of a director of our company shall be eliminated or limited to the fullest extent permitted by the Delaware General Corporation Law, as so amended.

The Charter will further provide that any repeal or modification of such article by our stockholders or amendment to the Delaware General Corporation Law will not adversely affect any right or protection existing at the time of such repeal or modification with respect to any acts or omissions occurring before such repeal or modification of a director serving at the time of such repeal or modification.

Our Amended and Restated By-Laws, or the By-Laws, which will become effective upon completion of the offering, will provide that we will indemnify each of our directors and officers and, in the discretion of our board of directors, certain employees, to the fullest extent permitted by the Delaware General Corporation Law as the same may be amended (except that in the case of amendment, only to the extent that the amendment permits us to provide broader indemnification rights than the Delaware General Corporation Law permitted us to provide prior to such the amendment) against any and all expenses, judgments, penalties, fines and amounts reasonably paid in settlement that are incurred by the director, officer or such employee or on the director's, officer's or employee's behalf in connection with any threatened, pending or completed proceeding or any claim, issue or matter therein, to which he or she is or is threatened to be made a party because he or she is or was serving as a director, officer or employee of our company, or at our request as a director, partner, trustee, officer, employee or agent of another corporation, partnership, joint venture, trust, employee benefit plan or other enterprise, if he or she acted in good faith and in a manner he or she reasonably believed to be in or not opposed to the best interests of our company and, with respect to any criminal proceeding, had no reasonable cause to believe his or her conduct was unlawful. The By-Laws will further provide for the advancement of expenses to each of our directors and, in the discretion of the board of directors, to certain officers and employees.

In addition, the By-Laws will provide that the right of each of our directors and officers to indemnification and advancement of expenses shall be a contract right and shall not be exclusive of any other right now possessed or hereafter acquired under any statute, provision of the Charter or By-Laws, agreement, vote of stockholders or otherwise. Furthermore, the By-Laws will authorize us to provide insurance for our directors, officers and employees, against any liability, whether or not we would have the power to indemnify such person against such liability under the Delaware General Corporation Law or the provisions of the By-Laws.

In connection with the sale of common stock being registered hereby, we will enter into indemnification agreements with each of our directors and our executive officers. These agreements will provide that we will indemnify each of our directors and officers to the fullest extent permitted by law and the Charter and By-Laws.

We also maintain a general liability insurance policy, which covers certain liabilities of directors and officers of our company arising out of claims based on acts or omissions in their capacities as directors or officers.

In any underwriting agreement we enter into in connection with the sale of common stock being registered hereby, the underwriters will agree to indemnify, under certain conditions, us, our directors, our officers and persons who control us within the meaning of the Securities Act, against certain liabilities.

ITEM 15. RECENT SALES OF UNREGISTERED SECURITIES.

Since January 1, 2017 we have issued the following securities that were not registered under the Securities Act. Also included is the consideration, if any, received by us for such shares, warrants and options, and information relating to the section of the Securities Act, or rule of the Securities and Exchange Commission, under which exemption from registration was claimed.

Issuances of Stock, Convertible Promissory Notes

From December 2017 through August 2018, we issued an aggregate of 121,735,503 shares of our Series A Preferred Stock at a purchase price of $0.2951 per share to various accredited investors for aggregate consideration of $25.0 million, plus conversion of convertible notes.

In January 2019 and February 2019, we issued an aggregate of 22,047,361 shares of our Series A-2 Preferred Stock at a purchase price of $0.3523 per share to six accredited investors for aggregate consideration of $7.8 million.

In November 2019 and December 2019, we issued an aggregate of 31,209,734 shares of our Series A-3 Preferred Stock at a purchase price of $0.3523 per share to six accredited investors for aggregate consideration of $11.0 million.

From April 2020 through the date of this prospectus, we issued convertible promissory notes in the aggregate principal amount of $22,024,786 to various accredited investors.

Stock Option

From January 1, 2017 through January 15, 2021 we granted to our employees, directors and consultants options to purchase an aggregate of 36,267,371 shares of our common stock with a weighted average exercise price of $0.21 per share, under our 2017 Equity Incentive Plan, as amended, and our 2018 Equity Incentive Plan, as amended.

Securities Act Exemptions

The offers, sales and issuances of the securities described above under “—Issuances of Stock, Convertible Promissory Notes ” were exempt from registration under the Securities Act in reliance on Section 4(a)(2) of the Securities Act and Rule 506 of Regulation D.

The grants of stock options described above under “—Stock Option” were exempt from registration under the Securities Act in reliance on Rule 701 promulgated under the Securities Act as offers and sales of securities under compensatory benefit plans and contracts relating to compensation in compliance with Rule 701. Each of the recipients of securities in any transaction exempt from registration either received or had adequate access, through employment, business or other relationships, to information about us.

All certificates representing the securities issued in the transactions described in this Item 15 included appropriate legends setting forth that the securities had not been offered or sold pursuant to a registration statement and describing the applicable restrictions on transfer of the securities. There were no underwriters employed in connection with any of the transactions set forth in this Item 15.

ITEM 16. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES.

(a) Exhibits.

Exhibit Number	Description of Exhibit
1.1*	Form of Underwriting Agreement.
3.1.1	Fifth Amended and Restated Certificate of Incorporation of the Registrant.
3.1.2	Certificate of Correction to the Fifth Amended and Restated Certificate of Incorporation of the Registrant.
3.2*	Form of Sixth Amended and Restated Certificate of Incorporation (to be effective upon completion of the offering).
3.3	By-Laws of the Registrant.
3.4*	Form of Amended and Restated By-Laws (to be effective upon completion of this offering).
4.1*	Form of Common Stock Certificate.
4.2*	Form of Convertible Promissory Note, as amended.
4.3*	Second Amended and Restated Investors’ Rights Agreement, by and between the Registrant and the investors listed therein, dated November 27, 2019.
5.1*	Opinion of Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C.
10.1+*	Form of Indemnification Agreement.
10.2.1+*	2017 Equity Incentive Plan, as amended.
10.2.2+*	Form of Stock Option Agreement under the 2017 Equity Incentive Plan, as amended.
10.3.1+*	2018 Equity Incentive Plan, as amended.
10.3.2+*	Form of Stock Option Agreement under the 2018 Equity Incentive Plan, as amended.
10.4.1+*	2021 Equity Incentive Plan.
10.4.2+*	Form of Stock Option Agreement under the 2021 Equity Incentive Plan.
10.5+*	Employment Agreement, by and between the Registrant and Scott Carmer, dated June 1, 2017.
10.6+*	Employment Agreement, by and between the Registrant and John Trainer, dated January 6, 2020.
10.7+*	Employment Agreement, by and between the Registrant and Jerome Zeldis, M.D., Ph.D., dated January 4, 2021.
10.8+*	Employment Agreement, by and between the Registrant and Kristi Jones, dated February 27, 2017.
10.9+*	Employment Agreement, by and between the Registrant and Alain Cappeluti, dated June 1, 2017.
10.10+*	Non-Employee Director Compensation Policy.
10.11#	Amended and Restated Exclusive License Agreement, by and between the Johns Hopkins University and NexImmune, Inc., dated June 21, 2011.
10.12	Lease Agreement, by and between the Company and W. M. Rickman Construction Co., LLC, dated June 30, 2017.
10.13	Sublease Agreement, by and between the Company and Modavar Pharmaceuticals LLC, dated December 11, 2017.
23.1*	Consent of Ernst & Young LLP.
23.2*	Consent of EisnerAmper LLP.
23.3*	Consent of Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C. (included in Exhibit 5.1).
24.1*	Power of Attorney (included on signature page).

* To be filed by amendment.
# Certain confidential portions of this Exhibit were omitted by means of marking such portions with brackets (“[***]”) because the identified confidential portions (i) are not material and (ii) would be competitively harmful if publicly disclosed.
+ Denotes management compensation plan or contract.

(b) Financial Statement Schedules.

No financial statement schedules are provided because the information called for is not required or is shown either in the financial statements or notes.

ITEM 17. UNDERTAKINGS.

The undersigned Registrant hereby undertakes to provide to the underwriters at the closing specified in the underwriting agreement, certificates in such denominations and registered in such names as required by the underwriters to permit prompt delivery to each purchaser.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the SEC such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

The undersigned Registrant hereby undertakes that:

(a) For purposes of determining any liability under the Securities Act, the information omitted from the form of prospectus filed as part of this registration statement in reliance upon Rule 430A and contained in a form of prospectus filed by the registrant pursuant to Rule 424(b)(1) or (4) or 497(h) under the Securities Act shall be deemed to be part of this registration statement as of the time it was declared effective.

(b) For the purpose of determining any liability under the Securities Act, each post-effective amendment that contains a form of prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

Table of Contents

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the Registrant has duly caused this registration statement on Form S-1 to be signed on its behalf by the undersigned, thereunto duly authorized, in Gaithersburg, Maryland, on the day of , 2021.

NEXIMMUNE, INC.

Scott Carmer
President and Chief Executive Officer

SIGNATURES AND POWER OF ATTORNEY

We, the undersigned directors and officers of NexImmune, Inc. (the “Company”), hereby severally constitute and appoint Scott Carmer and John Trainer, and each of them singly, our true and lawful attorneys, with full power to them, and to each of them singly, to sign for us and in our names in the capacities indicated below, the registration statement on Form S-1 filed herewith, and any and all pre-effective and post-effective amendments to said registration statement, and any registration statement filed pursuant to Rule 462(b) under the Securities Act of 1933, as amended, in connection with the registration under the Securities Act of 1933, as amended, of equity securities of the Company, and to file or cause to be filed the same, with all exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys, 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 each of us might or could do in person, and hereby ratifying and confirming all that said attorneys, and each of them, or their substitute or substitutes, shall do or cause to be done by virtue of this Power of Attorney.

Pursuant to the requirements of the Securities Act of 1933, as amended, this registration statement on Form S-1 has been signed by the following persons in the capacities and on the dates indicated.

Signature	Title	Date
Scott Carmer	President, Chief Executive Officer and Director *(principal executive officer)*	, 2021
John Trainer, M.B.A	Chief Financial Officer (*principal accounting officer and principal financial officer*)	, 2021
Sol J. Barer, Ph.D.	Chairman of the Board of Directors	, 2021
Alan S. Roemer, M.B.A., M.P.H	Director	, 2021
Tim Bertram, Ph.D.	Director	, 2021
Paul D’Angio, RPH, MSJ.	Director	, 2021

[Table of Contents](#)

Signature	Title	Date
Zhengbin (Bing) Yao, Ph.D.	Director	, 2021
Tony Yao, M.D., Ph.D.	Director	, 2021
Grant Verstandig	Director	, 2021

FIFTH AMENDED AND RESTATED
CERTIFICATE OF INCORPORATION
OF
NEXIMMUNE, INC.

(Pursuant to Sections 242 and 245 of the
General Corporation Law of the State of Delaware)

NexImmune, Inc., a corporation organized and existing under and by virtue of the provisions of the General Corporation Law of the State of Delaware (the "**General Corporation Law**"),

DOES HEREBY CERTIFY:

1. That the name of this corporation is NexImmune, Inc., and that this corporation was originally incorporated pursuant to the General Corporation Law on June 7, 2011 under the name NexImmune, Inc. An Amended and Restated Certificate of Incorporation of NexImmune, Inc. was filed with the Secretary of State of the State of Delaware on January 10, 2017. A Second Amended and Restated Certificate of Incorporation of NexImmune, Inc. was filed with the Secretary of State of the State of Delaware on December 28, 2017. A Third Amended and Restated Certificate of Incorporation of NexImmune, Inc. was filed with the Secretary of State of the State of Delaware on December 28, 2017. A Fourth Amended and Restated Certificate of Incorporation of NexImmune, Inc. was filed with the Secretary of State of the State of Delaware on January 8, 2019. This Fifth Amended and Restated Certificate of Incorporation is hereby amended and restated, in its entirety, to, among other things, create a new class of preferred stock of NexImmune, Inc., as set forth below.

2. That the Board of Directors duly adopted resolutions proposing to amend and restate the Certificate of Incorporation, declaring said amendment and restatement to be advisable and in the best interests of this corporation and its stockholders, and authorizing the appropriate officers of this corporation to solicit the consent of the stockholders therefor, which resolution setting forth the proposed amendment and restatement is as follows:

RESOLVED, that this Fifth Amended and Restated Certificate of Incorporation amends and restates the Certificate of Incorporation in its entirety to read as follows:

FIRST: The name of this corporation is NexImmune, Inc. (the "**Corporation**").

SECOND: The address of the registered office of the Corporation in the State of Delaware is 251 Little Falls Drive, Wilmington, Delaware, 19808, County of New Castle, and the name of its registered agent at such address is The Corporation Service Company.

THIRD: The nature of the business or purposes to be conducted or promoted is to engage in any lawful act or activity for which corporations may be organized under the General Corporation Law.

FOURTH: The total number of shares of all classes of stock which the Corporation shall have authority to issue is (i) 246,180,160 shares of Common Stock, $0.0001 par value per share ("**Common Stock**") and (ii) an aggregate of 184,182,081 shares of Preferred Stock, $0.0001 par value per share ("**Preferred Stock**").

The following is a statement of the designations and the powers, privileges and rights, and the qualifications, limitations or restrictions thereof in respect of each class of capital stock of the Corporation.

A. COMMON STOCK

1. General. The voting, dividend and liquidation rights of the holders of the Common Stock are subject to and qualified by the rights, powers and preferences of the holders of the Preferred Stock set forth herein.

Voting. The holders of the Common Stock are entitled to one vote for each share of Common Stock held at all meetings of stockholders (and written actions in lieu of meetings); provided, however, that, except as otherwise required by law, holders of Common Stock, as such, shall not be entitled to vote on any amendment to the Certificate of Incorporation that relates solely to the terms of one or more outstanding series of Preferred Stock if the holders of such affected series are entitled, either separately or together with the holders of one or more other such series, to vote thereon pursuant to the Certificate of Incorporation or pursuant to the General Corporation Law. There shall be no cumulative voting. The number of authorized shares of Common Stock may be increased or decreased (but not below the number of shares thereof then outstanding) by (in addition to any vote of the holders of one or more series of Preferred Stock that may be required by the terms of the Certificate of Incorporation) the affirmative vote of the holders of shares of capital stock of the Corporation representing a majority of the votes represented by all outstanding shares of capital stock of the Corporation entitled to vote (voting together as a single class on an as converted basis), irrespective of the provisions of Section 242(b)(2) of the General Corporation Law.

B. PREFERRED STOCK

121,735,303 shares of the authorized Preferred Stock of the Corporation are hereby designated "**Series A Preferred Stock**", 28,384,899 shares of the authorized Preferred Stock of the Corporation are hereby designated "**Series A-2 Preferred Stock**", and 34,061,879 shares of the authorized Preferred Stock of the Corporation are hereby designated "**Series A-3 Preferred Stock**", with the following rights, preferences, powers, privileges and restrictions, qualifications and limitations. Unless otherwise indicated, references to "sections" in this Part B of this Article Fourth refer to sections of Part B of this Article Fourth.

1. Dividends.

1.1 From and after the Series A Original Issue Date (as defined below), dividends at the rate per annum of $0.017706 per share shall accrue on such shares of Series A Preferred Stock (subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to the Series A Preferred Stock) (the "**Series A Accruing Dividends**"). Series A Accruing Dividends shall accrue from day to day,

whether or not declared, and shall be cumulative; provided, however, that except as set forth in the following sentence of this Section 1.1 or in Section 2.1, 2.2 and Section 2.4, such Series A Accruing Dividends shall be payable only when, as, and if declared by the Board of Directors and the Corporation shall be under no obligation to pay such Series A Accruing Dividends. The Corporation shall not declare, pay or set aside any dividends on shares of any other class or series of capital stock of the Corporation (other than Series A-2 Accruing Dividends (as defined below) or dividends on shares of Common Stock payable in shares of Common Stock) unless (in addition to the obtaining of any consents required elsewhere in the Certificate of Incorporation) the holders of the Series A Preferred Stock then outstanding shall first receive, or simultaneously receive, a dividend on each outstanding share of Series A Preferred Stock in an amount at least equal to the sum of (i) the amount of the aggregate Series A Accruing Dividends then accrued on such share of Series A Preferred Stock and not previously paid and (ii) (A) in the case of a dividend on Common Stock or any class or series that is convertible into Common Stock, that dividend per share of Series A Preferred Stock as would equal the product of (1) the dividend payable on each share of such class or series determined, if applicable, as if all shares of such class or series had been converted into Common Stock and (2) the number of shares of Common Stock issuable upon conversion of a share of Series A Preferred Stock, in each case calculated on the record date for determination of holders entitled to receive such dividend or (B) in the case of a dividend on any class or series that is not convertible into Common Stock, at a rate per share of Series A Preferred Stock determined by (1) dividing the amount of the dividend payable on each share of such class or series of capital stock by the original issuance price of such class or series of capital stock (subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to such class or series) and (2) multiplying such fraction by an amount equal to the Series A Original Issue Price (as defined below); provided that if the Corporation declares, pays or sets aside, on the same date, a dividend on shares of more than one class or series of capital stock of the Corporation, the dividend payable to the holders of Series A Preferred Stock pursuant to this Section 1.1 shall be calculated based upon the dividend on the class or series of capital stock that would result in the highest Series A Preferred Stock dividend. The "**Series A Original Issue Price**" shall mean $0.2951 per share, subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to the Series A Preferred Stock.

1.2 From and after the date of the issuance of any shares of Series A-2 Preferred Stock, dividends at the rate per annum of $0.021138 per share shall accrue on such shares of Series A-2 Preferred Stock (subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to the Series A-2 Preferred Stock) (the "**Series A-2 Accruing Dividends**"). Series A-2 Accruing Dividends shall accrue from day to day, whether or not declared, and shall be cumulative; provided, however, that except as set forth in the following sentence of this Section 1.2 or in Section 2.1, 2.2 and Section 2.4, such Series A-2 Accruing Dividends shall be payable only when, as, and if declared by the Board of Directors and the Corporation shall be under no obligation to pay such Series A-2 Accruing Dividends. The Corporation shall not declare, pay or set aside any dividends on shares of any other class or series of capital stock of the Corporation (other than dividends on shares of Common Stock payable in shares of Common Stock) unless (in addition to the obtaining of any consents required elsewhere in the Certificate of Incorporation) the holders of the Series A-2 Preferred Stock then outstanding shall first receive, or simultaneously receive, a dividend on each outstanding share of Series A-2 Preferred Stock in an amount at least equal to the sum of (i) the amount of the aggregate Series A-

2 Accruing Dividends then accrued on such share of Series A-2 Preferred Stock and not previously paid and (ii) (A) in the case of a dividend on Common Stock or any class or series that is convertible into Common Stock, that dividend per share of Series A-2 Preferred Stock as would equal the product of (1) the dividend payable on each share of such class or series determined, if applicable, as if all shares of such class or series had been converted into Common Stock and (2) the number of shares of Common Stock issuable upon conversion of a share of Series A-2 Preferred Stock, in each case calculated on the record date for determination of holders entitled to receive such dividend or (B) in the case of a dividend on any class or series that is not convertible into Common Stock, at a rate per share of Series A-2 Preferred Stock determined by (1) dividing the amount of the dividend payable on each share of such class or series of capital stock by the original issuance price of such class or series of capital stock (subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to such class or series) and (2) multiplying such fraction by an amount equal to the Series A-2 Original Issue Price (as defined below); provided that if the Corporation declares, pays or sets aside, on the same date, a dividend on shares of more than one class or series of capital stock of the Corporation, the dividend payable to the holders of Series A-2 Preferred Stock pursuant to this Section 1.2 shall be calculated based upon the dividend on the class or series of capital stock that would result in the highest Series A-2 Preferred Stock dividend. The "**Series A-2 Original Issue Price**" shall mean $0.3523 per share, subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to the Series A-2 Preferred Stock.

1.3 From and after the date of the issuance of any shares of Series A-3 Preferred Stock, dividends at the rate per annum of $0.021138 per share shall accrue on such shares of Series A-3 Preferred Stock (subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to the Series A-3 Preferred Stock) (the "**Series A-3 Accruing Dividends**"). Series A-3 Accruing Dividends shall accrue from day to day, whether or not declared, and shall be cumulative; provided, however, that except as set forth in the following sentence of this Section 1.3 or in Section 2.1, 2.2 and Section 2.4, such Series A-3 Accruing Dividends shall be payable only when, as, and if declared by the Board of Directors and the Corporation shall be under no obligation to pay such Series A-3 Accruing Dividends. The Corporation shall not declare, pay or set aside any dividends on shares of any other class or series of capital stock of the Corporation (other than dividends on shares of Common Stock payable in shares of Common Stock) unless (in addition to the obtaining of any consents required elsewhere in the Certificate of Incorporation) the holders of the Series A-3 Preferred Stock then outstanding shall first receive, or simultaneously receive, a dividend on each outstanding share of Series A-3 Preferred Stock in an amount at least equal to the sum of (i) the amount of the aggregate Series A-3 Accruing Dividends then accrued on such share of Series A-3 Preferred Stock and not previously paid and (ii) (A) in the case of a dividend on Common Stock or any class or series that is convertible into Common Stock, that dividend per share of Series A-3 Preferred Stock as would equal the product of (1) the dividend payable on each share of such class or series determined, if applicable, as if all shares of such class or series had been converted into Common Stock and (2) the number of shares of Common Stock issuable upon conversion of a share of Series A-3 Preferred Stock, in each case calculated on the record date for determination of holders entitled to receive such dividend or (B) in the case of a dividend on any class or series that is not convertible into Common Stock, at a rate per share of Series A-3 Preferred Stock determined by (1) dividing the amount of the dividend payable on each share of such class or series of capital stock by the original

issuance price of such class or series of capital stock (subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to such class or series) and (2) multiplying such fraction by an amount equal to the Series A-3 Original Issue Price (as defined below); provided that if the Corporation declares, pays or sets aside, on the same date, a dividend on shares of more than one class or series of capital stock of the Corporation, the dividend payable to the holders of Series A-3 Preferred Stock pursuant to this Section 1.2 shall be calculated based upon the dividend on the class or series of capital stock that would result in the highest Series A-3 Preferred Stock dividend. The "**Series A-3 Original Issue Price**" shall mean $0.3523 per share, subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to the Series A-3 Preferred Stock.

2. Liquidation, Dissolution or Winding Up; Certain Mergers, Consolidations and Asset Sales.

2.1 Preferential Payments to Holders of Preferred Stock. In the event of any voluntary or involuntary liquidation, dissolution or winding up of the Corporation or Deemed Liquidation Event, the holders of shares of each series of Preferred Stock then outstanding shall be entitled to be paid out of the assets of the Corporation available for distribution to its stockholders pari passu with the holders of outstanding shares of each other series of Preferred Stock before any payment shall be made to the holders of Common Stock by reason of their ownership thereof, an amount per share equal to the Series A Original Issue Price, the Series A-2 Original Issue Price or the Series A-3 Original Issue Price, as applicable, plus any Accruing Dividends accrued but unpaid thereon, whether or not declared, together with any other dividends declared but unpaid thereon. If upon any such liquidation, dissolution or winding up of the Corporation or Deemed Liquidation Event, the assets of the Corporation available for distribution to its stockholders shall be insufficient to pay the holders of shares of Preferred Stock the full amount to which they shall be entitled under this Section 2.1, the holders of shares of Preferred Stock shall share ratably in any distribution of the assets available for distribution in proportion to the respective amounts which would otherwise be payable in respect of the shares held by them upon such distribution if all amounts payable on or with respect to such shares were paid in full.

2.2 Distribution of Remaining Assets. In the event of any voluntary or involuntary liquidation, dissolution or winding up of the Corporation or Deemed Liquidation Event, after the payment of all preferential amounts required to be paid to the holders of shares of Series A Preferred Stock, Series A-2 Preferred Stock and Series A-3 Preferred Stock, the remaining assets of the Corporation available for distribution to its stockholders shall be distributed among the holders of the shares of Series A Preferred Stock, Series A-2 Preferred Stock, Series A-3 Preferred Stock, and Common Stock, pro rata based on the number of shares held by each such holder, treating for this purpose all such securities as if they had been converted to Common Stock pursuant to the terms of the Certificate of Incorporation immediately prior to such liquidation, dissolution or winding up of the Corporation. The aggregate amount which a holder of a share of Series A Preferred Stock is entitled to receive under Sections 2.1 and 2.2 is hereinafter referred to as the "**Series A Preferred Stock Liquidation Amount**." The aggregate amount which a holder of a share of Series A-2 Preferred Stock is entitled to receive under Sections 2.1 and 2.2 is hereinafter referred to as the "**Series A-2 Preferred Stock Liquidation Amount**." The aggregate amount which a holder of a share of Series A-3 Preferred Stock is entitled to receive under Sections 2.1 and 2.2 is hereinafter referred to as the "**Series A-3 Preferred Stock Liquidation Amount**."

2.3 Deemed Liquidation Events.

2.3.1 Definition. Each of the following events shall be considered a "**Deemed Liquidation Event**" unless the holders of at least 66.67% of the outstanding shares of Preferred Stock elect otherwise by written notice sent to the Corporation at least five (5) days prior to the effective date of any such event (and notice thereof to the holders of the outstanding shares of Preferred Stock shall be given by the Corporation at least fifteen (15) days prior to the effective date of such event):

(a) a merger or consolidation in which

(i) the Corporation is a constituent party or

(ii) a subsidiary of the Corporation is a constituent party and the Corporation issues shares of its capital stock pursuant to such merger or consolidation,

except any such merger or consolidation involving the Corporation or a subsidiary in which the shares of capital stock of the Corporation outstanding immediately prior to such merger or consolidation continue to represent, or are converted into or exchanged for shares of capital stock that represent, immediately following such merger or consolidation, a majority, by voting power, of the capital stock of (1) the surviving or resulting corporation; or (2) if the surviving or resulting corporation is a wholly owned subsidiary of another corporation immediately following such merger or consolidation, the parent corporation of such surviving or resulting corporation; or

(b) the sale, lease, transfer, exclusive license or other disposition, in a single transaction or series of related transactions, by the Corporation or any subsidiary of the Corporation of all or substantially all the assets of the Corporation and its subsidiaries taken as a whole, or the sale or disposition (whether by merger, consolidation or otherwise) of one or more subsidiaries of the Corporation if substantially all of the assets of the Corporation and its subsidiaries taken as a whole are held by such subsidiary or subsidiaries, except where such sale, lease, transfer, exclusive license or other disposition is to a wholly owned subsidiary of the Corporation.

2.3.2 Effecting a Deemed Liquidation Event.

(a) The Corporation shall not have the power to effect a Deemed Liquidation Event referred to in Section 2.3.1(a)(i) unless the agreement or plan of merger or consolidation for such transaction (the "**Merger Agreement**") provides that the consideration payable to the stockholders of the Corporation shall be allocated among the holders of capital stock of the Corporation in accordance with Sections 2.1. and 2.2.

(b) In the event of a Deemed Liquidation Event referred to in Section 2.3.1(a)(ii) or 2.3.1(b), if the Corporation does not effect a dissolution of the Corporation under the General Corporation Law within ninety (90) days after such Deemed Liquidation Event, then (i) the Corporation shall send a written notice to each holder of Preferred Stock no later than the ninetieth (90th) day after the Deemed Liquidation Event advising such holders of their right (and the requirements to be met to secure such right) pursuant to the terms of the following clause; (ii) to require the redemption of such shares of Preferred Stock, and (iii) if the holders of a majority of the then outstanding shares of Preferred Stock so request in a written instrument delivered to the Corporation not later than one hundred twenty (120) days after such Deemed Liquidation Event, the Corporation shall use the consideration received by the Corporation for such Deemed Liquidation Event (net of any retained liabilities associated with the assets sold or technology licensed, as determined in good faith by the Board of Directors of the Corporation), together with any other assets of the Corporation available for distribution to its stockholders, all to the extent permitted by Delaware law governing distributions to stockholders (the "**Available Proceeds**"), on the one hundred fiftieth (150th) day after such Deemed Liquidation Event, to redeem all outstanding shares of Preferred Stock at a price per share equal to the Preferred Stock Liquidation Amount, as applicable. Notwithstanding the foregoing, in the event of a redemption pursuant to the preceding sentence, if the Available Proceeds are not sufficient to redeem all outstanding shares of Preferred Stock, the Corporation shall ratably redeem each holder's shares of Preferred Stock to the fullest extent of such Available Proceeds, and shall redeem the remaining shares as soon as it may lawfully do so under Delaware law governing distributions to stockholders. Prior to the distribution or redemption provided for in this Section 2.3.2(b), the Corporation shall not expend or dissipate the consideration received for such Deemed Liquidation Event, except to discharge expenses incurred in connection with such Deemed Liquidation Event or in the ordinary course of business.

2.3.3 Redemption Notice. The Corporation shall send written notice of the redemption pursuant to Section 2.3.2(b) (the "**Redemption Notice**") to each holder of record of Preferred Stock not less than forty (40) days prior to the date of redemption (the "**Redemption Date**"). Each Redemption Notice shall state: (a) the number of shares of Preferred Stock held by the holder that the Corporation shall redeem on the Redemption Date specified in the Redemption Notice; (b) the Redemption Date and the Preferred Stock Liquidation Amount, as applicable; and (c) that the holder is to surrender to the Corporation, in the manner and at the place designated, his, her or its certificate or certificates representing the shares of Preferred Stock to be redeemed.

2.3.4 Surrender of Certificates; Payment. On or before the Redemption Date, each holder of shares of Preferred Stock to be redeemed shall surrender the certificate or certificates representing such shares (or, if such registered holder alleges that such certificate has been lost, stolen or destroyed, a lost certificate affidavit and agreement reasonably acceptable to the Corporation to indemnify the Corporation against any claim that may be made against the Corporation on account of the alleged loss, theft or destruction of such certificate) to the Corporation, in the manner and at the place designated in the Redemption Notice, and thereupon the Preferred Stock Liquidation Amount for such shares shall be payable to the order of the person whose name appears on such certificate or certificates as the owner thereof.

2.3.5 Amount Deemed Paid or Distributed. The amount deemed paid or distributed to the holders of capital stock of the Corporation upon any such merger, consolidation, sale, transfer, exclusive license, other disposition or redemption shall be the cash or the value of the property, rights or securities paid or distributed to such holders by the Corporation or the acquiring person, firm or other entity. The value of such property, rights or securities shall be determined in good faith by the Board of Directors of the Corporation.

2.3.6 Allocation of Escrow and Contingent Consideration. In the event of a Deemed Liquidation Event pursuant to Section 2.3.1(a)(i), if any portion of the consideration payable to the stockholders of the Corporation is payable only upon satisfaction of contingencies (the "**Additional Consideration**"), the Merger Agreement shall provide that (a) the portion of such consideration that is not Additional Consideration (such portion, the "**Initial Consideration**") shall be allocated among the holders of capital stock of the Corporation in accordance with Sections 2.1 and 2.2 as if the Initial Consideration were the only consideration payable in connection with such Deemed Liquidation Event; and (b) any Additional Consideration which becomes payable to the stockholders of the Corporation upon satisfaction of such contingencies shall be allocated among the holders of capital stock of the Corporation in accordance with Sections 2.1 and 2.2 after taking into account the previous payment of the Initial Consideration as part of the same transaction. For the purposes of this Section 2.3.6, consideration placed into escrow or retained as holdback to be available for satisfaction of indemnification or similar obligations in connection with such Deemed Liquidation Event shall be deemed to be Additional Consideration.

3. Voting.

3.1 General. On any matter presented to the stockholders of the Corporation for their action or consideration at any meeting of stockholders of the Corporation (or by written consent of stockholders in lieu of meeting), each holder of outstanding shares of Preferred Stock shall be entitled to cast the number of votes equal to the number of whole shares of Common Stock into which the shares of Preferred Stock held by such holder are convertible as of the record date for determining stockholders entitled to vote on such matter. Except as provided by law or by the other provisions of the Certificate of Incorporation, holders of Preferred Stock shall vote together with the holders of Common Stock as a single class.

3.2 Election of Directors. The holders of record of the shares of Series A Preferred Stock, exclusively and as a separate class, shall be entitled to elect five (5) directors of the Corporation (the "**Series A Directors**") and the holders of record of the shares of Common Stock, exclusively and as a separate class, shall be entitled to elect two (2) directors of the Corporation. Any director elected as provided in the preceding sentence may be removed without cause by, and only by, the affirmative vote of the holders of the shares of the class or series of capital stock entitled to elect such director or directors, given either at a special meeting of such stockholders duly called for that purpose or pursuant to a written consent of stockholders. If the holders of shares of Series A Preferred Stock or Common Stock, as the case may be, fail to elect a sufficient number of directors to fill all directorships for which they are respectively entitled to elect directors, voting exclusively and as a separate class, as applicable, pursuant to the first sentence of this Section 3.2, then any directorship not so filled shall remain vacant until such time as the holders of the Series A Preferred Stock or Common Stock, as the case may be, elect a person to fill such directorship by vote or written consent in lieu of a meeting; and no such directorship may be filled by stockholders of the Corporation other than by the stockholders of the Corporation that are entitled to elect a person to fill such directorship, voting exclusively and as a separate class.

At any meeting held for the purpose of electing a director, the presence in person or by proxy of the holders of a majority of the outstanding shares of the class or series entitled to elect such director shall constitute a quorum for the purpose of electing such director. Except as otherwise provided in this Section 3.2, a vacancy in any directorship filled by the holders of any class or series shall be filled only by vote or written consent in lieu of a meeting of the holders of such class or series or by any remaining director or directors elected by the holders of such class or series pursuant to this Section 3.2. The rights of the holders of the Series A Preferred Stock and the rights of the holders of the Common Stock under the first sentence of this Section 3.2 shall terminate on the first date following the Series A Original Issue Date (as defined below) on which there are issued and outstanding less than 30,433,831 shares of Series A Preferred Stock (subject to appropriate adjustment in the event of any stock dividend, stock split, combination, or other similar recapitalization with respect to the Series A Preferred Stock).

3.3 Series A Preferred Stock Protective Provisions. At any time when at least fifty percent (50%) of the Series A Preferred Stock (subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to the Series A Preferred Stock) outstanding as of the Series A Original Issue Date remain issued and outstanding, the Corporation shall not, either directly or indirectly by amendment, merger, reclassification, consolidation or otherwise, do any of the following without (in addition to any other vote required by law or the Certificate of Incorporation) the written consent or affirmative vote of the holders of a majority of the then outstanding shares of Series A Preferred Stock, given in writing or by vote at a meeting, consenting or voting (as the case may be) separately as a class, and any such act or transaction entered into without such consent or vote shall be null and void *ab initio*, and of no force or effect:

3.3.1 materially and adversely alter or change the rights, preferences or privileges of the Series A Preferred Stock; or

3.3.2 create, or authorize the creation of, any new class or series of shares having rights, preferences or privileges senior to or pari passu with the Series A Preferred or increase the authorized number of shares of Series A Preferred Stock or increase the authorized number of shares of any additional class or series of capital stock; or

3.3.3 redeem or repurchase or pay or declare any dividend or make any distribution on any shares of capital stock of the Corporation (other than (i) redemptions of or dividends or distributions on the Series A Preferred Stock as expressly authorized herein, (ii) dividends or other distributions payable on the Common Stock solely in the form of additional shares of Common Stock or (iii) pursuant to equity incentive agreements with service providers giving the Company the right to repurchase shares upon the termination of services); or

3.3.4 enter into any merger or other corporate reorganization that results in a change of control of the Company, any transaction or series of transactions in which all or substantially all of the assets of the Company are sold, liquidation, dissolution or wind up of the business and affairs of the Corporation, or any other Deemed Liquidation Event;

3.3.5 amend, alter or repeal any provision of the Certificate of Incorporation or Bylaws of the Corporation in a manner that adversely affects the powers, preferences or rights of the Series A Preferred Stock;

3.3.6 (i) reclassify, alter or amend any existing security of the Corporation that is pari passu with the Series A Preferred Stock in respect of the distribution of assets on the liquidation, dissolution or winding up of the Corporation, the payment of dividends or rights of redemption, if such reclassification, alteration or amendment would render such other security senior to the Series A Preferred Stock in respect of any such right, preference, or privilege or (ii) reclassify, alter or amend any existing security of the Corporation that is junior to the Series A Preferred Stock in respect of the distribution of assets on the liquidation, dissolution or winding up of the Corporation, the payment of dividends or rights of redemption, if such reclassification, alteration or amendment would render such other security senior to or pari passu with the Series A Preferred Stock in respect of any such right, preference or privilege;

3.3.7 create, or authorize the creation of, or issue, or authorize the issuance of any debt security, or permit any subsidiary to take any such action with respect to any debt security;

3.3.8 create, or hold capital stock in, any subsidiary that is not wholly owned (either directly or through one or more other subsidiaries) by the Corporation, or sell, transfer or otherwise dispose of any capital stock of any direct or indirect subsidiary of the Corporation, or permit any direct or indirect subsidiary to sell, lease, transfer, exclusively license or otherwise dispose (in a single transaction or series of related transactions) of all or substantially all of the assets of such subsidiary;

3.3.9 increase or decrease the authorized number of directors constituting the Board of Directors; or

3.3.10 issue or grant any equity or convertible securities, including stock options or stock awards, to any directors of the Corporation.

4. Optional Conversion.

The holders of the Preferred Stock shall have conversion rights as follows (the “**Conversion Rights**”):

4.1 Right to Convert.

4.1.1 Conversion Ratio. Each share of Series A Preferred Stock shall be convertible, at the option of the holder thereof, at any time and from time to time, and without the payment of additional consideration by the holder thereof, into such number of fully paid and non-assessable shares of Common Stock as is determined by dividing the Series A Original Issue Price by the Series A Conversion Price (as defined below) in effect at the time of conversion. The “**Series A Conversion Price**” shall initially be equal to $0.2951. Such initial Series A Conversion Price, and the rate at which shares of Series A Preferred Stock may be converted into shares of Common Stock, shall be subject to adjustment as provided below. Each share of Series A-2 Preferred Stock shall be convertible, at the option of the holder thereof, at any

time and from time to time, and without the payment of additional consideration by the holder thereof, into such number of fully paid and non-assessable shares of Common Stock as is determined by dividing the Series A-2 Original Issue Price by the Series A-2 Conversion Price (as defined below) in effect at the time of conversion. The "**Series A-2 Conversion Price**" shall initially be equal to $0.3523. Such initial Series A-2 Conversion Price, and the rate at which shares of Series A-2 Preferred Stock may be converted into shares of Common Stock, shall be subject to adjustment as provided below. Each share of Series A-3 Preferred Stock shall be convertible, at the option of the holder thereof, at any time and from time to time, and without the payment of additional consideration by the holder thereof, into such number of fully paid and non-assessable shares of Common Stock as is determined by dividing the Series A-3 Original Issue Price by the Series A-3 Conversion Price (as defined below) in effect at the time of conversion. The "**Series A-3 Conversion Price**" shall initially be equal to $0.3523. Such initial Series A-3 Conversion Price, and the rate at which shares of Series A-3 Preferred Stock may be converted into shares of Common Stock, shall be subject to adjustment as provided below. The "**Applicable Conversion Price**" shall mean with respect to the Series A Preferred Stock, the Series A Conversion Price, with respect to the Series A-2 Preferred Stock, the Series A-2 Conversion Price, and with respect to the Series A-3 Preferred Stock, the Series A-3 Conversion Price.

4.1.2 Termination of Conversion Rights. In the event of a notice of redemption of any shares of Preferred Stock pursuant to Section 2.3.3, the Conversion Rights of the shares designated for redemption shall terminate at the close of business on the last full day preceding the date fixed for redemption, unless the redemption price is not fully paid on such redemption date, in which case the Conversion Rights for such shares shall continue until such price is paid in full. In the event of a liquidation, dissolution or winding up of the Corporation or a Deemed Liquidation Event, the Conversion Rights shall terminate at the close of business on the last full day preceding the date fixed for the payment of any such amounts distributable on such event to the holders of Preferred Stock.

4.2 Fractional Shares. No fractional shares of Common Stock shall be issued upon conversion of the Preferred Stock. In lieu of any fractional shares to which the holder would otherwise be entitled, the Corporation shall pay cash equal to such fraction multiplied by the fair market value of a share of Common Stock as determined in good faith by the Board of Directors of the Corporation. Whether or not fractional shares would be issuable upon such conversion shall be determined on the basis of the total number of shares of Preferred Stock the holder is at the time converting into Common Stock and the aggregate number of shares of Common Stock issuable upon such conversion.

4.3 Mechanics of Conversion.

4.3.1 Notice of Conversion. In order for a holder of Preferred Stock to voluntarily convert shares of Preferred Stock into shares of Common Stock, such holder shall (a) provide written notice to the Corporation's transfer agent at the office of the transfer agent for the Preferred Stock (or at the principal office of the Corporation if the Corporation serves as its own transfer agent) that such holder elects to convert all or any number of such holder's shares of Preferred Stock and, if applicable, any event on which such conversion is contingent and (b), if such holder's shares are certificated, surrender the certificate or certificates for such shares of Preferred Stock (or, if such registered holder alleges that such certificate has been lost, stolen or

destroyed, a lost certificate affidavit and agreement reasonably acceptable to the Corporation to indemnify the Corporation against any claim that may be made against the Corporation on account of the alleged loss, theft or destruction of such certificate), at the office of the transfer agent for the Preferred Stock (or at the principal office of the Corporation if the Corporation serves as its own transfer agent). Such notice shall state such holder's name or the names of the nominees in which such holder wishes the shares of Common Stock to be issued. If required by the Corporation, any certificates surrendered for conversion shall be endorsed or accompanied by a written instrument or instruments of transfer, in form satisfactory to the Corporation, duly executed by the registered holder or his, her or its attorney duly authorized in writing. The close of business on the date of receipt by the transfer agent (or by the Corporation if the Corporation serves as its own transfer agent) of such notice and, if applicable, certificates (or lost certificate affidavit and agreement) shall be the time of conversion (the "**Conversion Time**"), and the shares of Common Stock issuable upon conversion of the specified shares shall be deemed to be outstanding of record as of such date. The Corporation shall, as soon as practicable after the Conversion Time (i) issue and deliver to such holder of Preferred Stock, or to his, her or its nominees, a certificate or certificates for the number of full shares of Common Stock issuable upon such conversion in accordance with the provisions hereof and a certificate for the number (if any) of the shares of Preferred Stock represented by the surrendered certificate that were not converted into Common Stock, (ii) pay in cash such amount as provided in Section 4.2 in lieu of any fraction of a share of Common Stock otherwise issuable upon such conversion and (iii) pay all declared but unpaid dividends on the shares of Preferred Stock converted.

4.3.2 Reservation of Shares. The Corporation shall at all times when the Series A Preferred Stock, the Series A-2 Preferred Stock or the Series A-3 Preferred Stock shall be outstanding, reserve and keep available out of its authorized but unissued capital stock, for the purpose of effecting the conversion of the Series A Preferred Stock and Series A-2 Preferred Stock, such number of its duly authorized shares of Common Stock as shall from time to time be sufficient to effect the conversion of all outstanding Series A Preferred Stock, Series A-2 Preferred Stock or Series A-3 Preferred Stock; and if at any time the number of authorized but unissued shares of Common Stock shall not be sufficient to effect the conversion of all then outstanding shares of the Series A Preferred Stock, Series A-2 Preferred Stock and Series A-3 Preferred Stock, the Corporation shall take such corporate action as may be necessary to increase its authorized but unissued shares of Common Stock to such number of shares as shall be sufficient for such purposes, including, without limitation, engaging in best efforts to obtain the requisite stockholder approval of any necessary amendment to the Certificate of Incorporation. Before taking any action which would cause an adjustment reducing the Applicable Conversion Price below the then par value of the shares of Common Stock issuable upon conversion of the Series A Preferred Stock, Series A-2 Preferred Stock and Series A-3 Preferred Stock, as applicable, the Corporation will take any corporate action which may, in the opinion of its counsel, be necessary in order that the Corporation may validly and legally issue fully paid and non-assessable shares of Common Stock at such adjusted Applicable Conversion Price.

4.3.3 Effect of Conversion. All shares of Preferred Stock which shall have been surrendered for conversion as herein provided shall no longer be deemed to be outstanding and all rights with respect to such shares shall immediately cease and terminate at the Conversion Time, except only the right of the holders thereof to receive shares of Common Stock in exchange therefor, to receive payment in lieu of any fraction of a share otherwise issuable upon

such conversion as provided in Section 4.2 and to receive payment of any dividends declared but unpaid thereon. Any shares of Preferred Stock so converted shall be retired and cancelled and may not be reissued as shares of such series, and the Corporation may thereafter take such appropriate action (without the need for stockholder action) as may be necessary to reduce the authorized number of shares of Preferred Stock accordingly.

4.3.4 No Further Adjustment. Upon any such conversion, no adjustment to the Applicable Conversion Price shall be made for any declared but unpaid dividends on the Series A Preferred Stock, Series A-2 Preferred Stock and Series A-3 Preferred Stock surrendered for conversion or on the Common Stock delivered upon conversion.

4.3.5 Taxes. The Corporation shall pay any and all issue and other similar taxes that may be payable in respect of any issuance or delivery of shares of Common Stock upon conversion of shares of Preferred Stock pursuant to this Section 4. The Corporation shall not, however, be required to pay any tax which may be payable in respect of any transfer involved in the issuance and delivery of shares of Common Stock in a name other than that in which the shares of Preferred Stock so converted were registered, and no such issuance or delivery shall be made unless and until the person or entity requesting such issuance has paid to the Corporation the amount of any such tax or has established, to the satisfaction of the Corporation, that such tax has been paid.

4.4 Adjustments to Applicable Conversion Price for Diluting Issues.

4.4.1 Special Definitions. For purposes of this Article Fourth, the following definitions shall apply:

(a) "**Approval of the Series A Directors**" shall mean the affirmative vote of at least four of the Series A Directors.

(b) "**Option**" shall mean rights, options or warrants to subscribe for, purchase or otherwise acquire Common Stock or Convertible Securities.

(c) "**Series A Original Issue Date**" shall mean the date on which the first share of Series A Preferred Stock was issued.

(d) "**Series A-2 Original Issue Date**" shall mean the date on which the first share of Series A-2 Preferred Stock was issued.

(e) "**Series A-3 Original Issue Date**" shall mean the date on which the first share of Series A-3 Preferred Stock was issued.

(f) "**Convertible Securities**" shall mean any evidences of indebtedness, shares or other securities directly or indirectly convertible into or exchangeable for Common Stock, but excluding Options.

(g) "**Additional Shares of Common Stock**" shall mean all shares of Common Stock issued (or, pursuant to Section 4.4.3 below, deemed to be issued) by the Corporation after the Series A-3 Original Issue Date, other than (1) the following shares of Common Stock and (2) shares of Common Stock deemed issued pursuant to the following Options and Convertible Securities (clauses (1) and (2), collectively, "**Exempted Securities**"):

(i) shares of Common Stock, Options or Convertible Securities issued as a dividend or distribution on Preferred Stock;

(ii) shares of Common Stock, Options or Convertible Securities issued by reason of a dividend, stock split, split-up or other distribution on shares of Common Stock that is covered by Section 4.5, 4.6, 4.7 or 4.8**;**

(iii) up to 42,643,980 shares of Common Stock, including Options therefor (subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization affecting such shares), issued to employees or directors of, or consultants or advisors to, the Corporation or any of its subsidiaries pursuant to the 2017 and 2018 Stock Incentive Plans of the Corporation, whether issued before or after the Series A-3 Original Issue Date (provided that any Options for such shares that expire or terminate unexercised or any restricted stock repurchased by the Corporation at cost shall not be counted toward such maximum number unless and until such shares are re-granted as new stock grants (or as new Options) pursuant to the terms of any such plan, agreement or arrangement);

(iv) shares of Common Stock or Convertible Securities actually issued upon the exercise of Options or shares of Common Stock actually issued upon the conversion or exchange of Convertible Securities, in each case provided such issuance is pursuant to the terms of such Option or Convertible Security;

(v) shares of Common Stock, Options or Convertible Securities issued to banks, equipment lessors or other financial institutions, or to real property lessors, solely pursuant to a debt financing, equipment leasing or real property leasing transaction

approved by the Board of Directors of the Corporation, including Approval of the Series A Directors, that do not exceed an aggregate of 2,484,684 shares of Common Stock (including shares underlying (directly or indirectly) any such Options or Convertible Securities);

(vi) shares of Common Stock, Options or Convertible Securities issued to suppliers or third party service providers in connection with the provision of goods or services pursuant to transactions approved by the Board of Directors of the Corporation, including Approval of the Series A Directors, that do not exceed an aggregate of 2,484,684 shares of Common Stock (including shares underlying (directly or indirectly) any such Options or Convertible Securities);

(vii) shares of Common Stock, Options or Convertible Securities issued pursuant to the acquisition of another corporation by the Corporation by merger, purchase of substantially all of the assets or other reorganization or to a joint venture agreement, provided that such issuances are approved by the Board of Directors of the Corporation, including Approval of the Series A Directors, that do not exceed an aggregate of 2,484,684 shares of Common Stock (including shares underlying (directly or indirectly) any such Options or Convertible Securities); or

(viii) shares of Common Stock, Options or Convertible Securities issued in connection with sponsored research, collaboration, technology license, development, OEM, marketing or other similar agreements or strategic partnerships approved by the Board of Directors of the Corporation, including Approval of the Series A Directors, that do not exceed an aggregate of 2,484,684 shares of Common Stock (including shares underlying (directly or indirectly) any such Options or Convertible Securities).

4.4.2 No Adjustment of Applicable Conversion Price. No adjustment in the Applicable Conversion Price shall be made as the result of the issuance or deemed issuance of Additional Shares of Common Stock if the Corporation receives written notice from the holders of a majority of the shares of Series A Preferred Stock (voting together as a single class on an as converted basis) or the holders of a majority of the shares of such series of Preferred Stock, which are outstanding prior to such issuance or deemed issuance, agreeing that no such adjustment shall be made as the result of the issuance or deemed issuance of such Additional Shares of Common Stock.

4.4.3 Deemed Issue of Additional Shares of Common Stock.

(a) If the Corporation at any time or from time to time after the Series A-3 Original Issue Date shall issue any Options or Convertible Securities (excluding Options or Convertible Securities which are themselves Exempted Securities) or shall fix a record date for the determination of holders of any class of securities entitled to receive any such Options or Convertible Securities, then the maximum number of shares of Common Stock (as set forth in the instrument relating thereto, assuming the satisfaction of any conditions to exercisability, convertibility or exchangeability but without regard to any provision contained therein for a subsequent adjustment of such number) issuable upon the exercise of such Options or, in the case of Convertible Securities and Options therefor, the conversion or exchange of such Convertible Securities, shall be deemed to be Additional Shares of Common Stock issued as of the time of such issue or, in case such a record date shall have been fixed, as of the close of business on such record date.

(b) If the terms of any Option or Convertible Security, the issuance of which resulted in an adjustment to the Applicable Conversion Price pursuant to the terms of Section 4.4.4, are revised as a result of an amendment to such terms or any other adjustment pursuant to the provisions of such Option or Convertible Security (but excluding automatic adjustments to such terms pursuant to anti-dilution or similar provisions of such Option or Convertible Security) to provide for either (1) any increase or decrease in the number of shares of Common Stock issuable upon the exercise, conversion and/or exchange of any such Option or Convertible Security or (2) any increase or decrease in the consideration payable to the Corporation upon such exercise, conversion and/or exchange, then, effective upon such increase or decrease becoming effective, the Applicable Conversion Price computed upon the original issue of such Option or Convertible Security (or upon the occurrence of a record date with respect thereto) shall be readjusted to such Applicable Conversion Price as would have obtained had such revised terms been in effect upon the original date of issuance of such Option or Convertible Security. Notwithstanding the foregoing, no readjustment pursuant to this clause (b) shall have the effect of increasing the Applicable Conversion Price to an amount which exceeds the lower of (i) the Applicable Conversion Price in effect immediately prior to the original adjustment made as a result of the issuance of such Option or Convertible Security, or (ii) the Applicable Conversion Price, that would have resulted from any issuances of Additional Shares of Common Stock (other than deemed issuances of Additional Shares of Common Stock as a result of the issuance of such Option or Convertible Security) between the original adjustment date and such readjustment date.

(c) If the terms of any Option or Convertible Security (excluding Options or Convertible Securities which are themselves Exempted Securities), the issuance of which did not result in an adjustment to the Applicable Conversion Price pursuant to the terms of Section 4.4.4 (either because the consideration per share (determined pursuant to Section 4.4.5) of the Additional Shares of Common Stock subject thereto was equal to or greater than the Applicable Conversion Price then in effect, or because such Option or Convertible Security was issued before the Series A-3 Original Issue Date), are revised after the Series A-3 Original Issue Date as a result of an amendment to such terms or any other adjustment pursuant to the provisions of such Option or Convertible Security (but excluding automatic adjustments to such terms pursuant to anti-dilution or similar provisions of such Option or Convertible Security) to provide for either (1) any increase in the number of shares of Common Stock issuable upon the exercise, conversion or exchange of any such Option or Convertible Security or (2) any decrease in the consideration payable to the Corporation upon such exercise, conversion or exchange, then such Option or Convertible Security, as so amended or adjusted, and the Additional Shares of Common Stock subject thereto (determined in the manner provided in Section 4.4.3(a) shall be deemed to have been issued effective upon such increase or decrease becoming effective.

(d) Upon the expiration or termination of any unexercised Option or unconverted or unexchanged Convertible Security (or portion thereof) which resulted (either upon its original issuance or upon a revision of its terms) in an adjustment to the Applicable Conversion Price pursuant to the terms of Section 4.4.4, the Applicable Conversion Price shall be readjusted to such Applicable Conversion Price as would have obtained had such Option or Convertible Security (or portion thereof) never been issued.

(e) If the number of shares of Common Stock issuable upon the exercise, conversion and/or exchange of any Option or Convertible Security, or the consideration payable to the Corporation upon such exercise, conversion and/or exchange, is calculable at the time such Option or Convertible Security is issued or amended but is subject to adjustment based upon subsequent events, any adjustment to the Applicable Conversion Price provided for in this Section 4.4.3 shall be effected at the time of such issuance or amendment based on such number of shares or amount of consideration without regard to any provisions for subsequent adjustments (and any subsequent adjustments shall be treated as provided in clauses (b) and (c) of this Section 4.4.3). If the number of shares of Common Stock issuable upon the exercise, conversion and/or exchange of any Option or Convertible Security, or the consideration payable to the Corporation upon such exercise, conversion and/or exchange, cannot be calculated at all at the time such Option or Convertible Security is issued or amended, any adjustment to the Applicable Conversion Price that would result under the terms of this Section 4.4.3 at the time of such issuance or amendment shall instead be effected at the time such number of shares and/or amount of consideration is first calculable (even if subject to subsequent adjustments), assuming for purposes of calculating such adjustment to the Applicable Conversion Price that such issuance or amendment took place at the time such calculation can first be made.

4.4.4 Adjustment of Applicable Conversion Price Upon Issuance of Additional Shares of Common Stock. In the event the Corporation shall at any time after the Series A-3 Original Issue Date issue Additional Shares of Common Stock (including Additional Shares of Common Stock deemed to be issued pursuant to Section 4.4.3), without consideration or for a consideration per share less than the Applicable Conversion Price in effect immediately prior to such issue, then the Applicable Conversion Price shall be reduced, concurrently with such issue, to a price (calculated to the nearest one-hundredth of a cent) determined in accordance with the following formula:

$$CP_2 = CP_1 * (A + B) \div (A + C).$$

For purposes of the foregoing formula, the following definitions shall apply:

(a) "CP1" shall mean the Applicable Conversion Price, in effect immediately after such issue of Additional Shares of Common Stock

(b) "CP2" shall mean the Applicable Conversion Price in effect immediately prior to such issue of Additional Shares of Common Stock;

(c) "A" shall mean the number of shares of Common Stock outstanding immediately prior to such issue of Additional Shares of Common Stock (treating for this purpose as outstanding all shares of Common Stock issuable upon exercise of Options outstanding immediately prior to such issue or upon conversion or exchange of Convertible Securities (including the Preferred Stock) outstanding (assuming exercise of any outstanding Options therefor) immediately prior to such issue);

(d) "B" shall mean the number of shares of Common Stock that would have been issued if such Additional Shares of Common Stock had been issued at a price per share equal to CP_1 (determined by dividing the aggregate consideration received by the Corporation in respect of such issue by CP_1); and

(e) "C" shall mean the number of such Additional Shares of Common Stock issued in such transaction.

4.4.5 <u>Determination of Consideration</u>. For purposes of this <u>Section 4.4</u>, the consideration received by the Corporation for the issue of any Additional Shares of Common Stock shall be computed as follows:

(a) Cash and Property: Such consideration shall:

(i) insofar as it consists of cash, be computed at the aggregate amount of cash received by the Corporation, excluding amounts paid or payable for accrued interest;

(ii) insofar as it consists of property other than cash, be computed at the fair market value thereof at the time of such issue, as determined in good faith by the Board of Directors of the Corporation; and

(iii) in the event Additional Shares of Common Stock are issued together with other shares or securities or other assets of the Corporation for consideration which covers both, be the proportion of such consideration so received, computed as provided in clauses (i) and (ii) above, as determined in good faith by the Board of Directors of the Corporation.

(b) Options and Convertible Securities. The consideration per share received by the Corporation for Additional Shares of Common Stock deemed to have been issued pursuant to Section 4.4.3, relating to Options and Convertible Securities, shall be determined by dividing:

(i) the total amount, if any, received or receivable by the Corporation as consideration for the issue of such Options or Convertible Securities, plus the minimum aggregate amount of additional consideration (as set forth in the instruments relating thereto, without regard to any provision contained therein for a subsequent adjustment of such consideration) payable to the Corporation upon the exercise of such Options or the conversion or exchange of such Convertible Securities, or in the case of Options for Convertible Securities, the exercise of such Options for Convertible Securities and the conversion or exchange of such Convertible Securities, by

(ii) the maximum number of shares of Common Stock (as set forth in the instruments relating thereto, without regard to any provision contained therein for a subsequent adjustment of such number) issuable upon the exercise of such Options or the conversion or exchange of such Convertible Securities, or in the case of Options for Convertible Securities, the exercise of such Options for Convertible Securities and the conversion or exchange of such Convertible Securities.

4.4.6 Multiple Closing Dates. In the event the Corporation shall issue on more than one date Additional Shares of Common Stock that are a part of one transaction or a series of related transactions and that would result in an adjustment to the Applicable Conversion Price pursuant to the terms of Section 4.4.4 then, upon the final such issuance, the Applicable Conversion Price shall be readjusted to give effect to all such issuances as if they occurred on the date of the first such issuance (and without giving effect to any additional adjustments as a result of any such subsequent issuances within such period).

4.5 Adjustment for Stock Splits and Combinations. If the Corporation shall at any time or from time to time after the Series A-3 Original Issue Date effect a subdivision of the outstanding Common Stock, the Applicable Conversion Price in effect immediately before that subdivision shall be proportionately decreased so that the number of shares of Common Stock issuable on conversion of each share of such series shall be increased in proportion to such increase in the aggregate number of shares of Common Stock outstanding. If the Corporation shall at any time or from time to time after the Series A-3 Original Issue Date combine the outstanding shares of Common Stock, the Applicable Conversion Price in effect immediately before the combination shall be proportionately increased so that the number of shares of Common Stock issuable on conversion of each share of such series shall be decreased in proportion to such decrease in the aggregate number of shares of Common Stock outstanding. Any adjustment under this Section 4.5 shall become effective at the close of business on the date the subdivision or combination becomes effective.

4.6 Adjustment for Certain Dividends and Distributions. In the event the Corporation at any time or from time to time after the Series A-3 Original Issue Date shall make or issue, or fix a record date for the determination of holders of Common Stock entitled to receive, a dividend or other distribution payable on the Common Stock in additional shares of Common Stock, then and in each such event the Applicable Conversion Price in effect immediately before such event shall be decreased as of the time of such issuance or, in the event such a record date shall have been fixed, as of the close of business on such record date, by multiplying the Applicable Conversion Price then in effect by a fraction:

(1) the numerator of which shall be the total number of shares of Common Stock issued and outstanding immediately prior to the time of such issuance or the close of business on such record date, and

(2) the denominator of which shall be the total number of shares of Common Stock issued and outstanding immediately prior to the time of such issuance or the close of business on such record date plus the number of shares of Common Stock issuable in payment of such dividend or distribution.

Notwithstanding the foregoing (a) if such record date shall have been fixed and such dividend is not fully paid or if such distribution is not fully made on the date fixed therefor, the Applicable Conversion Price shall be recomputed accordingly as of the close of business on such record date and thereafter the Applicable Conversion Price shall be adjusted pursuant to this Section 4.6 as of the time of actual payment of such dividends or distributions; and (b) that no such adjustment shall be made if the holders of such series of Preferred Stock simultaneously receive a dividend or other distribution of shares of Common Stock in a number equal to the number of shares of Common Stock as they would have received if all outstanding shares of such series of Preferred Stock had been converted into Common Stock on the date of such event.

4.7 Adjustments for Other Dividends and Distributions. In the event the Corporation at any time or from time to time after the Series A-3 Original Issue Date shall make or issue, or fix a record date for the determination of holders of Common Stock entitled to receive, a dividend or other distribution payable in securities of the Corporation (other than a distribution of shares of Common Stock in respect of outstanding shares of Common Stock) or in other property and the provisions of Section 1 do not apply to such dividend or distribution, then and in each such event the holders of Preferred Stock shall receive, simultaneously with the distribution to the holders of Common Stock, a dividend or other distribution of such securities or other property in an amount equal to the amount of such securities or other property as they would have received if all outstanding shares of Preferred Stock had been converted into Common Stock on the date of such event.

4.8 Adjustment for Merger or Reorganization, etc. Subject to the provisions of Section 2.3, if there shall occur any reorganization, recapitalization, reclassification, consolidation or merger involving the Corporation in which the Common Stock (but not the Preferred Stock) is converted into or exchanged for securities, cash or other property (other than a transaction covered by Section 4.4, 4.6 or 4.7), then, following any such reorganization, recapitalization, reclassification, consolidation or merger, each share of Preferred Stock shall thereafter be convertible in lieu of the Common Stock into which it was convertible prior to such event into the kind and amount of securities, cash or other property which a holder of the number of shares of Common Stock of the Corporation issuable upon conversion of one share of Preferred Stock immediately prior to such reorganization, recapitalization, reclassification, consolidation or merger would have been entitled to receive pursuant to such transaction; and, in such case, appropriate adjustment (as determined in good faith by the Board of Directors of the Corporation) shall be made in the application of the provisions in this Section 4 with respect to the rights and interests thereafter of the holders of the Preferred Stock, to the end that the provisions set forth in this Section 4 (including provisions with respect to changes in and other adjustments of the Applicable Conversion Price) shall thereafter be applicable, as nearly as reasonably may be, in relation to any securities or other property thereafter deliverable upon the conversion of the Preferred Stock. For the avoidance of doubt, nothing in this Section 4.8 shall be construed as preventing the holders of Preferred Stock from seeking any appraisal rights to which they are otherwise entitled under the General Corporation Law in connection with a merger triggering an adjustment hereunder, nor shall this Section 4.8 be deemed conclusive evidence of the fair value of the shares of Preferred Stock in any such appraisal proceeding.

4.9 Certificate as to Adjustments. Upon the occurrence of each adjustment or readjustment of the Applicable Conversion Price pursuant to this Section 4, the Corporation at its expense shall, as promptly as reasonably practicable but in any event not later than ten (10) business days thereafter, compute such adjustment or readjustment in accordance with the terms hereof and furnish to each holder of Preferred Stock a certificate setting forth such adjustment or readjustment (including the kind and amount of securities, cash or other property into which the Preferred Stock is convertible) and showing in detail the facts upon which such adjustment or readjustment is based. The Corporation shall, as promptly as reasonably practicable after the written request at any time of any holder of Preferred Stock (but in any event not later than ten (10) business days thereafter), furnish or cause to be furnished to such holder a certificate setting forth (i) the Applicable Conversion Price then in effect, and (ii) the number of shares of Common Stock and the amount, if any, of other securities, cash or property which then would be received upon the conversion of Preferred Stock.

4.10 Notice of Record Date. In the event:

(a) the Corporation shall take a record of the holders of its Common Stock (or other capital stock or securities at the time issuable upon conversion of the Preferred Stock) for the purpose of entitling or enabling them to receive any dividend or other distribution, or to receive any right to subscribe for or purchase any shares of capital stock of any class or any other securities, or to receive any other security; or

(b) of any capital reorganization of the Corporation, any reclassification of the Common Stock of the Corporation, or any Deemed Liquidation Event; or

(c) of the voluntary or involuntary dissolution, liquidation or winding-up of the Corporation,

then, and in each such case, the Corporation will send or cause to be sent to the holders of the Preferred Stock a notice specifying, as the case may be, (i) the record date for such dividend, distribution or right, and the amount and character of such dividend, distribution or right, or (ii) the effective date on which such reorganization, reclassification, consolidation, merger, transfer, dissolution, liquidation or winding-up is proposed to take place, and the time, if any is to be fixed, as of which the holders of record of Common Stock (or such other capital stock or securities at the time issuable upon the conversion of the Preferred Stock) shall be entitled to exchange their shares of Common Stock (or such other capital stock or securities) for securities or other property deliverable upon such reorganization, reclassification, consolidation, merger, transfer, dissolution, liquidation or winding-up, and the amount per share and character of such exchange applicable to the Preferred Stock and the Common Stock. Such notice shall be sent at least ten (10) days prior to the record date or effective date for the event specified in such notice.

5. Mandatory Conversion.

5.1 Trigger Events. Upon either (a) the closing of the sale of shares of Common Stock to the public at a purchase price of at least the Series A-3 Original Issue Price per share (subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to the Common Stock), in a firm-commitment underwritten public offering pursuant to an effective registration statement under the Securities Act of 1933, as amended, resulting in at least $40,000,000 of gross proceeds, net of the underwriting discount and commissions, to the Corporation or (b) the date and time, or the occurrence of an event, specified by vote or written consent of the holders of at least 66.67% of the then outstanding shares of Preferred Stock (the time of such closing or the date and time specified or the time of the event specified in such vote or written consent is referred to herein as the "**Mandatory Conversion Time**"), then (i) all outstanding shares of Preferred Stock shall automatically be converted into shares of Common Stock, at the then effective conversion rate as calculated pursuant to Section 4.1.1 and (ii) such shares may not be reissued by the Corporation.

5.2 Procedural Requirements. All holders of record of shares of Preferred Stock shall be sent written notice of the Mandatory Conversion Time and the place designated for mandatory conversion of all such shares of Preferred Stock pursuant to this Section 5. Such notice need not be sent in advance of the occurrence of the Mandatory Conversion Time. Upon receipt of such notice, each holder of shares of Preferred Stock in certificated form shall surrender his, her or its certificate or certificates for all such shares (or, if such holder alleges that such certificate has been lost, stolen or destroyed, a lost certificate affidavit and agreement reasonably acceptable to the Corporation to indemnify the Corporation against any claim that may be made against the Corporation on account of the alleged loss, theft or destruction of such certificate) to the Corporation at the place designated in such notice. If so required by the Corporation, any certificates surrendered for conversion shall be endorsed or accompanied by written instrument or instruments of transfer, in form satisfactory to the Corporation, duly executed by the registered holder or by his, her or its attorney duly authorized in writing. All rights with respect to the Preferred Stock converted pursuant to Section 5.1, including the rights, if any, to receive notices and vote (other than as a holder of Common Stock), will terminate at the Mandatory Conversion Time (notwithstanding the failure of the holder or holders thereof to surrender any certificates at or prior to such time), except only the rights of the holders thereof, upon surrender of any certificate or certificates of such holders (or lost certificate affidavit and agreement) therefor, to receive the items provided for in the next sentence of this Section 5.2. As soon as practicable after the Mandatory Conversion Time and, if applicable, the surrender of any certificate or certificates (or lost certificate affidavit and agreement) for Preferred Stock, the Corporation shall (a) issue and deliver to such holder, or to his, her or its nominees, a certificate or certificates for the number of full shares of Common Stock issuable on such conversion in accordance with the provisions hereof and (b) pay cash as provided in Section 4.2 in lieu of any fraction of a share of Common Stock otherwise issuable upon such conversion and the payment of any declared but unpaid dividends on the shares of Preferred Stock converted. Such converted Preferred Stock shall be retired and cancelled and may not be reissued as shares of such series, and the Corporation may thereafter take such appropriate action (without the need for stockholder action) as may be necessary to reduce the authorized number of shares of Preferred Stock accordingly.

6. Redeemed or Otherwise Acquired Shares. Any shares of Preferred Stock that are redeemed or otherwise acquired by the Corporation or any of its subsidiaries shall be automatically and immediately cancelled and retired and shall not be reissued, sold or transferred. Neither the Corporation nor any of its subsidiaries may exercise any voting or other rights granted to the holders of Preferred Stock following redemption.

7. Waiver. Any of the rights, powers, preferences and other terms of the Preferred Stock set forth herein may be waived on behalf of all holders of Preferred Stock by the affirmative written consent or vote of the holders of a majority of the shares of Preferred Stock then outstanding.

8. Notices. Any notice required or permitted by the provisions of this Article Fourth to be given to a holder of shares of Preferred Stock shall be mailed, postage prepaid, to the post office address last shown on the records of the Corporation, or given by electronic communication in compliance with the provisions of the General Corporation Law, and shall be deemed sent upon such mailing or electronic transmission.

FIFTH: Subject to any additional vote required by the Certificate of Incorporation or Bylaws, in furtherance and not in limitation of the powers conferred by statute, the Board of Directors is expressly authorized to make, repeal, alter, amend and rescind any or all of the Bylaws of the Corporation.

SIXTH: Subject to any additional vote or approval required by the Certificate of Incorporation, the number of directors of the Corporation shall be determined in the manner set forth in the Bylaws of the Corporation.

SEVENTH: Elections of directors need not be by written ballot unless the Bylaws of the Corporation shall so provide.

EIGHTH: Meetings of stockholders may be held within or without the State of Delaware, as the Bylaws of the Corporation may provide. The books of the Corporation may be kept outside the State of Delaware at such place or places as may be designated from time to time by the Board of Directors or in the Bylaws of the Corporation.

NINTH: To the fullest extent permitted by law, a director of the Corporation shall not be personally liable to the Corporation or its stockholders for monetary damages for breach of fiduciary duty as a director. If the General Corporation Law or any other law of the State of Delaware is amended after approval by the stockholders of this Article Ninth to authorize corporate action further eliminating or limiting the personal liability of directors, then the liability of a director of the Corporation shall be eliminated or limited to the fullest extent permitted by the General Corporation Law as so amended.

Any repeal or modification of the foregoing provisions of this Article Ninth by the stockholders of the Corporation shall not adversely affect any right or protection of a director of the Corporation existing at the time of, or increase the liability of any director of the Corporation with respect to any acts or omissions of such director occurring prior to, such repeal or modification.

TENTH: The following indemnification provisions shall apply to the persons enumerated below.

1. Right to Indemnification of Directors and Officers. The Corporation shall indemnify and hold harmless, to the fullest extent permitted by applicable law as it presently exists or may hereafter be amended, any person (an "**Indemnified Person**") who was or is made or is threatened to be made a party or is otherwise involved in any action, suit or proceeding, whether civil, criminal, administrative or investigative (a "**Proceeding**"), by reason of the fact that such person, or a person for whom such person is the legal representative, is or was a director or officer of the Corporation or, while a director or officer of the Corporation, is or was serving at the request of the Corporation as a director, officer, employee or agent of another corporation or of a partnership, joint venture, limited liability company, trust, enterprise or nonprofit entity, including service with respect to employee benefit plans, against all liability and loss suffered and expenses (including attorneys" fees) reasonably incurred by such Indemnified Person in such Proceeding. Notwithstanding the preceding sentence, except as otherwise provided in Section 3 of this Article Tenth, the Corporation shall be required to indemnify an Indemnified Person in connection with a Proceeding (or part thereof) commenced by such Indemnified Person only if the commencement of such Proceeding (or part thereof) by the Indemnified Person was authorized in advance by the Board of Directors.

2. Prepayment of Expenses of Directors and Officers. The Corporation shall pay the expenses (including attorneys' fees) incurred by an Indemnified Person in defending any Proceeding in advance of its final disposition, provided, however, that, to the extent required by law, such payment of expenses in advance of the final disposition of the Proceeding shall be made only upon receipt of an undertaking by the Indemnified Person to repay all amounts advanced if it should be ultimately determined that the Indemnified Person is not entitled to be indemnified under this Article Tenth or otherwise.

3. Claims by Directors and Officers. If a claim for indemnification or advancement of expenses under this Article Tenth is not paid in full within thirty (30) days after a written claim therefor by the Indemnified Person has been received by the Corporation, the Indemnified Person may file suit to recover the unpaid amount of such claim and, if successful in whole or in part, shall be entitled to be paid the expense of prosecuting such claim. In any such action the Corporation shall have the burden of proving that the Indemnified Person is not entitled to the requested indemnification or advancement of expenses under applicable law.

4. Indemnification of Employees and Agents. The Corporation may indemnify and advance expenses to any person who was or is made or is threatened to be made or is otherwise involved in any Proceeding by reason of the fact that such person, or a person for whom such person is the legal representative, is or was an employee or agent of the Corporation or, while an employee or agent of the Corporation, is or was serving at the request of the Corporation as a director, officer, employee or agent of another corporation or of a partnership, joint venture, limited liability company, trust, enterprise or nonprofit entity, including service with respect to employee benefit plans, against all liability and loss suffered and expenses (including attorneys' fees) reasonably incurred by such person in connection with such Proceeding. The ultimate determination of entitlement to indemnification of persons who are non-director or officer employees or agents shall be made in such manner as is determined by the Board of Directors in its sole discretion. Notwithstanding the foregoing sentence, the Corporation shall not be required to indemnify a person in connection with a Proceeding initiated by such person if the Proceeding was not authorized in advance by the Board of Directors.

5. Advancement of Expenses of Employees and Agents. The Corporation may pay the expenses (including attorneys' fees) incurred by an employee or agent in defending any Proceeding in advance of its final disposition on such terms and conditions as may be determined by the Board of Directors.

6. Non-Exclusivity of Rights. The rights conferred on any person by this Article Tenth shall not be exclusive of any other rights which such person may have or hereafter acquire under any statute, provision of the certificate of incorporation, these by-laws, agreement, vote of stockholders or disinterested directors or otherwise.

7. Other Indemnification. The Corporation's obligation, if any, to indemnify any person who was or is serving at its request as a director, officer or employee of another Corporation, partnership, limited liability company, joint venture, trust, organization or other enterprise shall be reduced by any amount such person may collect as indemnification from such other Corporation, partnership, limited liability company, joint venture, trust, organization or other enterprise.

8. Insurance. The Board of Directors may, to the full extent permitted by applicable law as it presently exists, or may hereafter be amended from time to time, authorize an appropriate officer or officers to purchase and maintain at the Corporation's expense insurance: (a) to indemnify the Corporation for any obligation which it incurs as a result of the indemnification of directors, officers and employees under the provisions of this Article Tenth; and (b) to indemnify or insure directors, officers and employees against liability in instances in which they may not otherwise be indemnified by the Corporation under the provisions of this Article Tenth.

9. Amendment or Repeal. Any amendment, repeal or modification of the foregoing provisions of this Article Tenth shall not adversely affect any right or protection hereunder of any person in respect of any act or omission occurring prior to the time of such amendment, repeal or modification. The rights provided hereunder shall inure to the benefit of any Indemnified Person and such person's heirs, executors and administrators.

ELEVENTH: The Corporation renounces, to the fullest extent permitted by law, any interest or expectancy of the Corporation in, or in being offered an opportunity to participate in, any Excluded Opportunity. An "**Excluded Opportunity**" is any matter, transaction or interest that is presented to, or acquired, created or developed by, or which otherwise comes into the possession of (i) any director of the Corporation who is not an employee of the Corporation or any of its subsidiaries, or (ii) any holder of Preferred Stock or any partner, member, director, stockholder, employee or agent of any such holder, other than someone who is an employee of the Corporation or any of its subsidiaries (collectively, "**Covered Persons**"), unless such matter, transaction or interest is presented to, or acquired, created or developed by, or otherwise comes into the possession of, a Covered Person expressly and solely in such Covered Person's capacity as a director of the Corporation.

TWELFTH: Unless the Corporation consents in writing to the selection of an alternative forum, the Court of Chancery in the State of Delaware shall be the sole and exclusive forum for any stockholder (including a beneficial owner) to bring (i) any derivative action or proceeding brought on behalf of the Corporation, (ii) any action asserting a claim of breach of fiduciary duty owed by any director, officer or other employee of the Corporation to the Corporation or the Corporation's stockholders, (iii) any action asserting a claim against the Corporation, its directors, officers or employees arising pursuant to any provision of the Delaware General Corporation Law or the Corporation's certificate of incorporation or bylaws or (iv) any action asserting a claim against the Corporation, its directors, officers or employees governed by the internal affairs doctrine, except for, as to each of (i) through (iv) above, any claim as to which the Court of Chancery determines that there is an indispensable party not subject to the jurisdiction of the Court of Chancery (and the indispensable party does not consent to the personal jurisdiction of the Court of Chancery within ten days following such determination), which is vested in the exclusive jurisdiction of a court or forum other than the Court of Chancery, or for which the Court of Chancery does not have subject matter jurisdiction. If any provision or provisions of this Article Twelfth shall be held to be invalid, illegal or unenforceable as applied to any person or entity or circumstance for any reason whatsoever, then, to the fullest extent permitted by law, the validity, legality and enforceability of such provisions in any other circumstance and of the remaining provisions of this Article Twelfth (including, without limitation, each portion of any sentence of this Article Twelfth containing any such provision held to be invalid, illegal or unenforceable that is not itself held to be invalid, illegal or unenforceable) and the application of such provision to other persons or entities and circumstances shall not in any way be affected or impaired thereby.

*   *   *

3. That the foregoing amendment and restatement was approved by the holders of the requisite number of shares of this corporation in accordance with Section 228 of the General Corporation Law.

4. That this Fifth Amended and Restated Certificate of Incorporation, which restates and integrates and further amends the provisions of this Corporation's Certificate of Incorporation, has been duly adopted in accordance with Sections 242 and 245 of the General Corporation Law.

[Signature Page Follows]

IN WITNESS WHEREOF, this Fifth Amended and Restated Certificate of Incorporation has been executed by a duly authorized officer of this corporation on this 26th day of November, 2019.

By: ______________________________
Name: Alain Cappeluti
Title: Chief Financial Officer

Exhibit 3.1.2

CERTIFICATE OF CORRECTION

OF

RESTATED CERTIFICATE OF INCORPORATION

OF

NEXIMMUNE, INC.

It is hereby certified that:

1. The name of the corporation (hereinafter called the "Corporation") is Neximmune, Inc.
2. The Certificate of Incorporation of the Corporation was filed with the Secretary of State of the State of Delaware on June 7, 2011. Thereafter a Restated Certificate of Incorporation for the Corporation was filed on November 27, 2019 (the "Restated Certificate").
3. The Restated Certificate is hereby corrected.
4. The inaccuracy to be corrected in said instrument is as follows:

Due to a scrivener's error, paragraph 1. Dividends of Article Fourth Part B of the Restated Certificate had an incorrect "Series A-3 Original Issue Price" stated in the last sentence of paragraph 1.3 of Article Fourth Part B.

The following paragraph 1.3 of Article Fourth Part B of the Restated Certificate is corrected so that paragraph 1.3 shall read as follows:

1.3 From and after the date of the issuance of any shares of Series A-3 Preferred Stock, dividends at the rate per annum of $0.021138 per share shall accrue on such shares of Series A-3 Preferred Stock (subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to the Series A-3 Preferred Stock) (the "**Series A-3 Accruing Dividends**"). Series A-3 Accruing Dividends shall accrue from day to day, whether or not declared, and shall be cumulative; provided, however, that except as set forth in the following sentence of this Section 1.3 or in Section 2.1, 2.2 and Section 2.4, such Series A-3 Accruing Dividends shall be payable only when, as, and if declared by the Board of Directors and the Corporation shall be under no obligation to pay such Series A-3 Accruing Dividends. The Corporation shall not declare, pay or set aside any dividends on shares of any other class or series of capital stock of the Corporation (other than dividends on shares of Common Stock payable in shares of Common Stock) unless (in addition to the obtaining of any consents required elsewhere in the Certificate of Incorporation) the holders of the Series A-3 Preferred Stock then outstanding shall first receive, or simultaneously receive, a dividend on each outstanding share of Series A-3 Preferred Stock in an amount at least equal to the sum of (i) the amount of the aggregate Series A-

3 Accruing Dividends then accrued on such share of Series A-3 Preferred Stock and not previously paid and (ii) (A) in the case of a dividend on Common Stock or any class or series that is convertible into Common Stock, that dividend per share of Series A-3 Preferred Stock as would equal the product of (1) the dividend payable on each share of such class or series determined, if applicable, as if all shares of such class or series had been converted into Common Stock and (2) the number of shares of Common Stock issuable upon conversion of a share of Series A-3 Preferred Stock, in each case calculated on the record date for determination of holders entitled to receive such dividend or (B) in the case of a dividend on any class or series that is not convertible into Common Stock, at a rate per share of Series A-3 Preferred Stock determined by (1) dividing the amount of the dividend payable on each share of such class or series of capital stock by the original issuance price of such class or series of capital stock (subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to such class or series) and (2) multiplying such fraction by an amount equal to the Series A-3 Original Issue Price (as defined below); provided that if the Corporation declares, pays or sets aside, on the same date, a dividend on shares of more than one class or series of capital stock of the Corporation, the dividend payable to the holders of Series A-3 Preferred Stock pursuant to this Section 1.2 shall be calculated based upon the dividend on the class or series of capital stock that would result in the highest Series A-3 Preferred Stock dividend. The "**Series A-3 Original Issue Price**" shall mean $0.3523 per share, subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to the Series A-3 Preferred Stock.

and

Due to a scrivener's error, paragraph 4.1.1 Conversion Ratio. Article Fourth Part B of the Restated Certificate had an incorrect "Series A-3 Conversion Price" stated in the third to last sentence of paragraph 4.1.1 of Article Fourth Part B.

The following paragraph 4.1.1 of Article Fourth Part B of the Restated Certificate is corrected so that paragraph 4.1.1 shall read as follows:

4.1.1. Conversion Ratio. Each share of Series A Preferred Stock shall be convertible, at the option of the holder thereof, at any time and from time to time, and without the payment of additional consideration by the holder thereof, into such number of fully paid and non-assessable shares of Common Stock as is determined by dividing the Series A Original Issue Price by the Series A Conversion Price (as defined below) in effect at the time of conversion. The "**Series A Conversion Price**" shall initially be equal to $0.2951. Such initial Series A Conversion Price, and the rate at which shares of Series A Preferred Stock may be converted into shares of Common Stock, shall be subject to adjustment as provided below. Each share of Series A-2 Preferred Stock shall be convertible, at the option of the holder thereof, at any time and from time to time, and without the payment of additional consideration by the holder thereof, into such number of fully paid and non-assessable shares of Common Stock as is determined by dividing the Series A-2 Original Issue Price by the Series A-2 Conversion Price (as defined below) in effect at the time of conversion. The "**Series A-2 Conversion Price**" shall initially be equal to $0.3523. Such initial Series A-2 Conversion Price, and the rate at which shares of Series A-2 Preferred Stock may be converted into shares of Common Stock, shall be subject to adjustment as provided below. Each

share of Series A-3 Preferred Stock shall be convertible, at the option of the holder thereof, at any time and from time to time, and without the payment of additional consideration by the holder thereof, into such number of fully paid and non-assessable shares of Common Stock as is determined by dividing the Series A-3 Original Issue Price by the Series A-3 Conversion Price (as defined below) in effect at the time of conversion. The "**Series A-3 Conversion Price**" shall initially be equal to $0.3523. Such initial Series A-3 Conversion Price, and the rate at which shares of Series A-3 Preferred Stock may be converted into shares of Common Stock, shall be subject to adjustment as provided below. The "**Applicable Conversion Price**" shall mean with respect to the Series A Preferred Stock, the Series A Conversion Price, with respect to the Series A-2 Preferred Stock, the Series A-2 Conversion Price, and with respect to the Series A-3 Preferred Stock, the Series A-3 Conversion Price.

Executed this day of January, 2020.

Name: Alain Cappeluti
Title: Chief Financial Officer

Exhibit 3.3

BYLAWS

OF

NEXIMMUNE, INC.
(A DELAWARE CORPORATION)

BYLAWS

OF

NEXIMMUNE, INC.
(A DELAWARE CORPORATION)

ARTICLE I

OFFICES

Section 1. Registered Office. The registered office of the corporation in the State of Delaware will be in the City of Wilmington, County of New Castle.

Section 2. Other Offices. The corporation will also have and maintain an office or principal place of business at such place as may be fixed by the Board of Directors, and may also have offices at such other places, both within and without the State of Delaware, as the Board of Directors may from time to time determine or the business of the corporation may require.

ARTICLE II

CORPORATE SEAL

Section 3. Corporate Seal. The Board of Directors may adopt a corporate seal. The corporate seal will consist of a die bearing the name of the corporation and the inscription, "Corporate Seal-Delaware." Said seal may be used by causing it or a facsimile thereof to be impressed or affixed or reproduced or otherwise.

ARTICLE III

STOCKHOLDERS' MEETINGS

Section 4. Place of Meetings. Meetings of the stockholders of the corporation may be held at such place, either within or without the State of Delaware, as may be determined from time to time by the Board of Directors. The Board of Directors may, in its sole discretion, determine that the meeting will not be held at any place, but may instead be held solely by means of remote communication as provided under the Delaware General Corporation Law ("***DGCL***").

Section 5. Annual Meeting.

(a) The annual meeting of the stockholders of the corporation, for the purpose of election of directors and for such other business as may lawfully come before it, will be held on such date and at such time as may be designated from time to time by the Board of Directors. Nominations of persons for election to the Board of Directors of the corporation and the proposal of business to be considered by the stockholders may be made at an annual meeting of stockholders: (i) pursuant to the corporation's notice of meeting of stockholders; (ii) by or at the direction of the Board of Directors; or (iii) by any stockholder of the corporation who was a stockholder of record at the time of giving of notice provided for in the following paragraph, who is entitled to vote at the meeting and who complied with the notice procedures set forth in Section 5.

(b) At an annual meeting of the stockholders, only such business will be conducted as will have been properly brought before the meeting.

(c) Except as otherwise provided by law, the Chairman of the meeting will have the power and duty to determine whether a nomination or any business proposed to be brought before the meeting was proposed in accordance with the procedures set forth in these Bylaws and, if any proposed business is not in compliance with these Bylaws, to declare that such defective proposal will not be presented for stockholder action at the meeting and will be disregarded.

Section 6. Special Meetings.

(a) Special meetings of the stockholders of the corporation may be called, for any purpose or purposes, by (i) the Chairman of the Board of Directors, (ii) the Chief Executive Officer, or (iii) the Board of Directors pursuant to a resolution adopted by a majority of the total number of authorized directors (whether or not there exist any vacancies in previously authorized directorships at the time any such resolution is presented to the Board of Directors for adoption), or (iv) by the holders of shares entitled to cast not less than ten percent (10%) of the votes at the meeting, and will be held at such place, on such date, and at such time as the Board of Directors will fix.

(b) If a special meeting is properly called by any person or persons other than the Board of Directors, the request will be in writing, specifying the general nature of the business proposed to be transacted, and will be delivered personally or sent by certified or registered mail, return receipt requested, or by telegraphic or other facsimile transmission to the Chairman of the Board of Directors, the Chief Executive Officer, or the Secretary of the corporation. No business may be transacted at such special meeting otherwise than specified in such notice. The Board of Directors will determine the time and place of such special meeting, which will be held not less than twenty-five (25) nor more than one hundred twenty (120) days after the date of the receipt of the request. Upon determination of the time and place of the meeting, the officer receiving the request will cause notice to be given to the stockholders entitled to vote, in accordance with the provisions of Section 7 of these Bylaws. Nothing contained in this paragraph (b) will be construed as limiting, fixing, or affecting the time when a meeting of stockholders called by action of the Board of Directors may be held.

Section 7. Notice of Meetings. Except as otherwise provided by law, notice, given in writing or by electronic transmission, of each meeting of stockholders will be given not less than ten (10) nor more than sixty (60) days before the date of the meeting to each stockholder entitled to vote at such meeting, such notice to specify the place, if any, date and hour, in the case of special meetings, the purpose or purposes of the meeting, and the means of remote communications, if any, by which stockholders and proxyholders may be deemed to be present in person and vote at any such meeting. If mailed, notice is given when deposited in the United States mail, postage prepaid, directed to the stockholder at such stockholder's address as it appears on the records of the corporation. Notice of the time, place, if any, and purpose of any meeting of stockholders may

be waived in writing, signed by the person entitled to notice thereof or by electronic transmission by such person, either before or after such meeting, and will be waived by any stockholder by his attendance thereat in person, by remote communication, if applicable, or by proxy, except when the stockholder attends a meeting for the express purpose of objecting, at the beginning of the meeting, to the transaction of any business because the meeting is not lawfully called or convened. Any stockholder so waiving notice of such meeting will be bound by the proceedings of any such meeting in all respects as if due notice thereof had been given.

Section 8. Quorum. At all meetings of stockholders, except where otherwise provided by statute or by the Certificate of Incorporation, or by these Bylaws, the presence, in person, by remote communication, if applicable, or by proxy duly authorized, of the holders of a majority of the outstanding shares of stock entitled to vote will constitute a quorum for the transaction of business. In the absence of a quorum, any meeting of stockholders may be adjourned, from time to time, either by the chairman of the meeting or by vote of the holders of a majority of the shares represented thereat, but no other business will be transacted at such meeting. The stockholders present at a duly called or convened meeting, at which a quorum is present, may continue to transact business until adjournment, notwithstanding the withdrawal of enough stockholders to leave less than a quorum. Except as otherwise provided by statute, or by the Certificate of Incorporation or these Bylaws, in all matters other than the election of directors, the affirmative vote of a majority of shares present in person, by remote communication, if applicable, or represented by proxy duly authorized at the meeting and entitled to vote generally on the subject matter will be the act of the stockholders. Except as otherwise provided by statute, the Certificate of Incorporation or these Bylaws, directors will be elected by a plurality of the votes of the shares present in person, by remote communication, if applicable, or represented by proxy duly authorized at the meeting and entitled to vote generally on the election of directors. Where a separate vote by a class or classes or series is required, except where otherwise provided by the statute or by the Certificate of Incorporation or these Bylaws, a majority of the outstanding shares of such class or classes or series, present in person, by remote communication, if applicable, or represented by proxy duly authorized, will constitute a quorum entitled to take action with respect to that vote on that matter. Except where otherwise provided by statute or by the Certificate of Incorporation or these Bylaws, the affirmative vote of the majority (plurality, in the case of the election of directors) of shares of such class or classes or series present in person, by remote communication, if applicable, or represented by proxy at the meeting will be the act of such class or classes or series.

Section 9. Adjournment and Notice of Adjourned Meetings. Any meeting of stockholders, whether annual or special, may be adjourned from time to time either by the chairman of the meeting or by the vote of a majority of the shares present in person, by remote communication, if applicable, or represented by proxy. When a meeting is adjourned to another time or place, if any, notice need not be given of the adjourned meeting if the time and place, if any, thereof are announced at the meeting at which the adjournment is taken. At the adjourned meeting, the corporation may transact any business which might have been transacted at the original meeting. If the adjournment is for more than thirty (30) days or if after the adjournment a new record date is fixed for the adjourned meeting, a notice of the adjourned meeting will be given to each stockholder of record entitled to vote at the meeting.

Section 10. Voting Rights. For the purpose of determining those stockholders entitled to vote at any meeting of the stockholders, except as otherwise provided by law, only persons in whose names shares stand on the stock records of the corporation on the record date, as provided in Section 12 of these Bylaws, will be entitled to vote at any meeting of stockholders. Every person entitled to vote or execute consents will have the right to do so either in person, by remote communication, if applicable, or by an agent or agents authorized by a proxy granted in accordance with Delaware law. An agent so appointed need not be a stockholder. No proxy will be voted after three (3) years from its date of creation unless the proxy provides for a longer period.

Section 11. Joint Owners of Stock. If shares or other securities having voting power stand of record in the names of two (2) or more persons, whether fiduciaries, members of a partnership, joint tenants, tenants in common, tenants by the entirety, or otherwise, or if two (2) or more persons have the same fiduciary relationship respecting the same shares, unless the Secretary is given written notice to the contrary and is furnished with a copy of the instrument or order appointing them or creating the relationship wherein it is so provided, their acts with respect to voting will have the following effect: (a) if only one (1) votes, his act binds all; (b) if more than one (1) votes, the act of the majority so voting binds all; (c) if more than one (1) votes, but the vote is evenly split on any particular matter, each faction may vote the securities in question proportionally, or may apply to the Delaware Court of Chancery for relief as provided in the DGCL, Section 217(b). If the instrument filed with the Secretary shows that any such tenancy is held in unequal interests, a majority or even-split for the purpose of subsection (c) will be a majority or even-split in interest.

Section 12. List of Stockholders. The Secretary will prepare and make, at least ten (10) days before every meeting of stockholders, a complete list of the stockholders entitled to vote at said meeting, arranged in alphabetical order, showing the address of each stockholder and the number of shares registered in the name of each stockholder. Such list will be open to the examination of any stockholder, for any purpose germane to the meeting, on a reasonably accessible electronic network, provided that the information required to gain access to such list is provided with the notice of the meeting, or during ordinary business hours, at the principal place of business of the corporation. In the event that the corporation determines to make the list available on an electronic network, the corporation may take reasonable steps to ensure that such information is available only to stockholders of the corporation. The list will be open to examination of any stockholder during the time of the meeting as provided by law.

Section 13. Action Without Meeting.

(a) Unless otherwise provided in the Certificate of Incorporation, any action required by statute to be taken at any annual or special meeting of the stockholders, or any action which may be taken at any annual or special meeting of the stockholders, may be taken without a meeting, without prior notice and without a vote, if a consent in writing, or by electronic transmission setting forth the action so taken, will be signed by the holders of outstanding stock having not less than the minimum number of votes that would be necessary to authorize or take such action at a meeting at which all shares entitled to vote thereon were present and voted.

(b) Every written consent or electronic transmission will bear the date of signature of each stockholder who signs the consent, and no written consent or electronic transmission will be effective to take the corporate action referred to therein unless, within sixty (60) days of the earliest dated consent delivered to the corporation in the manner herein required, written consents or electronic transmissions signed by a sufficient number of stockholders to take action are delivered to the corporation by delivery to its registered office in the State of Delaware, its principal place of business or an officer or agent of the corporation having custody of the book in which proceedings of meetings of stockholders are recorded. Delivery made to a corporation's registered office will be by hand or by certified or registered mail, return receipt requested.

(c) Prompt notice of the taking of the corporate action without a meeting by less than unanimous written consent will be given to those stockholders who have not consented in writing or by electronic transmission and who, if the action had been taken at a meeting, would have been entitled to notice of the meeting if the record date for such meeting had been the date that written consents signed by a sufficient number of stockholders to take action were delivered to the corporation as provided in Section 228(c) of the DGCL. If the action which is consented to is such as would have required the filing of a certificate under any section of the DGCL if such action had been voted on by stockholders at a meeting thereof, then the certificate filed under such section will state, in lieu of any statement required by such section concerning any vote of stockholders, that written consent has been given in accordance with Section 228 of the DGCL.

(d) A telegram, cablegram or other electronic transmission consenting to an action to be taken and transmitted by a stockholder or proxyholder, will be deemed to be written, signed and dated for the purposes of this section, provided that any such telegram, cablegram or other electronic transmission sets forth or is delivered with information from which the corporation can determine (i) that the telegram, cablegram or other electronic transmission was transmitted by the stockholder or proxyholder or by a person or persons authorized to act for the stockholder and (ii) the date on which such stockholder or proxyholder or authorized person or persons transmitted such telegram, cablegram or electronic transmission. The date on which such telegram, cablegram or electronic transmission is transmitted will be deemed to be the date on which such consent was signed. No consent given by telegram, cablegram or other electronic transmission will be deemed to have been delivered until such consent is reproduced in paper form and until such paper form will be delivered to the corporation by delivery to its registered office in the state of Delaware, its principal place of business or an officer or agent of the corporation having custody of the book in which proceedings of meetings of stockholders are recorded. Delivery made to a corporation's registered office will be made by hand or by certified or registered mail, return receipt requested. Notwithstanding the foregoing limitations on delivery, consents given by telegram, cablegram or other electronic transmission may be otherwise delivered to the principal place of business of the corporation or to an officer or agent of the corporation having custody of the book in which proceedings of meetings of stockholders are recorded if, to the extent and in the manner provided by resolution of the board of directors of the corporation. Any copy, facsimile or other reliable reproduction of a consent in writing may be substituted or used in lieu of the original writing for any and all purposes for which the original writing could be used, provided that such copy, facsimile or other reproduction will be a complete reproduction of the entire original writing.

Section 14. Organization.

(a) At every meeting of stockholders, the Chairman of the Board of Directors, or, if a Chairman has not been appointed or is absent, the President, or, if the President is absent, a chairman of the meeting chosen by a majority in interest of the stockholders entitled to vote, present in person or by proxy, will act as chairman. The Secretary, or, in his absence, an Assistant Secretary directed to do so by the President, will act as secretary of the meeting.

(b) The Board of Directors of the corporation will be entitled to make such rules or regulations for the conduct of meetings of stockholders as it will deem necessary, appropriate or convenient. Subject to such rules and regulations of the Board of Directors, if any, the chairman of the meeting will have the right and authority to prescribe such rules, regulations and procedures and to do all such acts as, in the judgment of such chairman, are necessary, appropriate or convenient for the proper conduct of the meeting, including, without limitation, establishing an agenda or order of business for the meeting, rules and procedures for maintaining order at the meeting and the safety of those present, limitations on participation in such meeting to stockholders of record of the corporation and their duly authorized and constituted proxies and such other persons as the chairman will permit, restrictions on entry to the meeting after the time fixed for the commencement thereof, limitations on the time allotted to questions or comments by participants and regulation of the opening and closing of the polls for balloting on matters which are to be voted on by ballot. The date and time of the opening and closing of the polls for each matter upon which the stockholders will vote at the meeting will be announced at the meeting. Unless and to the extent determined by the Board of Directors or the chairman of the meeting, meetings of stockholders will not be required to be held in accordance with rules of parliamentary procedure.

ARTICLE IV

DIRECTORS

Section 15. Number and Term of Office.

The authorized number of directors of the corporation will be fixed by the Board of Directors from time to time.

Directors need not be stockholders unless so required by the Certificate of Incorporation. If for any cause, the directors will not have been elected at an annual meeting, they may be elected as soon thereafter as convenient.

Section 16. Powers. The powers of the corporation will be exercised, its business conducted and its property controlled by the Board of Directors, except as may be otherwise provided by statute or by the Certificate of Incorporation.

Section 17. Term of Directors. Directors will be elected at each annual meeting of stockholders for a term of one year. Each director will serve until his successor is duly elected and qualified or until his death, resignation or removal. No decrease in the number of directors constituting the Board of Directors will shorten the term of any incumbent director.

Section 18. Vacancies.

(a) Unless otherwise provided in the Certificate of Incorporation, any vacancies on the Board of Directors resulting from death, resignation, disqualification, removal or other causes and any newly created directorships resulting from any increase in the number of directors will, unless the Board of Directors determines by resolution that any such vacancies or newly created directorships will be filled by stockholders, be filled only by the affirmative vote of a majority of the directors then in office, even though less than a quorum of the Board of Directors. Any director elected in accordance with the preceding sentence will hold office for the remainder of the full term of the director for which the vacancy was created or occurred and until such director's successor will have been elected and qualified. A vacancy in the Board of Directors will be deemed to exist under this Bylaw in the case of the death, removal or resignation of any director.

Section 19. Resignation. Any director may resign at any time by delivering his or her notice in writing or by electronic transmission to the Secretary, such resignation to specify whether it will be effective at a particular time, upon receipt by the Secretary or at the pleasure of the Board of Directors. If no such specification is made, it will be deemed effective at the pleasure of the Board of Directors. When one or more directors will resign from the Board of Directors, effective at a future date, a majority of the directors then in office, including those who have so resigned, will have power to fill such vacancy or vacancies, the vote thereon to take effect when such resignation or resignations will become effective, and each Director so chosen will hold office for the unexpired portion of the term of the Director whose place will be vacated and until his successor will have been duly elected and qualified.

Section 20. Removal.

(a) Subject to any limitations imposed by applicable law, the Board of Directors or any director may be removed from office at any time (i) with cause by the affirmative vote of the holders of a majority of the voting power of all then-outstanding shares of capital stock of the corporation entitled to vote generally at an election of directors or (ii) without cause by the affirmative vote of the holders of a majority of the voting power of all then-outstanding shares of capital stock of the corporation, entitled to vote generally at an election of directors.

Section 21. Meetings

(a) Regular Meetings. Unless otherwise restricted by the Certificate of Incorporation, regular meetings of the Board of Directors may be held at any time or date and at any place within or without the State of Delaware which has been designated by the Board of Directors and publicized among all directors, either orally or in writing, including a voice-messaging system or other system designated to record and communicate messages, facsimile, telegraph or telex, or by electronic mail or other electronic means. No further notice will be required for a regular meeting of the Board of Directors.

(b) Special Meetings. Unless otherwise restricted by the Certificate of Incorporation, special meetings of the Board of Directors may be held at any time and place within or without the State of Delaware whenever called by the Chairman of the Board, the President, the Chief Executive Officer or any director.

(c) Meetings by Electronic Communications Equipment. Any member of the Board of Directors, or of any committee thereof, may participate in a meeting by means of conference telephone or other communications equipment by means of which all persons participating in the meeting can hear each other, and participation in a meeting by such means will constitute presence in person at such meeting.

(d) Notice of Special Meetings. Notice of the time and place of all special meetings of the Board of Directors will be orally or in writing, by telephone, including a voice messaging system or other system or technology designed to record and communicate messages, facsimile, telegraph or telex, or by electronic mail or other electronic means, during normal business hours, at least twenty-four (24) hours before the date and time of the meeting. If notice is sent by US mail, it will be sent by first class mail, postage prepaid at least three (3) days before the date of the meeting. Notice of any meeting may be waived in writing or by electronic transmission at any time before or after the meeting and will be waived by any director by attendance thereat, except when the director attends the meeting for the express purpose of objecting, at the beginning of the meeting, to the transaction of any business because the meeting is not lawfully called or convened.

(e) Waiver of Notice. The transaction of all business at any meeting of the Board of Directors, or any committee thereof, however called or noticed, or wherever held, will be as valid as though had at a meeting duly held after regular call and notice, if a quorum be present and if, either before or after the meeting, each of the directors not present who did not receive notice will sign a written waiver of notice or will waive notice by electronic transmission. All such waivers will be filed with the corporate records or made a part of the minutes of the meeting.

Section 22. Quorum and Voting.

(a) Unless the Certificate of Incorporation requires a greater number, a quorum of the Board of Directors will consist of a majority of the exact number of directors fixed from time to time by the Board of Directors in accordance with the Certificate of Incorporation; *provided*, *however*, at any meeting, whether a quorum be present or otherwise, a majority of the directors present may adjourn from time to time until the time fixed for the next regular meeting of the Board of Directors, without notice other than by announcement at the meeting.

(b) At each meeting of the Board of Directors at which a quorum is present, all questions and business will be determined by the affirmative vote of a majority of the directors present, unless a different vote be required by law, the Certificate of Incorporation or these Bylaws.

Section 23. Action Without Meeting. Unless otherwise restricted by the Certificate of Incorporation or these Bylaws, any action required or permitted to be taken at any meeting of the Board of Directors or of any committee thereof may be taken without a meeting, if all members of the Board of Directors or committee, as the case may be, consent thereto in writing or by electronic transmission, and such writing or writings or transmission or transmissions are filed with the minutes of proceedings of the Board of Directors or committee. Such filing will be in paper form if the minutes are maintained in paper form and will be in electronic form if the minutes are maintained in electronic form.

Section 24. Fees and Compensation. Directors will be entitled to such compensation for their services as may be approved by the Board of Directors, including, if so approved, by resolution of the Board of Directors, a fixed sum and expenses of attendance, if any, for attendance at each regular or special meeting of the Board of Directors and at any meeting of a committee of the Board of Directors. Nothing herein contained will be construed to preclude any director from serving the corporation in any other capacity as an officer, agent, employee, or otherwise and receiving compensation therefor.

Section 25. Committees.

(a) Executive Committee. The Board of Directors may appoint an Executive Committee to consist of one (1) or more members of the Board of Directors. The Executive Committee, to the extent permitted by law and provided in the resolution of the Board of Directors will have and may exercise all the powers and authority of the Board of Directors in the management of the business and affairs of the corporation, and may authorize the seal of the corporation to be affixed to all papers which may require it; but no such committee will have the power or authority in reference to (i) approving or adopting, or recommending to the stockholders, any action or matter expressly required by the DGCL to be submitted to stockholders for approval, or (ii) adopting, amending or repealing any bylaw of the corporation.

(b) Other Committees. The Board of Directors may, from time to time, appoint such other committees as may be permitted by law. Such other committees appointed by the Board of Directors will consist of one (1) or more members of the Board of Directors and will have such powers and perform such duties as may be prescribed by the resolution or resolutions creating such committees, but in no event will any such committee have the powers denied to the Executive Committee in these Bylaws.

(c) Term. The Board of Directors, subject to the provisions of subsections (a) or (b) of this Bylaw may at any time increase or decrease the number of members of a committee or terminate the existence of a committee. The membership of a committee member will terminate on the date of his death or voluntary resignation from the committee or from the Board of Directors. The Board of Directors may at any time for any reason remove any individual committee member and the Board of Directors may fill any committee vacancy created by death, resignation, removal or increase in the number of members of the committee. The Board of Directors may designate one or more directors as alternate members of any committee, who may replace any absent or disqualified member at any meeting of the committee, and, in addition, in the absence or disqualification of any member of a committee, the member or members thereof present at any meeting and not disqualified from voting, whether or not he or they constitute a quorum, may unanimously appoint another member of the Board of Directors to act at the meeting in the place of any such absent or disqualified member.

(d) Meetings. Unless the Board of Directors will otherwise provide, regular meetings of the Executive Committee or any other committee appointed pursuant to this Section 25 will be held at such times and places as are determined by the Board of Directors, or by any such committee, and when notice thereof has been given to each member of such committee, no further notice of such regular meetings need be given thereafter. Special meetings of any such committee may be held at any place which has been determined from time to time by such committee, and may be called by any director who is a member of such committee, upon notice to the members of such committee of the time and place of such special meeting given in the manner provided for the giving of notice to members of the Board of Directors of the time and place of special meetings

of the Board of Directors. Notice of any special meeting of any committee may be waived in writing at any time before or after the meeting and will be waived by any director by attendance thereat, except when the director attends such special meeting for the express purpose of objecting, at the beginning of the meeting, to the transaction of any business because the meeting is not lawfully called or convened. Unless otherwise provided by the Board of Directors in the resolutions authorizing the creation of the committee, a majority of the authorized number of members of any such committee will constitute a quorum for the transaction of business, and the act of a majority of those present at any meeting at which a quorum is present will be the act of such committee.

Section 26. Organization. At every meeting of the directors, the Chairman of the Board of Directors, or, if a Chairman has not been appointed or is absent, the President, or if the President is absent, the most senior Vice President, (if a director) or, in the absence of any such person, a chairman of the meeting chosen by a majority of the directors present, will preside over the meeting. The Secretary, or in his absence, any Assistant Secretary directed to do so by the President, will act as secretary of the meeting.

ARTICLE V

OFFICERS

Section 27. Officers Designated. The officers of the corporation will include, if and when designated by the Board of Directors, the Chairman of the Board of Directors, the President, one or more Vice Presidents, the Secretary, the Senior Financial Officer, the Treasurer and the Controller, all of whom will be elected at the annual organizational meeting of the Board of Directors. The Board of Directors may also appoint one or more Assistant Secretaries, Assistant Treasurers, Assistant Controllers and such other officers and agents with such powers and duties as it will deem necessary. The Board of Directors may assign such additional titles to one or more of the officers as it will deem appropriate. Any one person may hold any number of offices of the corporation at any one time unless specifically prohibited therefrom by law. The salaries and other compensation of the officers of the corporation will be fixed by or in the manner designated by the Board of Directors.

Section 28. Tenure and Duties of Officers.

(a) General. All officers will hold office at the pleasure of the Board of Directors and until their successors will have been duly elected and qualified, unless sooner removed. Any officer elected or appointed by the Board of Directors may be removed at any time by the Board of Directors. If the office of any officer becomes vacant for any reason, the vacancy may be filled by the Board of Directors.

(b) Duties of Chairman of the Board of Directors. The Chairman of the Board of Directors, when present, will preside at all meetings of the stockholders and the Board of Directors. The Chairman of the Board of Directors will perform other duties commonly incident to the office and will also perform such other duties and have such other powers as the Board of Directors will designate from time to time. If there is no President, then the Chairman of the Board of Directors will also serve as the Chief Executive Officer of the corporation and will have the powers and duties prescribed in paragraph (c) of this Section 28.

(c) Duties of President. The President will preside at all meetings of the stockholders and at all meetings of the Board of Directors, unless the Chairman of the Board of Directors has been appointed and is present. Unless some other officer has been elected Chief Executive Officer of the corporation, the President will be the chief executive officer of the corporation and will, subject to the control of the Board of Directors, have general supervision, direction and control of the business and officers of the corporation. The President will perform other duties commonly incident to the office and will also perform such other duties and have such other powers as the Board of Directors will designate from time to time.

(d) Duties of Vice Presidents. The Vice Presidents may assume and perform the duties of the President in the absence or disability of the President or whenever the office of President is vacant. The Vice Presidents will perform other duties commonly incident to their office and will also perform such other duties and have such other powers as the Board of Directors or the President will designate from time to time.

(e) Duties of Secretary. The Secretary will attend all meetings of the stockholders and of the Board of Directors and will record all acts and proceedings thereof in the minute book of the corporation. The Secretary will give notice in conformity with these Bylaws of all meetings of the stockholders and of all meetings of the Board of Directors and any committee thereof requiring notice. The Secretary will perform all other duties provided for in these Bylaws and other duties commonly incident to the office and will also perform such other duties and have such other powers as the Board of Directors will designate from time to time. The President may direct any Assistant Secretary to assume and perform the duties of the Secretary in the absence or disability of the Secretary, and each Assistant Secretary will perform other duties commonly incident to the office and will also perform such other duties and have such other powers as the Board of Directors or the President will designate from time to time.

(f) Duties of Senior Financial Officer. The Senior Financial Officer will keep or cause to be kept the books of account of the corporation in a thorough and proper manner and will render statements of the financial affairs of the corporation in such form and as often as required by the Board of Directors or the President. The Senior Financial Officer, subject to the order of the Board of Directors, will have the custody of all funds and securities of the corporation. The Senior Financial Officer will perform other duties commonly incident to his office and will also perform such other duties and have such other powers as the Board of Directors or the President will designate from time to time. The President may direct the Treasurer or any Assistant Treasurer, or the Controller or any Assistant Controller to assume and perform the duties of the Senior Financial Officer in the absence or disability of the Senior Financial Officer, and each Treasurer and Assistant Treasurer and each Controller and Assistant Controller will perform other duties commonly incident to the office and will also perform such other duties and have such other powers as the Board of Directors or the President will designate from time to time.

Section 29. Delegation of Authority. The Board of Directors may from time to time delegate the powers or duties of any officer to any other officer or agent, notwithstanding any provision hereof.

Section 30. Resignations. Any officer may resign at any time by giving notice in writing or by electronic transmission notice to the Board of Directors or to the President or to the Secretary. Any such resignation will be effective when received by the person or persons to whom such notice is given, unless a later time is specified therein, in which event the resignation will become effective at such later time. Unless otherwise specified in such notice, the acceptance of any such resignation will not be necessary to make it effective. Any resignation will be without prejudice to the rights, if any, of the corporation under any contract with the resigning officer.

Section 31. Removal. Any officer may be removed from office at any time, either with or without cause, by the affirmative vote of a majority of the directors in office at the time, or by the unanimous written consent of the directors in office at the time, or by any committee or superior officers upon whom such power of removal may have been conferred by the Board of Directors.

ARTICLE VI

EXECUTION OF CORPORATE INSTRUMENTS AND VOTING OF SECURITIES OWNED BY THE CORPORATION

Section 32. Execution of Corporate Instruments. The Board of Directors may, in its discretion, determine the method and designate the signatory officer or officers, or other person or persons, to execute on behalf of the corporation any corporate instrument or document, or to sign on behalf of the corporation the corporate name without limitation, or to enter into contracts on behalf of the corporation, except where otherwise provided by law or these Bylaws, and such execution or signature will be binding upon the corporation.

All checks and drafts drawn on banks or other depositaries on funds to the credit of the corporation or in special accounts of the corporation will be signed by such person or persons as the Board of Directors will authorize so to do.

Unless authorized or ratified by the Board of Directors or within the agency power of an officer, no officer, agent or employee will have any power or authority to bind the corporation by any contract or engagement or to pledge its credit or to render it liable for any purpose or for any amount.

Section 33. Voting of Securities Owned by the Corporation. All stock and other securities of other corporations owned or held by the corporation for itself, or for other parties in any capacity, will be voted, and all proxies with respect thereto will be executed, by the person authorized so to do by resolution of the Board of Directors, or, in the absence of such authorization, by the Chairman of the Board of Directors, the Chief Executive Officer, the President, or any Vice President.

ARTICLE VII

SHARES OF STOCK

Section 34. Form and Execution of Certificates. Certificates for the shares of stock of the corporation will be in such form as is consistent with the Certificate of Incorporation and applicable law. Every holder of stock in the corporation will be entitled to have a certificate signed by or in the name of the corporation by the Chairman of the Board of Directors, or the President or any Vice President and by the Treasurer or Assistant Treasurer or the Secretary or Assistant Secretary, certifying the number of shares owned by him in the corporation. Any or all of the signatures on the certificate may be facsimiles. In case any officer, transfer agent, or registrar who has signed or whose facsimile signature has been placed upon a certificate will have ceased to be such officer, transfer agent, or registrar before such certificate is issued, it may be issued with the same effect as if he were such officer, transfer agent, or registrar at the date of issue. Each certificate will state upon the face or back thereof, in full or in summary, all of the powers, designations, preferences, and rights, and the limitations or restrictions of the shares authorized to be issued or will, except as otherwise required by law, set forth on the face or back a statement that the corporation will furnish without charge to each stockholder who so requests the powers, designations, preferences and relative, participating, optional, or other special rights of each class of stock or series thereof and the qualifications, limitations or restrictions of such preferences and/or rights. Within a reasonable time after the issuance or transfer of uncertificated stock, the corporation will send to the registered owner thereof a written notice containing the information required to be set forth or stated on certificates pursuant to this section or otherwise required by law or with respect to this section a statement that the corporation will furnish without charge to each stockholder who so requests the powers, designations, preferences and relative participating, optional or other special rights of each class of stock or series thereof and the qualifications, limitations or restrictions of such preferences and/or rights.

Section 35. Lost Certificates. A new certificate or certificates will be issued in place of any certificate or certificates theretofore issued by the corporation alleged to have been lost, stolen, or destroyed, upon the making of an affidavit of that fact by the person claiming the certificate of stock to be lost, stolen, or destroyed. The corporation may require, as a condition precedent to the issuance of a new certificate or certificates, the owner of such lost, stolen, or destroyed certificate or certificates, or the owner’s legal representative, to agree to indemnify the corporation in such manner as it will require or to give the corporation a surety bond in such form and amount as it may direct as indemnity against any claim that may be made against the corporation with respect to the certificate alleged to have been lost, stolen, or destroyed.

Section 36. Transfers.

(a) Transfers of record of shares of stock of the corporation will be made only upon its books by the holders thereof, in person or by attorney duly authorized, and upon the surrender of a properly endorsed certificate or certificates for a like number of shares.

(b) The corporation will have power to enter into and perform any agreement with any number of stockholders of any one or more classes of stock of the corporation to restrict the transfer of shares of stock of the corporation of any one or more classes owned by such stockholders in any manner not prohibited by the DGCL.

Section 37. Fixing Record Dates.

(a) In order that the corporation may determine the stockholders entitled to notice of or to vote at any meeting of stockholders or any adjournment thereof, the Board of Directors may fix, in advance, a record date, which record date will not precede the date upon which the resolution fixing the record date is adopted by the Board of Directors, and which record date will, subject to applicable law, not be more than sixty (60) nor less than ten (10) days before the date of such meeting. If no record date is fixed by the Board of Directors, the record date for determining stockholders entitled to notice of or to vote at a meeting of stockholders will be at the close of business on the day next preceding the day on which notice is given, or if notice is waived, at the close of business on the day next preceding the day on which the meeting is held. A determination of stockholders of record entitled to notice of or to vote at a meeting of stockholders will apply to any adjournment of the meeting; provided, however, that the Board of Directors may fix a new record date for the adjourned meeting.

(b) In order that the corporation may determine the stockholders entitled to consent to corporate action in writing without a meeting, the Board of Directors may fix a record date, which record date will not precede the date upon which the resolution fixing the record date is adopted by the Board of Directors, and which date will not be more than ten (10) days after the date upon which the resolution fixing the record date is adopted by the Board of Directors. Any stockholder of record seeking to have the stockholders authorize or take corporate action by written consent will, by written notice to the Secretary, request the Board of Directors to fix a record date. The Board of Directors will promptly, but in all events within ten (10) days after the date on which such a request is received, adopt a resolution fixing the record date. If no record date has been fixed by the Board of Directors within ten (10) days of the date on which such a request is received, the record date for determining stockholders entitled to consent to corporate action in writing without a meeting, when no prior action by the Board of Directors is required by applicable law, will be the first date on which a signed written consent setting forth the action taken or proposed to be taken is delivered to the corporation by delivery to its registered office in the State of Delaware, its principal place of business or an officer or agent of the corporation having custody of the book in which proceedings of meetings of stockholders are recorded. Delivery made to the corporation’s registered office will be by hand or by certified or registered mail, return receipt requested. If no record date has been fixed by the Board of Directors and prior action by the Board of Directors is required by law, the record date for determining stockholders entitled to consent to corporate action in writing without a meeting will be at the close of business on the day on which the Board of Directors adopts the resolution taking such prior action.

(c) In order that the corporation may determine the stockholders entitled to receive payment of any dividend or other distribution or allotment of any rights or the stockholders entitled to exercise any rights in respect of any change, conversion or exchange of stock, or for the purpose of any other lawful action, the Board of Directors may fix, in advance, a record date, which record date will not precede the date upon which the resolution fixing the record date is adopted, and which record date will be not more than sixty (60) days prior to such action. If no record date is fixed, the record date for determining stockholders for any such purpose will be at the close of business on the day on which the Board of Directors adopts the resolution relating thereto.

Section 38. Registered Stockholders. The corporation will be entitled to recognize the exclusive right of a person registered on its books as the owner of shares to receive dividends, and to vote as such owner, and will not be bound to recognize any equitable or other claim to or interest in such share or shares on the part of any other person whether or not it will have express or other notice thereof, except as otherwise provided by the laws of Delaware.

ARTICLE VIII

OTHER SECURITIES OF THE CORPORATION

Section 39. Execution of Other Securities. All bonds, debentures and other corporate securities of the corporation, other than stock certificates (covered in Section 34), may be signed by the Chairman of the Board of Directors, the President or any Vice President, or such other person as may be authorized by the Board of Directors, and the corporate seal impressed thereon or a facsimile of such seal imprinted thereon and attested by the signature of the Secretary or an Assistant Secretary, or the Senior Financial Officer or Treasurer or an Assistant Treasurer; *provided*, *however*, that where any such bond, debenture or other corporate security will be authenticated by the manual signature, or where permissible facsimile signature, of a trustee under an indenture pursuant to which such bond, debenture or other corporate security will be issued, the signatures of the persons signing and attesting the corporate seal on such bond, debenture or other corporate security may be the imprinted facsimile of the signatures of such persons. Interest coupons appertaining to any such bond, debenture or other corporate security, authenticated by a trustee as aforesaid, will be signed by the Treasurer or an Assistant Treasurer of the corporation or such other person as may be authorized by the Board of Directors, or bear imprinted thereon the facsimile signature of such person. In case any officer who will have signed or attested any bond, debenture or other corporate security, or whose facsimile signature will appear thereon or on any such interest coupon, will have ceased to be such officer before the bond, debenture or other corporate security so signed or attested will have been delivered, such bond, debenture or other corporate security nevertheless may be adopted by the corporation and issued and delivered as though the person who signed the same or whose facsimile signature will have been used thereon had not ceased to be such officer of the corporation.

ARTICLE IX

DIVIDENDS

Section 40. Declaration of Dividends. Dividends upon the capital stock of the corporation, subject to the provisions of the Certificate of Incorporation and applicable law, if any, may be declared by the Board of Directors pursuant to law at any regular or special meeting. Dividends may be paid in cash, in property, or in shares of the capital stock, subject to the provisions of the Certificate of Incorporation and applicable law.

Section 41. Dividend Reserve. Before payment of any dividend, there may be set aside out of any funds of the corporation available for dividends such sum or sums as the Board of Directors from time to time, in their absolute discretion, think proper as a reserve or reserves to meet contingencies, or for equalizing dividends, or for repairing or maintaining any property of the corporation, or for such other purpose as the Board of Directors will think conducive to the interests of the corporation, and the Board of Directors may modify or abolish any such reserve in the manner in which it was created.

ARTICLE X

FISCAL YEAR

Section 42. Fiscal Year. The fiscal year of the corporation will be fixed by resolution of the Board of Directors.

ARTICLE XI

INDEMNIFICATION

Section 43. Indemnification of Directors, Executive Officers, Other Officers, Employees and Other Agents.

(a) Directors and Officers. The corporation will indemnify its directors (for the purposes of this Article XI, "executive officers" will have the meaning defined in Rule 3b-7 promulgated under the Securities Act of 1934, as amended (the "***1934 Act***")) and officers to the fullest extent not prohibited by the DGCL or any other applicable law; *provided*, *however*, that the corporation may modify the extent of such indemnification by individual contracts with its directors and officers; and, *provided*, *further*, that the corporation will not be required to indemnify any director or officer in connection with any proceeding (or part thereof) initiated by such person unless (i) such indemnification is expressly required to be made by law, (ii) the proceeding was authorized by the Board of Directors of the corporation, (iii) such indemnification is provided by the corporation, in its sole discretion, pursuant to the powers vested in the corporation under the Delaware General Corporation Law or any other applicable law or (iv) such indemnification is required to be made under subsection (d).

(b) Employees and Other Agents. The corporation will have power to indemnify its officers employees and other agents as set forth in the DGCL or any other applicable law. The Board of Directors will have the power to delegate the determination of whether indemnification will be given to any such person to such officers or other persons as the Board of Directors will determine.

(c) Expenses. The corporation will advance to any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative, by reason of the fact that he is or was a director or officer, of the corporation, or is or was serving at the request of the corporation as a director or officer of another corporation, partnership, joint venture, trust or other enterprise, prior to the final disposition of the proceeding, promptly following request therefor, all expenses incurred by any director or officer in connection with such proceeding, provided, however, that, if the DGCL requires, an advancement of expenses incurred by a director or officer in his or her capacity as a director or officer (and not in any other capacity in which service was or is rendered by such indemnitee, including, without limitation, service to an employee benefit plan) will be made only upon delivery to the corporation of an undertaking, by or on behalf of such indemnitee, to repay all amounts so advanced if it will ultimately be determined by final judicial decision from which there is no further right to appeal that such indemnitee is not entitled to be indemnified for such expenses under this Section 43 or otherwise.

Notwithstanding the foregoing, unless otherwise determined pursuant to paragraph (e) of this Bylaw, no advance will be made by the corporation to an officer of the corporation (except by reason of the fact that such officer is or was a director of the corporation, in which event this paragraph will not apply) in any action, suit or proceeding, whether civil, criminal, administrative or investigative, if a determination is reasonably and promptly made (i) by a majority vote of a quorum consisting of directors who were not parties to the proceeding, even if not a quorum, or (ii) by a committee of such directors designated by a majority of such directors, even though less than a quorum, or (iii) if there are no such directors, or such directors so direct, by independent legal counsel in a written opinion, that the facts known to the decision-making party at the time such determination is made demonstrate clearly and convincingly that such person acted in bad faith or in a manner that such person did not believe to be in or not opposed to the best interests of the corporation.

(d) Enforcement. Without the necessity of entering into an express contract, all rights to indemnification and advances to directors and officers under this Bylaw will be deemed to be contractual rights and be effective to the same extent and as if provided for in a contract between the corporation and the director or officer. Any right to indemnification or advances granted by this Bylaw to a director or officer will be enforceable by or on behalf of the person holding such right in any court of competent jurisdiction if (i) the claim for indemnification or advances is denied, in whole or in part, or (ii) no disposition of such claim is made within ninety (90) days of request therefor. The claimant in such enforcement action, if successful in whole or in part, will be entitled to be paid also the expense of prosecuting the claim. In connection with any claim for indemnification, the corporation will be entitled to raise as a defense to any such action that the claimant has not met the standards of conduct that make it permissible under the DGCL or any other applicable law for the corporation to indemnify the claimant for the amount claimed. In connection with any claim by an officer of the corporation (except in any action, suit or proceeding, whether civil, criminal, administrative or investigative, by reason of the fact that such officer is or was a director of the corporation) for advances, the corporation will be entitled to raise a defense as to any such action clear and convincing evidence that such person acted in bad faith or in a manner that such person did not believe to be in or not opposed to the best interests of the corporation, or with respect to any criminal action or proceeding that such person acted without reasonable cause to believe that his conduct was lawful. Neither the failure of the corporation (including its Board of Directors, independent legal counsel or its stockholders) to have made a determination prior to the commencement of such action that indemnification of the claimant is proper in the circumstances because he has met the applicable standard of conduct set forth in the DGCL or any other applicable law, nor an actual determination by the corporation (including its Board of Directors, independent legal counsel or its stockholders) that the claimant has not met such applicable standard of conduct, will be a defense to the action or create a presumption that claimant has not met the applicable standard of conduct. In any suit brought by a director or officer to enforce a right to indemnification or to an advancement of expenses hereunder, the burden of proving that the director or officer is not entitled to be indemnified, or to such advancement of expenses, under this Article XI or otherwise will be on the corporation.

(e) Non-Exclusivity of Rights. The rights conferred on any person by this Bylaw will not be exclusive of any other right which such person may have or hereafter acquire under any applicable statute, provision of the Certificate of Incorporation, Bylaws, agreement, vote of stockholders or disinterested directors or otherwise, both as to action in his official capacity and as to action in another capacity while holding office. The corporation is specifically authorized to enter into individual contracts with any or all of its directors, officers, employees or agents respecting indemnification and advances, to the fullest extent not prohibited by the DGCL or any other applicable law.

(f) Survival of Rights. The rights conferred on any person by this Bylaw will continue as to a person who has ceased to be a director, officer, employee or other agent and will inure to the benefit of the heirs, executors and administrators of such a person.

(g) Insurance. To the fullest extent permitted by the DGCL, or any other applicable law, the corporation, upon approval by the Board of Directors, may purchase insurance on behalf of any person required or permitted to be indemnified pursuant to this Bylaw.

(h) Amendments. Any amendment, repeal or modification of any provision of this Article XI will only be prospective and will not affect the rights or protections under any provision of this Article XI in effect at the time of the alleged occurrence of any action or omission to act that is the cause of any proceeding against any agent of the corporation.

(i) Saving Clause. If this Bylaw or any portion hereof will be invalidated on any ground by any court of competent jurisdiction, then the corporation will nevertheless indemnify each director and officer to the full extent not prohibited by any applicable portion of this Bylaw that will not have been invalidated, or by any other applicable law. If this Section 43 will be invalid due to the application of the indemnification provisions of another jurisdiction, then the corporation will indemnify each director and officer to the full extent under applicable law. Notwithstanding anything herein or otherwise to the contrary, the provisions of this Section 43 will not be deemed to limit or restrain the corporation from complying with its obligations to any director under the terms of any indemnification agreement entered into by the corporation with any director.

(j) Certain Definitions. For the purposes of this Bylaw, the following definitions will apply:

(1) The term “proceeding” will be broadly construed and will include, without limitation, the investigation, preparation, prosecution, defense, settlement, arbitration and appeal of, and the giving of testimony in, any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative.

(2) The term “expenses” will be broadly construed and will include, without limitation, court costs, attorneys’ fees, witness fees, fines, amounts paid in settlement or judgment and any other costs and expenses of any nature or kind incurred in connection with any proceeding.

(3) The term the “corporation” will include, in addition to the resulting corporation, any constituent corporation (including any constituent of a constituent) absorbed in a consolidation or merger which, if its separate existence had continued, would have had power and authority to indemnify its directors, officers, and employees or agents, so that any person who is or was a director, officer, employee or agent of such constituent corporation, or is or was serving at the request of such constituent corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, will stand in the same position under the provisions of this Bylaw with respect to the resulting or surviving corporation as he would have with respect to such constituent corporation if its separate existence had continued.

(4) References to a "director," "executive officer," "officer," "employee," or "agent" of the corporation will include, without limitation, situations where such person is serving at the request of the corporation as, respectively, a director, executive officer, officer, employee, trustee or agent of another corporation, partnership, joint venture, trust or other enterprise.

(5) References to "other enterprises" will include employee benefit plans; references to "fines" will include any excise taxes assessed on a person with respect to an employee benefit plan; and references to "serving at the request of the corporation" will include any service as a director, officer, employee or agent of the corporation which imposes duties on, or involves services by, such director, officer, employee, or agent with respect to an employee benefit plan, its participants, or beneficiaries; and a person who acted in good faith and in a manner he reasonably believed to be in the interest of the participants and beneficiaries of an employee benefit plan will be deemed to have acted in a manner "not opposed to the best interests of the corporation" as referred to in this Bylaw.

ARTICLE XII

NOTICES

Section 44. Notices.

(a) Notice to Stockholders. Written notice to stockholders of stockholder meetings will be given as provided in Section 7 herein. Without limiting the manner by which notice may otherwise be given effectively to stockholders under any agreement or contract with such stockholder, and except as otherwise required by law, written notice to stockholders for purposes other than stockholder meetings may be sent by United States mail or nationally recognized overnight courier, or by facsimile, telegraph or telex or by electronic mail or other electronic means.

(b) Notice to Directors. Any notice required to be given to any director may be given by the method stated in subsection (a), or as provided for in Section 21 of these Bylaws. If such notice is not delivered personally, it will be sent to such address as such director will have filed in writing with the Secretary, or, in the absence of such filing, to the last known post office address of such director.

(c) Affidavit of Mailing. An affidavit of mailing, executed by a duly authorized and competent employee of the corporation or its transfer agent appointed with respect to the class of stock affected or other agent, specifying the name and address or the names and addresses of the stockholder or stockholders, or director or directors, to whom any such notice or notices was or were given, and the time and method of giving the same, will in the absence of fraud, be prima facie evidence of the facts therein contained.

(d) Methods of Notice. It will not be necessary that the same method of giving notice be employed in respect of all recipients of notice, but one permissible method may be employed in respect of any one or more, and any other permissible method or methods may be employed in respect of any other or others.

(e) Notice to Person with Whom Communication Is Unlawful. Whenever notice is required to be given, under any provision of law or of the Certificate of Incorporation or Bylaws of the corporation, to any person with whom communication is unlawful, the giving of such notice to such person will not be required and there will be no duty to apply to any governmental authority or agency for a license or permit to give such notice to such person. Any action or meeting which will be taken or held without notice to any such person with whom communication is unlawful will have the same force and effect as if such notice had been duly given. In the event that the action taken by the corporation is such as to require the filing of a certificate under any provision of the DGCL, the certificate will state, if such is the fact and if notice is required, that notice was given to all persons entitled to receive notice except such persons with whom communication is unlawful.

ARTICLE XIII

AMENDMENTS

Section 45. Amendments. Subject to any restrictions set forth in the Certificate of Incorporation, the Board of Directors is expressly empowered to adopt, amend or repeal Bylaws of the corporation. Subject to any restrictions set forth in the Certificate of Incorporation, the stockholders will also have power to adopt, amend or repeal the Bylaws of the corporation.

ARTICLE XIV

RIGHT OF FIRST REFUSAL

Section 46. Right of First Refusal. No stockholder will sell, assign, pledge, or in any manner transfer any of the shares of common stock of the corporation, or any right or interest therein, whether voluntarily or by operation of law, or by gift or otherwise, except by a transfer which meets the requirements hereinafter set forth in this bylaw:

(a) If the stockholder desires to sell or otherwise transfer any of his shares of common stock, then the stockholder will first give written notice thereof to the corporation. The notice will name the proposed transferee and state the number of shares to be transferred, the proposed consideration, and all other terms and conditions of the proposed transfer.

(b) For thirty (30) days following receipt of such notice, the corporation will have the option to purchase all (but not less than all) of the shares specified in the notice at the price and upon the terms set forth in such notice; *provided*, *however*, that, with the consent of the stockholder, the corporation will have the option to purchase a lesser portion of the shares specified in said notice at the price and upon the terms set forth therein. In the event of a gift, property settlement or other transfer in which the proposed transferee is not paying the full price for the shares, and that is not otherwise exempted from the provisions of this Section 46, the price will be

deemed to be the fair market value of the stock at such time as determined in good faith by the Board of Directors. In the event the corporation elects to purchase all of the shares or, with consent of the stockholder, a lesser portion of the shares, it will give written notice to the transferring stockholder of its election and settlement for said shares will be made as provided below in paragraph (e).

(c) In the event that the corporation does not elect to purchase all of the shares available pursuant to its rights under paragraph (b) within the period set forth in such paragraph, the selling stockholder will promptly give the same written notice to each of the other stockholders. Each other stockholder will then have the right, exercisable upon written notice to the selling stockholder within ten (10) days after the receipt of notice, to purchase its pro rata share of all of the shares of stock subject to the notice (and not less than all) and on the same terms and conditions as set forth in the notice. Except as set forth below, the stockholders who so exercise their rights (the "***Participating Stockholders***") will effect the purchase of the shares, including payment of the purchase price, not more than five (5) days after delivery of the notice, and at such time the selling stockholder will deliver to the Participating Stockholders the certificate(s) representing the shares to be purchased by the Participating Stockholders, each certificate to be properly endorsed for transfer.

(i) Each stockholder's *pro rata* share will be equal to the product obtained by multiplying (i) the aggregate number of shares of stock covered by the notice and (ii) a fraction, the numerator of which is the number of shares of Common Stock held by the Participating Stockholder at the time of the notice, and the denominator of which is the total number of shares of Common Stock at the time of the notice held by all stockholders.

(ii) In the event that not all of the stockholders elect to purchase their *pro rata* share of the stock available pursuant to their rights above within the time period set forth in the notice, then the selling stockholder will promptly give written notice to each of the Participating Stockholders (the "***Overallotment Notice***"), which will set forth the number of shares of stock not purchased by the other stockholders, and will offer such Participating Stockholders the right to acquire such unsubscribed shares. Each Participating Stockholder will have five (5) days after receipt of the Overallotment Notice to deliver a written notice to the selling stockholder indicating the number of unsubscribed shares that such Participating Stockholder desires to purchase, and each such Participating Stockholder will be entitled to purchase such number of unsubscribed shares on the same terms and conditions as set forth in the notice. In the event that the Participating Stockholders desire, in the aggregate, to purchase in excess of the total number of available unsubscribed shares, then the number of unsubscribed shares that each Participating Stockholder may purchase will be reduced on a *pro rata* basis. The Participating Stockholder will then effect the purchase of the shares, including payment of the purchase price, not more than five (5) days after delivery of the Participating Stockholders overallotment notice, and at such time, the selling stockholder will deliver to the stockholders the certificates representing the shares to be purchased by the Participating Stockholders, each certificate to be properly endorsed for transfer.

(d) The corporation may assign its rights hereunder.

(e) In the event the corporation and/or its assignee(s) elect to acquire any of the shares of the transferring stockholder as specified in said transferring stockholder's notice, the Secretary of the corporation will so notify the transferring stockholder and settlement thereof will be made in cash within thirty (30) days after the Secretary of the corporation receives said transferring stockholder's notice; provided that if the terms of payment set forth in said transferring stockholder's notice were other than cash against delivery, the corporation and/or its assignee(s) will pay for said shares on the same terms and conditions set forth in said transferring stockholder's notice.

(f) In the event the corporation and/or its assignees(s) or the stockholders do not elect to acquire all of the shares specified in the transferring stockholder's notice, said transferring stockholder may, within the sixty-day period following the expiration of the option rights granted to the corporation and/or its assignees(s) herein, transfer the shares specified in said transferring stockholder's notice which were not acquired by the corporation and/or its assignees(s) as specified in said transferring stockholder's notice. All shares so sold by said transferring stockholder will continue to be subject to the provisions of this bylaw in the same manner as before said transfer.

(g) Anything to the contrary contained herein notwithstanding, the following transactions will be exempt from the provisions of this bylaw:

(1) A stockholder's transfer of any or all shares held either during such stockholder's lifetime or on death by will or intestacy to such stockholder's immediate family or to any custodian or trustee for the account of such stockholder or such stockholder's immediate family or to any limited partnership of which the stockholder, members of such stockholder's immediate family or any trust for the account of such stockholder or such stockholder's immediate family will be the general of limited partner(s) of such partnership. "Immediate family" as used herein will mean spouse, lineal descendant, father, mother, brother, or sister of the stockholder making such transfer.

(2) A stockholder's bona fide pledge or mortgage of any shares with a commercial lending institution, provided that any subsequent transfer of said shares by said institution will be conducted in the manner set forth in this bylaw.

(3) A stockholder's transfer of any or all of such stockholder's shares to the corporation or to any other stockholder of the corporation.

(4) A stockholder's transfer of any or all of such stockholder's shares to a person who, at the time of such transfer, is an officer or director of the corporation.

(5) A corporate stockholder's transfer of any or all of its shares pursuant to and in accordance with the terms of any merger, consolidation, reclassification of shares or capital reorganization of the corporate stockholder, or pursuant to a sale of all or substantially all of the stock or assets of a corporate stockholder.

(6) A corporate stockholder's transfer of any or all of its shares to any or all of its stockholders.

(7) A transfer by a stockholder which is a limited or general partnership to any or all of its partners or former partners.

In any such case, the transferee, assignee, or other recipient will receive and hold such stock subject to the provisions of this bylaw, and there will be no further transfer of such stock except in accord with this bylaw.

(h) The provisions of this bylaw may be waived with respect to any transfer either by the corporation, upon duly authorized action of its Board of Directors, or by the stockholders, upon the express written consent of the owners of a majority of the voting power of the corporation (excluding the votes represented by those shares to be transferred by the transferring stockholder). This bylaw may be amended or repealed either by a duly authorized action of the Board of Directors or by the stockholders, upon the express written consent of the owners of a majority of the voting power of the corporation.

(i) Any sale or transfer, or purported sale or transfer, of securities of the corporation will be null and void unless the terms, conditions, and provisions of this bylaw are strictly observed and followed.

(j) The foregoing right of first refusal will terminate on either of the following dates, whichever will first occur:

(1) June 7, 2021; or

(2) Upon the date securities of the corporation are first offered to the public pursuant to a registration statement filed with, and declared effective by, the United States Securities and Exchange Commission under the Securities Act of 1933, as amended.

(k) The certificates representing shares of common stock of the corporation will bear on their face the following legend so long as the foregoing right of first refusal remains in effect:

"THE SHARES REPRESENTED BY THIS CERTIFICATE ARE SUBJECT TO A RIGHT OF FIRST REFUSAL OPTION IN FAVOR OF THE CORPORATION AND/OR ITS ASSIGNEE(S), AS PROVIDED IN THE BYLAWS OF THE CORPORATION."

ARTICLE XV

LOANS TO OFFICERS

Section 47. Loans to Officers. Until such time as the corporation becomes public pursuant to a registration statement filed with, and declared effective by, the United States Securities and Exchange Commission under the Securities Act of 1933, as amended, the corporation may lend money to, or guarantee any obligation of, or otherwise assist any officer or other employee of the corporation or of its subsidiaries, including any officer or employee who is a Director of the corporation or its subsidiaries, whenever, in the judgment of the Board of Directors, such loan, guarantee or assistance may reasonably be expected to benefit the corporation. The loan, guarantee or other assistance may be with or without interest and may be unsecured, or secured in such manner as the Board of Directors will approve, including, without limitation, a pledge of shares of stock of the corporation. Nothing in these Bylaws will be deemed to deny, limit or restrict the powers of guaranty or warranty of the corporation at common law or under any statute.

ARTICLE I	OFFICES	2
Section 1.	Registered Office	2
Section 2.	Other Offices	2
ARTICLE II CORPORATE SEAL		2
Section 3.	Corporate Seal	2
ARTICLE III STOCKHOLDERS’ MEETINGS		2
Section 4.	Place of Meetings	2
Section 5.	Annual Meeting	2
Section 6.	Special Meetings	3
Section 7.	Notice of Meetings	3
Section 8.	Quorum	4
Section 9.	Adjournment and Notice of Adjourned Meetings	4
Section 10.	Voting Rights	5
Section 11.	Joint Owners of Stock	5
Section 12.	List of Stockholders	5
Section 13.	Action Without Meeting	5
Section 14.	Organization	7
ARTICLE IV DIRECTORS		7
Section 15.	Number and Term of Office	7
Section 16.	Powers	7
Section 17.	Term of Directors	7
Section 18.	Vacancies	8
Section 19.	Resignation	8
Section 20.	Removal	8
Section 21.	Meetings	8
(a)	Regular Meetings	8
(b)	Special Meetings	8
(c)	Meetings by Electronic Communications Equipment	8
(d)	Notice of Special Meetings	9
(e)	Waiver of Notice	9
Section 22.	Quorum and Voting	9
Section 23.	Action Without Meeting	9
Section 24.	Fees and Compensation	10

Section 25.	Committees	10
(a)	Executive Committee	10
(b)	Other Committees	10
(c)	Term	10
(d)	Meetings	10
Section 26.	Organization	11
ARTICLE V	OFFICERS	11
Section 27.	Officers Designated	11
Section 28.	Tenure and Duties of Officers	11
(a)	General	11
(b)	Duties of Chairman of the Board of Directors	11
(c)	Duties of President	12
(d)	Duties of Vice Presidents	12
(e)	Duties of Secretary	12
(f)	Duties of Senior Financial Officer	12
Section 29.	Delegation of Authority	12
Section 30.	Resignations	13
Section 31.	Removal	13
ARTICLE VI	EXECUTION OF CORPORATE INSTRUMENTS AND VOTING OF SECURITIES OWNED BY THE CORPORATION	13
Section 32.	Execution of Corporate Instruments	13
Section 33.	Voting of Securities Owned by the Corporation	13
ARTICLE VII	SHARES OF STOCK	14
Section 34.	Form and Execution of Certificates	14
Section 35.	Lost Certificates	14
Section 36.	Transfers	14
Section 37.	Fixing Record Dates	15
Section 38.	Registered Stockholders	15
ARTICLE VIII	OTHER SECURITIES OF THE CORPORATION	16
Section 39.	Execution of Other Securities	16
ARTICLE IX	DIVIDENDS	16
Section 40.	Declaration of Dividends	16
Section 41.	Dividend Reserve	16

ARTICLE X	FISCAL YEAR	17
Section 42.	Fiscal Year	17
ARTICLE XI	INDEMNIFICATION	17
Section 43.	Indemnification of Directors, Executive Officers, Other Officers, Employees and Other Agents	17
(a)	Directors and Officers	17
(b)	Employees and Other Agents	17
(c)	Expenses	17
(d)	Enforcement	18
(e)	Non-Exclusivity of Rights	18
(f)	Survival of Rights	19
(g)	Insurance	19
(h)	Amendments	19
(i)	Saving Clause	19
(j)	Certain Definitions	19
ARTICLE XII	NOTICES	20
Section 44.	Notices	20
(a)	Notice to Stockholders	20
(b)	Notice to Directors	20
(c)	Affidavit of Mailing	20
(d)	Methods of Notice	21
(e)	Notice to Person with Whom Communication Is Unlawful	21
ARTICLE XIII	AMENDMENTS	21
Section 45.	Amendments	21
ARTICLE XIV	RIGHT OF FIRST REFUSAL	21
Section 46.	Right of First Refusal	21
ARTICLE XV	LOANS TO OFFICERS	24
Section 47.	Loans to Officers	24

Exhibit 10.11

AMENDED AND RESTATED
EXCLUSIVE LICENSE AGREEMENT

BETWEEN

THE JOHNS HOPKINS UNIVERSITY

&

NEXIMMUNE, INC.

JHU Agreement: # - [***]

CONFIDENTIAL

EXCLUSIVE LICENSE AGREEMENT

THIS AMENDED AND RESTATED EXCLUSIVE 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 NEXIMMUNE, INC., a Delaware corporation having an address at 9119 Gaither Rd, Gaithersburg, MD 20877 ("Company"), with respect to the following:

RECITALS

WHEREAS, JHU and Company entered into that certain License Agreement as of the Effective Date, as amended as of October 9, 2013, (the "Original License") and now wish to amend and restate the Original License in full as provided for herein as of the Restatement Date (defined below) for the purpose of adding certain PATENT RIGHTS (defined below) and other rights and obligations as provided herein; and

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, valuable inventions entitled [***] were developed during the course of research conducted by[***] (all hereinafter, "Inventors"); and

WHEREAS, an invention entitled "Production of Antigen Specific T-cells," (Company case reference number NEX-007, JHU reference C14063) were developed during the course of research at Company by Drs. Mathias Oelke, Jose Santos, and Sojung Kim and at JHU by Drs. Jonathan Schneck and Alyssa Kosmides; 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 to amend and restate the Original License as of the Restatement Date and agree as follows:

[***] = CERTAIN CONFIDENTIAL INFORMATION CONTAINED IN THIS DOCUMENT, MARKED BY BRACKETS, HAS BEEN OMITTED BECAUSE THE INFORMATION (I) IS NOT MATERIAL AND (II) WOULD BE COMPETITIVELY HARMFUL IF PUBLICLY DISCLOSED.

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 “aAPC PATENT RIGHTS” shall mean the JHU Patent Applications and issued Patents, listed on Exhibit A, including Fusion Protein Patents corresponding to [***]; aAPC patents corresponding to [***] and a joint Nexlmmune and JHU patent application corresponding to [***]. Patent Rights include any foreign patent application corresponding thereto, and any divisional, continuation, or reexamination application, and each patent that issues or reissues from any of these patent applications. aAPC PATENT RIGHTS excludes any continuation-in-part (CIP) patent application or patent filed after the Effective Date. Any claim of an unexpired LICENSED PATENT is presumed to be valid unless it has been held to be invalid by a final judgment of a court of competent jurisdiction from which no appeal can be or is taken.

1.2 “AFFILIATED COMPANY(IES)” 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, which includes control by Company, any persons who have an ownership interest in Company, any family members of any such persons, and any companies or legal entities owned or controlled by such persons. Control shall mean the direct or indirect ownership of at least fifty percent (50%) of the securities or other ownership interests representing the equity, voting stock, general partnership or membership interest of such entity.

1.3 “COMPASSIONATE USE” shall mean (i) providing a LICENSED PRODUCT prior to marketing approval by the United States Food and Drug Administration (FDA) and outside of a clinical trial to treat a patient with a serious or immediately life-threatening disease or condition who has no comparable or satisfactory alternative treatment options; (ii) providing a LICENSED PRODUCT or LICENSED SERVICE to public sector entities in developing countries (as defined by the World Bank or International Monetary Fund); (iii) providing a LICENSED PRODUCT or LICENSED SERVICE to indigent individuals and/or individuals without medical health insurance; or (iv) a combination of the preceding (i-iii).

1.4 “DIAGNOSTIC FIELD” shall mean all human and veterinary diagnostic, predictive and prognostic uses for LICENSED PRODUCTS AND LICENSED SERVICES, including uses of the foregoing that involve [***].

1.5 “EFFECTIVE DATE” of this Agreement shall mean June 24, 2011.

1.6 “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

[***] = CERTAIN CONFIDENTIAL INFORMATION CONTAINED IN THIS DOCUMENT, MARKED BY BRACKETS, HAS BEEN OMITTED BECAUSE THE INFORMATION (I) IS NOT MATERIAL AND (II) WOULD BE COMPETITIVELY HARMFUL IF PUBLICLY DISCLOSED.

CFR Part 401), and subject to the retained right of JHU to make, have made, provide and use for its and The Johns Hopkins Health Systems' internal purposes LICENSED PRODUCT(S) and LICENSED SERVICE(S), including the ability to distribute any biological material disclosed and/or claimed in PATENT RIGHTS for nonprofit academic research use to non-profit entities as is customary in the scientific community

1.7 "FIRST COMMERCIAL SALE" shall mean, with respect to any LICENSED PRODUCT or LICENSED SERVICE and any country of the world, the first sale of such LICENSED PRODUCT or LICENSED SERVICE under this Agreement by Company, its AFFILIATED COMPANY, or SUBLICENSEE(S) to a non-affiliate third party in such country other than sales for COMPASSIONATE USE. For any LICENSED PRODUCT or LICENSED SERVICE requiring Regulatory Approval, the First Commercial Sale will be such sale after Regulatory Approval has been granted.

1.8 "FUSION PROTEIN PATENT RIGHTS" shall mean the JHU Patent Applications and issued Patents listed on Exhibit A, Fusion Protein Patents and corresponding to [***] including any foreign patent application corresponding thereto, and any divisional, continuation, or reexamination application, and each patent that issues or reissues from any of these patent applications. FUSION PROTEIN PATENT RIGHTS excludes any continuation-in-part (Cm) patent application or patent filed after the Effective Date. Any claim of an unexpired LICENSED PATENT is presumed to be valid unless it has been held to be invalid by a final judgment of a court of competent jurisdiction from which no appeal can be or is taken.

1.9 "JHU KNOW-HOW" shall mean JHU's proprietary technical information, research data, designs, formulas, process information, protocols or other information created, developed, or fixed in any tangible medium of expression solely by [***] prior to the RESTATEMENT DATE of this Agreement, each directly related to the use of, or required for the practice of, the PATENT RIGHTS, and that is owned by JHU and is not subject to any third party rights. JHU KNOW-HOW specifically excludes inventions as defined by U.S. Patent law (whether or not patented) and tangible products. Notwithstanding any other provision of this Agreement, JHU KNOW-HOW shall not include any information which: (a) is within the public domain prior to the time of provision by JHU or thereafter becomes within the public domain other than as a result of provision to a third party by Company, AFFILIATED COMPANY(IES), SUBLICENSEE(S) or any of their representatives; (b) was, on or before the date of provision to Company in the possession of Company as evidenced by records, however maintained; (c) is acquired by Company from a third party having the right to provide without burden; or (d) is hereafter independently developed by Company without reference to JHU KNOW-HOW, as evidenced by records, however maintained.

1.10 "LICENSED FIELD" shall mean collectively THERAPEUTIC FIELD, DIAGNOSTIC FIELD and NON-CLINICAL FIELD.

1.11 "LICENSED PRODUCT(S)" as used herein in either singular or plural shall mean any process or method, material, compositions, drug, or other product, the manufacture, use or sale of which would constitute, but for the license granted to Company pursuant to this Agreement, an infringement of a claim of PATENT RIGHTS (infringement shall include, but is not limited to, direct, contributory, or inducement to infringe), or uses JHU KNOW-HOW in its manufacture.

[***] = CERTAIN CONFIDENTIAL INFORMATION CONTAINED IN THIS DOCUMENT, MARKED BY BRACKETS, HAS BEEN OMITTED BECAUSE THE INFORMATION (I) IS NOT MATERIAL AND (II) WOULD BE COMPETITIVELY HARMFUL IF PUBLICLY DISCLOSED.

1.12 “LICENSED SERVICE(S)” as used herein in either singular or plural shall mean the performance on behalf of a third party of any method or the manufacture of any product or the use of any product or composition which performance would constitute, but for the license granted to Company pursuant to this Agreement, an infringement of a claim of the PATENT RIGHTS in the country in which such service or method is practiced, (infringement shall include, but not be limited to, direct, contributory or inducement to infringe), or uses JHU KNOW-HOW.

1.13 “NET SALES” shall mean gross sales revenues and fees billed by Company, AFFILIATED COMPANY(IES) and/or SUBLICENSEE(S) from the sale of LICENSED PRODUCT(S) less (i) trade, quantity and cash discounts allowed, (ii) refunds, returns and recalls granted, (iii) charge backs and reimbursements given to distributors, buying groups and the like, (iv) payments or rebates given to governmental authorities, and (v) import, export, excise, sales taxes, value added and use taxes, custom duties, freight and insurance invoiced to and/or paid by the purchaser of such LICENSED PRODUCTS.

In the event that Company, AFFILIATED COMPANY and/or SUBLICENSEE(S) sells a LICENSED PRODUCT in combination with other active ingredients or components which are not LICENSED PRODUCTS (“Other Items”), the NET SALES for purposes of royalty payments on the combination shall be calculated as follows:

(a) If all LICENSED PRODUCTS and Other Items contained in the combination are available separately in each case in the relevant country of sale, 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 average of separately available price of all LICENSED PRODUCTS in the combination in each case in the relevant country of sale, and B is the average of separately available price for all Other Items in the combination in each case in the relevant country of sale.

(b) If the combination includes Other Items which are not sold separately in each case in the relevant country of sale (but all LICENSED PRODUCTS contained in the combination are available separately in each case in the relevant country of sale), the NET SALES for purposes of royalty payments will be calculated by multiplying the NET SALES of the combination by A/C, where A is as defined above and C is the invoiced price of the combination.

(c) If the LICENSED PRODUCTS contained in the combination are not sold separately in each case in the relevant country of sale, the NET SALES for such combination shall be NET SALES of such combination as defined in the first sentence of this Paragraph 1.11. However, the parties agree to negotiate a reasonable reduction in the royalty rate to reflect the fair value that the LICENSED PRODUCT(S) attributed to the overall product sold, but in no event shall the royalty rates be reduced by greater than [***].

(d) The term “Other Items” does not include solvents, diluents, carriers, excipients, buffers or the like used in formulating a product.

[***] = CERTAIN CONFIDENTIAL INFORMATION CONTAINED IN THIS DOCUMENT, MARKED BY BRACKETS, HAS BEEN OMITTED BECAUSE THE INFORMATION (I) IS NOT MATERIAL AND (II) WOULD BE COMPETITIVELY HARMFUL IF PUBLICLY DISCLOSED.

(e) In the event that a particular LICENSED PRODUCT is sold for use as a single product in both the THERAPEUTIC FIELD and DIAGNOSTIC FIELD, then the royalties attributable to each of the THERAPEUTIC FIELD and DIAGNOSTIC FIELD shall be apportioned and allocated using the terms of subsection (a) through (c) above. For clarity, in no event will more than one NET SALES payment be owed with respect to the sale of a single particular LICENSED PRODUCT.

For clarity, NET SALES shall exclude (i) any amount received for the sale or transfer of LICENSED PRODUCT(S) among Company, AFFILIATED COMPANIES or SUBLICENSEE(S) for subsequent sale, provided that the amount received by Company, AFFILIATED COMPANIES or SUBLICENSEE(S) in the subsequent sale to unaffiliated third parties shall be included in NET SALES; (ii) any amount received for sale or transfer of a LICENSED PRODUCT(S) to independent third parties at or below the direct cost to manufacture such LICENSED PRODUCT for Compassionate Use.

1.14 “NET SERVICE REVENUES” shall mean gross service revenues and fees billed by Company, AFFILIATED COMPANY(IES) and/or SUBLICENSEE(S) for the performance of LICENSED SERVICE(S) less (i) the direct costs associated with providing such services any discounts, rebates, returns and charge backs actually taken and (ii) import, export, excise, sales, value added and use taxes, custom duties invoiced to and/or paid by the purchaser of such LICENSED SERVICE(S).

In the event that Company, AFFILIATED COMPANY(IES) and/or SUBLICENSEE(S) sells a LICENSED SERVICE in combination with other services, active ingredients or components which are not LICENSED PRODUCTS or LICENSED SERVICES (“Other Items”), the NET SERVICE REVENUES for purposes of royalty payments on the combination shall be calculated as follows:

(a) If all LICENSED SERVICES and Other Items contained in the combination are available separately in the relevant country of sale, the NET SERVICE REVENUES for purposes of royalty payments will be calculated by multiplying the NET SERVICE REVENUES of the combination by the fraction A/A+B, where A is the average of separately available price of all LICENSED SERVICES in the combination, and B is the average of separately available price for all Other Items in the combination in each case in the relevant country of sale.

(b) If the combination includes Other Items which are not sold separately in the relevant country of sale (but all LICENSED SERVICES contained in the combination are available separately in the relevant country of sale), the NET SERVICE REVENUES for purposes of royalty payments will be calculated by multiplying the NET SERVICE REVENUES of the combination by A/C, where A is as defined above and C is the invoiced price of the combination.

(c) If the LICENSED SERVICES contained in the combination are not sold separately in the relevant country of sale, the NET SERVICE REVENUES for such combination shall be NET SERVICE REVENUES of such combination as defined in the first sentence of this Paragraph 1.12. However, the parties agree to negotiate a reduction in the royalty rate to reflect the fair value that the LICENSED SERVICES attributed to the overall product sold, but in no event shall the royalty rates be reduced by greater than fifty [***].

[***] = CERTAIN CONFIDENTIAL INFORMATION CONTAINED IN THIS DOCUMENT, MARKED BY BRACKETS, HAS BEEN OMITTED BECAUSE THE INFORMATION (I) IS NOT MATERIAL AND (II) WOULD BE COMPETITIVELY HARMFUL IF PUBLICLY DISCLOSED.

For clarity, NET SERVICE REVENUES shall exclude, any amount received for performance of a LICENSED SERVICE(S) for independent third parties at or below direct cost to provide such LICENSED SERVICE for Compassionate Use.

In the event that a particular LICENSED SERVICE is sold for use as a single service in the both the THERAPEUTIC FIELD and DIAGNOSTIC FIELD, then the Net Services Revenues attributable to each of the THERAPEUTIC FIELD and DIAGNOSTIC FIELD shall be apportioned and allocated using the terms of subsection (a) through (c) above. For clarity, in no event will more than one NET SERVICE REVENUE payment be owed with respect to a single LICENSED SERVICE.

1.15 “NON CLINICAL FIELD” shall mean all uses of LICENSED PRODUCTS and LICENSED SERVICES that are not in the DIAGNOSTIC FIELD or the THERAPEUTIC FIELD, including the uses for pre-clinical and clinical research and/or development activities.

1.16 “PATENT RIGHTS” shall mean collectively aAPC PATENT RIGHTS, and FUSION PROTEIN PATENT RIGHTS The pending patent applications and issued patents existing as of the RESTATEMENT DATE of this Agreement are listed in Exhibit A. Upon the written request of Company, JHU shall (or JHU shall instruct its outside legal counsel to) provide to Company a complete listing of the issued and applied-for PATENT RIGHTS outstanding at the time, including the status of any applications, divisions, continuations, continuations-in-part, reexaminations, reissues, renewals, or registrations then outstanding.

1.17 “PHASE I CLINICAL TRIAL” shall mean a human clinical trial, the principal purpose of which is a preliminary determination of safety in healthy individuals or patients as required in 21 C.F .R. § 312, or a similar clinical study prescribed by the regulatory authorities in a market other than the United States.

1.18 “PHASE II CLINICAL TRIAL” shall mean a human clinical trial, for which a primary endpoint is a preliminary determination of efficacy or dose ranges in patients with the disease target being studied as required in 21 C.F .R. § 312.2 1 (b), as may be amended from time to time, or a similar clinical study prescribed by the regulatory authorities in a market other than the United States.

1.19 1.19 “PHASE III CLINICAL TRIAL” shall mean an expanded human clinical trial performed after preliminary evidence suggesting effectiveness has been obtained from a PHASE II CLINICAL TRIAL, and intended to gather the additional information about effectiveness and safety that is needed to evaluate the overall benefit-risk relationship and to provide an adequate basis for physician labeling as required in 21 C.F .R. § 312.21 (c), or a similar clinical study prescribed by the regulatory authorities in a market other than the United States.

[***] = CERTAIN CONFIDENTIAL INFORMATION CONTAINED IN THIS DOCUMENT, MARKED BY BRACKETS, HAS BEEN OMITTED BECAUSE THE INFORMATION (I) IS NOT MATERIAL AND (II) WOULD BE COMPETITIVELY HARMFUL IF PUBLICLY DISCLOSED.

1.20 “REGULATORY APPROVAL” shall mean all approvals, including licenses, registrations, and authorizations, of all governmental agencies in a country necessary for the manufacture, use or sale of a LICENSED PRODUCT or LICENSED SERVICE in the applicable country. As used herein, REGULATORY APPROVAL shall not include pricing or reimbursement approval.

1.21 “RESTATEMENT DATE” shall mean January 11, 2017.

1.22 “SUBLICENSEE(S)” as used herein in either singular or plural shall mean any person or entity other than an AFFILIATED COMPANY to which Company has granted a sublicense under this Agreement. SUBLICENSEE(S) shall also include any person or entity to which Company’s SUBLICENSEE(S) has granted a sublicense subject to JHU’s approval.

1.23 “TERRITORY” shall mean worldwide.

1.24 “THERAPEUTIC FIELD” shall mean all human and veterinary therapeutic and prophylactic uses for LICENSED PRODUCTS and LICENSED SERVICES, including uses that involve [***].

ARTICLE 2
LICENSE GRANT

2.1 Grant. Subject to the terms and conditions of this Agreement, JHU hereby grants to Company (i) an EXCLUSIVE LICENSE to make, have made, use, import, offer for sale and sell the LICENSED PRODUCT(S) and to provide the LICENSED SERVICE(S) in the TERRITORY under the aAPC PATENT RIGHTS in the LICENSED FIELD, (ii) an EXCLUSIVE LICENSE to make, have made, use, import, offer for sale and sell the LICENSED PRODUCT(S) and to provide the LICENSED SERVICE(S) in the TERRITORY under the FUSION PATENT RIGHTS in the THERAPEUTIC FIELD, (iii) a non-exclusive license to make, have made, use, import, offer for sale and sell the LICENSED PRODUCT(S) and to provide the LICENSED SERVICE(S) in the TERRITORY under the FUSION PATENT RIGHTS in the DIAGNOSTIC FIELD and NON CLINICAL FIELD, and (iv) a non-exclusive right to use JHU KNOW-HOW to develop, make, have made and sell the LICENSED PRODUCT(S) and to develop and provide the LICENSED SERVICE(S). This license grant shall apply to the Company and any AFFILIATED COMPANY, except that any AFFILIATED COMPANY shall not have the right to sublicense to others as set forth in Paragraph 2.2 below. 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.

2.2 Sublicense. Company may sublicense the rights granted by JHU under Paragraph 2.1 to others under this Agreement (with right to grant sublicenses through multiple tiers), in each case subject to the terms and conditions of this Paragraph 2.2 and Paragraph 5.1. Each sublicense agreement shall: (a) incorporate by reference the applicable terms and conditions of this

[***] = CERTAIN CONFIDENTIAL INFORMATION CONTAINED IN THIS DOCUMENT, MARKED BY BRACKETS, HAS BEEN OMITTED BECAUSE THE INFORMATION (I) IS NOT MATERIAL AND (II) WOULD BE COMPETITIVELY HARMFUL IF PUBLICLY DISCLOSED.

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 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", and 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. Company and its SUBLICENSEE(S) shall provide to JHU a copy of each sublicense agreement, executed by both Company and SUBLICENSEE; provided that Company may redact any commercially sensitive terms or terms not necessary for JHU to confirm compliance of the sublicense agreement with the terms of 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 JHU Retained Rights. JHU retains the right, on behalf of itself, the Inventors and all other non-profit academic and non-profit research institutions to whom JHU extends rights, to practice the PATENT RIGHTS and use JHU KNOW-HOW in the LICENSED FIELD for any non-profit, non-commercial research or other non-commercial purpose, including, but not limited to assessment of patients at JIIHS/JHU institutions.

2.4 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 throughout the world the inventions described in PATENT RIGHTS that were supported by federal funding. The rights granted herein with respect to such federal funding supported PATENT RIGHTS 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. JHU has disclosed to Company the extent of any such government rights of which it is aware and has taken all actions required under such Government rights to secure ownership by JHU in those PATENT RIGHTS disclosed to JHU as of the RESTATEMENT DATE of this Agreement.

ARTICLE 3
FEES, ROYALTIES, & PAYMENTS

3.1 License Fee. Company shall pay to JHU as set forth in Exhibit B (the "License Fee"). The license fee is nonrefundable and shall not be credited against royalties or other fees.

3.2 Equity. In accordance with Exhibit B (the Equity), and in consideration for the rights and licenses granted by JHU to Company hereunder, Company previously issued to JHU within [***] of the EFFECTIVE DATE, shares of Company common stock in such amounts that after issuance of those shares JHU owned [***] of the total outstanding common shares of Company as of the EFFECTIVE DATE. Those shares have been diluted and upon dilution

[***] = CERTAIN CONFIDENTIAL INFORMATION CONTAINED IN THIS DOCUMENT, MARKED BY BRACKETS, HAS BEEN OMITTED BECAUSE THE INFORMATION (I) IS NOT MATERIAL AND (II) WOULD BE COMPETITIVELY HARMFUL IF PUBLICLY DISCLOSED.

represented [***] of the total outstanding common shares of Company and were tendered in the financing on [***]. In consideration for the rights and licenses granted by JHU to Company as part of the Amended and Restated Agreement and the addition of new intellectual property to the PATENT RIGHTS hereunder, the Company offers and JHU agrees to accept ownership of additional shares of Company common stock such that JHU will own [***] of Company stock as of close of the financing on [***]. JHU's common stock shall be granted under terms and conditions identical to those afforded to the other investors that invested in the same round of financing.

3.3 Milestones License Fees. In addition to the License Fee as set forth in Paragraph 3.1, Company shall pay to JHU for certain milestone license fees for the achievement of the applicable milestones by Company, AFFILIATED COMPANIES or SUBLICENSEES, as set forth in Exhibit B (the "Milestone License Fees"). For those milestones achieved by Company or AFFILIATED COMPANIES, Company shall pay to JHU the applicable Milestone License Fee(s) within [***] of such achievement, and for those milestones achieved by SUBLICENSEES, Company shall pay to JHU the applicable Milestone License Fee(s) within [***] of such achievement.

3.4 Minimum Annual Royalties. Company shall pay to JHU minimum annual royalties as set forth in Exhibit B. These minimum annual royalties shall be due, without invoice from JHU, within thirty (30) days of each anniversary of the EFFECTIVE DATE beginning with the [***] anniversary of the EFFECTIVE DATE. Running royalties accrued under Paragraph 3.5 and paid to JHU during the [***] period preceding an anniversary of the EFFECTIVE DATE shall be credited against the minimum annual royalties due on that anniversary date.

3.5 Running Royalties. Company shall pay to JHU a running royalty as set forth in Exhibit B, for each LICENSED PRODUCT(S) sold, and for each LICENSED SERVICE(S) provided, by Company, AFFILIATED COMPANIES, and SUBLICENSEES (including all sublicensing tiers) based on NET SALES and NET SERVICE REVENUES for the Term of this Agreement. Such payments shall be made within [***] of the end of each calendar quarter following FIRST COMMERCIAL SALE of LICENSED PRODUCT or providing LICENSED SERVICES. All non-U.S. taxes other than income taxes of JHU related to LICENSED PRODUCT(S) or LICENSED SERVICE(S) sold under this Agreement shall be paid by Company and shall not be deducted from royalty or other payments due to JHU. In the event that a withholding or other tax is imposed by law at the source on a royalty payment due hereunder, Company, with JHU's cooperation, shall exercise commercially reasonable efforts to file such requests as are available under the regulations applicable to the jurisdiction and the taxing agency to eliminate the withholding and/or qualify the royalty payments made hereunder for reduced rates of income tax withholding under any applicable income tax treaty, only then shall Company deduct from the royalty payment to JHU the appropriate amount of withholding taxes imposed hereunder, and pay such taxes on behalf of JHU. Company shall provide JHU with receipts or certificates showing the payment of the amounts withheld pursuant to this Paragraph 3.5.

In order to insure JHU the full royalty payments contemplated hereunder, Company agrees that in the event any LICENSED PRODUCT(S) shall be sold, or any LICENSED SERVICE(S) shall be performed for, a third party with which Company, an AFFILIATED COMPANY or SUBLICENSEE(S) shall have any agreement, understanding or arrangement with respect to consideration (such as, among other things, an option to purchase stock or actual stock ownership, or an arrangement involving division of profits or special rebates or allowances) the royalties to be paid hereunder for such LICENSED PRODUCT(S) shall be based upon the average price (per NET SALES) charged to third parties in arm's length sales where cash is the exclusive consideration during the applicable time period in the applicable country (or if there were only de minimis cash sales during such time period in such country, at the fair market value as determined by comparable markets).

3.6 Sublicense Consideration. In addition to the running royalty as set forth under Paragraph 3.5, Company shall pay to JHU a percentage of Sublicense Consideration (as defined below) received for sublicenses through multiple tiers under this Agreement as set forth in Exhibit B.8. This percentage of Sublicense Consideration shall be due, without the need for invoice from JHU, within [***] of receipt thereof from SUBLICENSEE(S). For purposes of this Agreement "Sublicense Consideration" shall mean consideration of any kind received by the Company or AFFILIATED COMPANIES from a SUBLICENSEE(S) to the extent reasonably attributable to the grant of a sublicense under the PATENT RIGHTS under this Agreement, as determined by mutual agreement of JHU and Company, including sublicensing fees, upfront fees, milestone payments, stock or other forms of equity, and the fair value of any services or other compensation received. and any other sublicensing revenue (hereinafter referred to as "Non-royalty Sublicense Consideration"); provided that, in each case, such Sublicense Consideration shall exclude (i) amounts paid to the Company by the SUBLICENSEE(S) for running royalties on sales of LICENSED PRODUCT(S) and LICENSED SERVICE(S) (hereinafter referred to as "Royalty Sublicense Consideration") and (ii) any amounts paid to the Company by the SUBLICENSEE(S) for (a) product development, research work, clinical studies, manufacturing and regulatory approvals performed by or for the Company or AFFILIATED COMPANIES (including third parties on their behalf), each pursuant to a specific agreement and (b) equity investments at Fair Market Value. The term "Fair Market Value" shall mean the average price that the stock in question is publicly trading at for [***] prior to the announcement of its purchase by the SUBLICENSEE(S) or if the stock is not publicly traded, the value of such stock as determined by a third party GAAP qualified accountant, reasonably acceptable to the parties and whose services are retained at Company's expense, or by the most recent private financing through a financial investor (an entity whose sole interest in the Company or AFFILIATED COMPANY is financial) of the Company or AFFILIATED COMPANY that issued the shares if such financing was completed within [***] of the relevant date.

3.7 Patent Reimbursement. Pursuant to section 4.1, Company, at Company's expense and in consultation with JHU, shall file, prosecute and maintain all patents and patent applications specified under PATENT RIGHTS in the LICENSED FIELD. Title to all such patents and patent applications shall reside in JHU. Company will reimburse JHU for the reasonable past costs not already paid associated with preparing, filing, maintaining and prosecuting aAPC PATENT RIGHTS and FUSION PROTEIN PATENT RIGHTS (hereinafter referred to as "Past Patent Expenses") JHU shall provide an invoice of all Past Patent Expenses within [***] of the RESTATEMENT DATE. The Past Patent Expenses under all Patent Rights as of [***] are [***]. The Past Patent Expenses shall be due according to the following schedule:

[***] = CERTAIN CONFIDENTIAL INFORMATION CONTAINED IN THIS DOCUMENT, MARKED BY BRACKETS, HAS BEEN OMITTED BECAUSE THE INFORMATION (I) IS NOT MATERIAL AND (II) WOULD BE COMPETITIVELY HARMFUL IF PUBLICLY DISCLOSED.

(i) Past Patent Expenses accrued during the time period from [***] and the RESTATEMENT DATE are considered due on the RESTATEMENT DATE and shall be paid to JHU within [***] of Company receiving an invoice for such fees; and

(ii) The balance of any unreimbursed Past Patent Expenses shall be due within [***] of completion of cumulative financing and/or capitalization in which Company receives at least [***].

Notwithstanding the above, all Past Patent Expenses will be paid by Company to JHU within [***] of the RESTATEMENT DATE.

3.8 Form of Payment. All payments under this Agreement shall be made in U.S. Dollars by either check or wire transfer.

3.9 Payment Information. All check payments from Company to JHU shall be sent to:

[***]

or such other addresses which JHU may designate in writing from time to time. Checks are to be made payable to [***].

Wire transfers may be made through:

[***]

[***]

Company shall be responsible for any and all costs associated with wire transfers. Company shall provide JHU with the date of wire transfer payment and ACH confirmation number upon completion of such payment.

3.10 Late Payments. In the event that any payment due hereunder is not made when due, the payment shall accrue interest beginning on the [***] following the due date thereof, calculated at the annual rate of [***] or the maximum rate allowable by applicable law, whichever is lower, the interest being compounded on the last day of each calendar year. 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.

[***] = CERTAIN CONFIDENTIAL INFORMATION CONTAINED IN THIS DOCUMENT, MARKED BY BRACKETS, HAS BEEN OMITTED BECAUSE THE INFORMATION (I) IS NOT MATERIAL AND (II) WOULD BE COMPETITIVELY HARMFUL IF PUBLICLY DISCLOSED.

3.11 Invoices. Any invoice for payments sent by JHU to Company may be electronically provided by e-mail service. JHU will send invoices to an e-mail address provided by Company. Company will provide JHU with any updates to this e-mail address.

ARTICLE 4
PATENT PROSECUTION, MAINTENANCE, & INFRINGEMENT

4.1 Prosecution & Maintenance. Company, at Company's expense and in consultation with JHU, shall file, prosecute and maintain all patents and patent applications specified under PATENT RIGHTS in the LICENSED FIELD. Title to all such patents and patent applications shall reside in JHU with the exception of the joint Company and JHU patent, [***], which will be held jointly. In consultation with JHU, Company shall have control over all patent matters in connection therewith under the PATENT RIGHTS in the LICENSED FIELD, provided however, that, Company shall (a) notify JHU, in advance, of the filing and prosecution of all patents and patent applications within the PATENT RIGHTS, (b) cause its patent counsel to timely copy JHU on all official actions and written correspondence with any patent office, and (c) allow JHU an opportunity to comment and advise Company. Company shall consider and incorporate all reasonable comments of JHU that do not otherwise diminish or limit the scope of the PATENT RIGHTS. If Company elects to not file or to abandon any patent application (except for purposes of filing a continuation application) or patent included in the PATENT RIGHTS in any country, Company shall notify JHU in writing at least [***] prior to any filing or payment due date or any other deadline that requires action to avoid loss of rights and thereafter, JHU shall have the right to control the filing, prosecution, and/or maintenance of such patent application or patent in such country at its own expense, subject to the terms of any exclusive license between JHU and a third party for the PATENT RIGHTS in a non-overlapping field. By concurrent written notification to JHU and its patent counsel at least [***] in advance of any filing or response deadline, or fee due date, Company may elect not to have a particular patent application filed in any particular country or not to pay expenses associated with filing, prosecuting or maintaining a particular patent application or patent included in the PATENT RIGHTS, provided that Company pays for all costs incurred up to JHU's receipt of such notification. 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 any rights or license granted hereunder held by Company, AFFILIATED COMPANIES or SUBLICENSEE(S) relating to such patent application or patent within the PATENT RIGHTS in such country shall terminate.

4.2 Notification. Each party will notify the other promptly in writing when any infringement of the PATENT RIGHTS is uncovered or suspected.

4.3 Infringement. Company shall have the first right, but not the obligation, to enforce any patent within PATENT RIGHTS and in the LICENSED FIELD against any infringement or alleged infringement thereof, and 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

[***] = CERTAIN CONFIDENTIAL INFORMATION CONTAINED IN THIS DOCUMENT, MARKED BY BRACKETS, HAS BEEN OMITTED BECAUSE THE INFORMATION (I) IS NOT MATERIAL AND (II) WOULD BE COMPETITIVELY HARMFUL IF PUBLICLY DISCLOSED.

manner consistent with the terms and provisions hereof and recover any damages, awards or settlements resulting therefrom, subject to Paragraph 4.5. However, no settlement, consent judgment or other voluntary final disposition of the suit that limits the scope of any PATENT RIGHTS in any material respect or which places an affirmative obligation on JHU may be entered into without the prior written consent of JHU, which consent shall not be unreasonably withheld or delayed. 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, including joining such litigation if JHU is a necessary party to the litigation, without whose joinder, Company may not pursue such action.

If Company elects not to enforce any patent within the PATENT RIGHTS, Company shall so notify JHU in writing within [***] of receiving notice that an infringement exists, and JHU may, at its own expense, take steps to enforce any patent 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.

4.4 Patent Invalidity Suit. If a declaratory judgment action is brought naming Company as a defendant and alleging invalidity of any of the PATENT RIGHTS, JHU may elect to take over the sole defense of the action at its own expense. Company shall cooperate fully with JHU in connection with any such action.

4.5 Recovery. In the event of a recovery by the Company of compensatory damages (i.e. non-punitive damages net of legal fees and out of pocket costs of the action) for a royalty-bearing product, the Company shall pay to JHU the royalty rate under Paragraph 3.3 on infringing NET SALES and NET SERVICE REVENUES. Infringing NET SALES and NET SERVICE REVENUES shall be determined by and calculated from the amount of infringing sales on which the award of compensatory damages is based. With respect to any recovery of punitive damages for royalty-bearing products, the Company shall pay to JHU an amount equal to [***] thereof, net of legal fees and out of pocket costs of the action.

ARTICLE 5
OBLIGATIONS OF THE PARTIES

5.1 Reports. Company shall provide to JHU the following written reports according to the following schedules:

(a) Until Company, an AFFILIATED COMPANY or a SUBLICENSEE(S) has achieved a FIRST COMMERCIAL SALE of a LICENSED PRODUCT or LICENSED SERVICE, Company shall provide Semi-Annual Diligence Reports, due within [***] of the end of every June and December following the EFFECTIVE DATE of this Agreement. These Semi-Annual Diligence Reports shall reasonably summarize Company's, AFFILIATED COMPANIES', or any SUBLICENSEE(S)'(through multiple tiers) technical efforts towards meeting its obligations under the terms of this Agreement.

[***] = CERTAIN CONFIDENTIAL INFORMATION CONTAINED IN THIS DOCUMENT, MARKED BY BRACKETS, HAS BEEN OMITTED BECAUSE THE INFORMATION (I) IS NOT MATERIAL AND (II) WOULD BE COMPETITIVELY HARMFUL IF PUBLICLY DISCLOSED.

(b) Within [***] after the end of each calendar quarter after achieving a FIRST COMMERCIAL SALE of a LICENSED PRODUCT or LICENSED SERVICE, Company shall provide quarterly Royalty Reports, substantially in the format of Exhibit C accompanying each running royalty payment under Paragraph 3.5 of this Agreement. Royalty Reports shall disclose the amount of LICENSED PRODUCT(S) and LICENSED SERVICE(S) sold, the total NET SALES and NET SERVICE REVENUES of such LICENSED PRODUCT(S) and LICENSED SERVICE(S), and the running royalties due to JHU as a result of NET SALES and NET SERVICE REVENUES by Company, AFFILIATED COMPANIES and SUBLICENSEE(S).

(c) Company shall provide Annual Reports within [***] 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;

(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;

(iii) notice of all FDA approvals of any LICENSED PRODUCT(S) or LICENSED SERVICE(S) obtained by COMPANY, AFFILIATED COMPANY or SUBLICENSEE, the patent(s) or patent application(s) licensed under this Agreement upon which such product or service is based, and the commercial name of such product or service, or, in the alternative, a statement that no FDA approvals have been obtained; and

(iv) Notification of any change of control, name change or other significant change in Company status that related to this Agreement, if not previously provided to JHU.

(d) In lieu of sending reports to JHU via mail or via courier under this Paragraph 5.1, Company may electronically submit all required reports to an e-mail address specified by JHU.

5.2 Records. Company shall make and retain, for a period of [***] 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 and copying of such records, files and books of account by JHU or its agents during regular business hours upon [***] written notice to Company. Such inspection shall not be made more than once each calendar year. All costs of such inspection and copying shall be paid by JHU, provided that if any such inspection shall reveal that an error has been made in the amount equal to [***] or more of such payment, such costs shall be borne by Company. As a condition to entering into any such agreement, Company shall include in any agreement with its AFFILIATED COMPANIES or its SUBLICENSEE(S) which permits such party to make, use, sell or import the LICENSED PRODUCT(S) or provide LICENSED SERVICE(S), a provision requiring such party to retain records of sales of LICENSED PRODUCT(S) and records of LICENSED SERVICE(S) and other information as required in Paragraph 5.1 and permit JHU or an independent third party auditor to inspect such records as required by this Paragraph 5.2.

[***] = CERTAIN CONFIDENTIAL INFORMATION CONTAINED IN THIS DOCUMENT, MARKED BY BRACKETS, HAS BEEN OMITTED BECAUSE THE INFORMATION (I) IS NOT MATERIAL AND (II) WOULD BE COMPETITIVELY HARMFUL IF PUBLICLY DISCLOSED.

5.3 Diligence. As set forth in Exhibit B, Diligence Milestones, Company shall use commercially reasonable efforts to develop and to introduce the LICENSED PRODUCT(S) and LICENSED SERVICE(S) into the commercial market as soon as practicable, consistent with sound and reasonable business practice and judgment; thereafter, until the expiration or termination of this Agreement, Company shall endeavor to keep LICENSED PRODUCT(S) and LICENSED SERVICE(S) reasonably available to the public. Company shall also exercise reasonable efforts to develop LICENSED PRODUCT(S) suitable for different indications within the LICENSED FIELD, so that the PATENT RIGHTS can be commercialized as broadly and as speedily as good scientific and business judgment would deem possible.

Company shall provide JHU with notice, as provided hereunder in Paragraph 10.6, within [***] of achieving each Diligence Milestone. Company may satisfy the foregoing obligation through one or more AFFILIATED COMPANIES or SUBLICENSEES. In addition, Company will provide to JHU within [***] of the RESTATEMENT DATE a confidential written development plan setting forth the initial development strategy consistent with the timeframes described in Exhibit B9, “Diligence Milestones.”

5.4 Other Products. After clinical or other evidence, provided in writing by JHU or by another party, to Company, demonstrating the practicality of a particular market or use within the LICENSED FIELD which is not being developed or commercialized by Company, Company and JHU shall discuss in good faith the particular application and use. Within [***] of notification of a potential market, Company shall provide JHU with a reasonable development plan and use commercially reasonable efforts to either start development itself, or attempt to sublicense to a suitable third party, or reasonably demonstrate to JHU why development in the particular market would adversely affect the Company’s business. If within [***] of such notification by JHU, Company has not used commercially reasonable efforts to commence development or has not granted a sublicense to a suitable third party for the development of at least one LICENSED PRODUCT or LICENSED SERVICE for that particular market or use, and if JHU is aware of a third party that is interested in a license, then, subject to the following, Company will grant a commercially reasonable sub-license to the third party to commence the development for such particular market or use, or if Company is unable or fails to cause such development of LICENSED PRODUCT(S) or LICENSED SERVICE(S) under this provision, all rights to that particular market or use will revert back to JHU at no cost to JHU and JHU will be free to license such use to third parties. Company will not be required to cause development of any LICENSED PRODUCT or LICENSED SERVICE for a particular market or use if it reasonably demonstrates to JHU that developing or commercializing such LICENSED PRODUCT(S) or LICENSED SERVICE(S) or granting such a sublicense in said market or use would have a potentially adverse commercial effect upon marketing or sales of the LICENSED PRODUCT(S) or LICENSED SERVICE(S) being developed or sold by Company, AFFILIATED COMPANY or existing SUBLICENSEES.

[***] = CERTAIN CONFIDENTIAL INFORMATION CONTAINED IN THIS DOCUMENT, MARKED BY BRACKETS, HAS BEEN OMITTED BECAUSE THE INFORMATION (I) IS NOT MATERIAL AND (II) WOULD BE COMPETITIVELY HARMFUL IF PUBLICLY DISCLOSED.

5.5 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 to provide notice of the applicable patent(s) licensed hereunder in accordance with each country's patent laws.

5.6 Transfer of JHU KNOW-HOW. To the extent requested by Company and within JHU's possession and control, JHU, [***], will provide Company with JHU KNOW-HOW. JHU KNOW-HOW existing as of the RESTATEMENT DATE of this Agreement is listed in Exhibit D and any KNOW-HOW not otherwise previously provided shall be provided to Company within [***] of Company's request.

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 JHU KNOW-HOW, PATENT RIGHTS, LICENSED PRODUCT or LICENSED SERVICE 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 LICENSED SERVICES or other rights granted.

6.2 Representations by JHU. JHU warrants that 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. 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, COMPANY, AFFILIATED COMPANIES AND SUBLICENSEE(S) AGREE THAT THE PATENT RIGHTS AND JHU KNOW-HOW ARE PROVIDED "AS IS", AND THAT JHU MAKES NO REPRESENTATION OR WARRANTY WITH RESPECT TO THE PERFORMANCE OF LICENSED PRODUCT(S) AND LICENSED SERVICE(S) INCLUDING THEIR SAFETY, EFFECTIVENESS, OR COMMERCIAL VIABILITY. JHU DISCLAIMS ALL WARRANTIES WITH REGARD TO PRODUCT(S) AND SERVICE(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) AND SERVICE(S) LICENSED UNDER THIS AGREEMENT. COMPANY, AFFILIATED COMPANIES AND SUBLICENSEE(S) ASSUME ALL RESPONSIBILITY AND LIABILITY FOR LOSS OR DAMAGE CAUSED BY A PRODUCT AND/OR SERVICE MANUFACTURED, USED, OR SOLD BY COMPANY, ITS SUBLICENSEE(S) AND AFFILIATED COMPANIES WHICH IS A LICENSED PRODUCT(S) OR LICENSED SERVICE(S) AS DEFINED IN THIS AGREEMENT.

[***] = CERTAIN CONFIDENTIAL INFORMATION CONTAINED IN THIS DOCUMENT, MARKED BY BRACKETS, HAS BEEN OMITTED BECAUSE THE INFORMATION (I) IS NOT MATERIAL AND (II) WOULD BE COMPETITIVELY HARMFUL IF PUBLICLY DISCLOSED.

ARTICLE 7
INDEMNIFICATION

7.1 Indemnification. JHU and the Inventors will have no legal liability exposure to third parties if JHU does not license the LICENSED PRODUCT(S) and LICENSED SERVICE(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) or LICENSED SERVICE(S) from any of the foregoing entities, develop, manufacture, market or practice the inventions of LICENSED PRODUCT(S) and LICENSED SERVICE(S). Therefore, Company, AFFILIATED COMPANY and SUBLICENSEE 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 the practice of said inventions by any of the foregoing entities, 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. Practice of the inventions covered by LICENSED PRODUCT(S) and LICENSED SERVICE(S), by an AFFILIATED COMPANY or an agent or a SUBLICENSEE(S) or a third party on behalf of or for the account of Company or by a third party who purchases LICENSED PRODUCT(S) and LICENSED SERVICE(S) from Company, shall be considered Company's practice of said inventions for purposes of this Paragraph 7.1. The obligation of Company to defend and indemnify as set out in this Paragraph 7.1 shall survive the termination of this Agreement, shall continue even after assignment of rights and responsibilities to an AFFILIATED COMPANY or SUBLICENSEE, and shall not be limited by any other limitation of liability elsewhere in this Agreement.

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 and JHU KNOW-HOW which is disclosed in writing and marked as confidential at the time it is sent to the recipient, and to employ all reasonable efforts to maintain the information secret and confidential, such efforts to be no less than the degree of care employed by

[***] = CERTAIN CONFIDENTIAL INFORMATION CONTAINED IN THIS DOCUMENT, MARKED BY BRACKETS, HAS BEEN OMITTED BECAUSE THE INFORMATION (I) IS NOT MATERIAL AND (II) WOULD BE COMPETITIVELY HARMFUL IF PUBLICLY DISCLOSED.

the recipient to preserve and safeguard its own confidential information. The information shall not be disclosed or revealed to anyone except employees 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 information may also be disclosed or revealed to funding sponsors as required by obligations imposed on JHU by a funding sponsor pursuant to an executed funding agreement with JHU, providing that confidentiality of information provided is maintained for a certain period.

Company may, without additional consent, disclose JHU KNOW-HOW and confidential information to AFFILIATED COMPANIES and/or SUBLICENSEE(S), provided that the obligations of this Paragraph 8.1 shall also apply to AFFILIATED COMPANIES and/or SUBLICENSEE(S) provided such information by Company. JHU's, Company's, AFFILIATED COMPANIES' and SUBLICENSEES' obligations under this Paragraph 8.1 shall extend until [***] after the termination of this Agreement.

For the avoidance of doubt, the reports provided by Company to JHU under Paragraph 5.1 and the records retained by Company under Paragraph 5.2 shall be deemed to be confidential information of Company unless an exception described in Paragraph 8.2 applies to such report or record.

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; or

(e) that is required to be disclosed by law, government regulation or court order.

8.3 Authorized Disclosure. Notwithstanding the foregoing, each party may disclose confidential information of the other party to the limited extent required in order to comply with the order of a court or other governmental body, or as otherwise necessary to comply with the applicable law, provided that the party making the disclosure pursuant to such order shall first have given notice to the other party.

[***] = CERTAIN CONFIDENTIAL INFORMATION CONTAINED IN THIS DOCUMENT, MARKED BY BRACKETS, HAS BEEN OMITTED BECAUSE THE INFORMATION (I) IS NOT MATERIAL AND (II) WOULD BE COMPETITIVELY HARMFUL IF PUBLICLY DISCLOSED.

8.4 Right to Publish. JHU may publish manuscripts, abstracts or the like describing the JHU KNOW-HOW, and PATENT RIGHTS and inventions contained therein provided confidential information of Company as defined in Paragraph 8.1, is not included or without first obtaining approval from Company to include such confidential information. Otherwise, JHU and the Inventors shall be free to publish manuscripts and abstracts or the like directed to the work done at JHU related to the PATENT RIGHTS and JHU KNOW-HOW without prior approval.

ARTICLE 9
TERM & TERMINATION

9.1 Term. The term of this Agreement shall commence on the EFFECTIVE DATE and shall continue, in each country, on a LICENSED PRODUCT-by-LICENSED PRODUCT or LICENSED SERVICE-by-LICENSED SERVICE basis until the date of expiration of the last to expire patent included within PATENT RIGHTS or if no patents issue then for a term of [***] from the RESTATEMENT DATE of this Agreement. (the "Term"). Upon expiration of the Term in a given country for a given LICENSED PRODUCT OR LICENSED SERVICE, Company's license to JHU-KNOW HOW shall become fully-paid and royalty-free for so long as Company is selling such LICENSED PRODUCT or LICENSED SERVICE in such country.

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, makes an assignment for the benefit of creditors, has a receiver appointed for it or a substantial part of its assets, or otherwise takes advantage of any statute or law designed for relief of debtors that is not dismissed within [***] 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 [***] (or [***] in the event of non-payment of an undisputed amount). In the event of any alleged breach of Company's diligence obligations (Paragraph 5.3) under this Agreement, JHU shall give Company the right to cure for a period not to exceed [***] if Company sets forth a written plan submitted to JHU, providing a reasonable plan to cure such breach and Company diligently performs such plan to effect a cure to such alleged breach. Such extended cure period shall not apply to breach for non-payment of monies owed. 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 in its entirety or on a country-by-country and patent-by-patent basis, and the license granted herein, for any reason, upon giving JHU [***] written notice.

9.4 Obligations and Duties upon Termination. If this Agreement is terminated or expires, 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 expiration or termination, both parties shall cease any further use of the confidential information disclosed to the receiving party by the other party as described in Section 8.1, provided that the exceptions provided in Section 8.2 and 8.3 shall continue to apply. Expiration or termination of this Agreement, for whatever reason, shall not affect the obligation of

[***] = CERTAIN CONFIDENTIAL INFORMATION CONTAINED IN THIS DOCUMENT, MARKED BY BRACKETS, HAS BEEN OMITTED BECAUSE THE INFORMATION (I) IS NOT MATERIAL AND (II) WOULD BE COMPETITIVELY HARMFUL IF PUBLICLY DISCLOSED.

either party to make any payments for which it is liable prior to or upon such expiration or termination. Expiration or 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 expiration or termination. Upon expiration or 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. Furthermore, upon expiration or termination of this Agreement, all rights in and to the PATENT RIGHTS shall revert immediately to JHU at no cost to JHU. Upon termination of this Agreement, any SUBLICENSEE(S) 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. 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. Company, AFFILIATED COMPANIES and SUBLICENSEE(S) shall not use the name of The Johns Hopkins University or The Johns Hopkins Health System or any of its constituent parts, such as the Johns Hopkins Hospital or any contraction thereof or the name of Inventors in any advertising, promotional, sales literature or fundraising documents without prior written consent from an authorized representative of JHU. Company, AFFILIATED COMPANIES and SUBLICENSEE(S) shall allow at least [***] notice of any proposed public disclosure for JHU's review and comment or to provide written consent.

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) or LICENSED SERVICE(S) as the case may be in any particular country, Company shall establish and maintain, in each country in which Company, an AFFILIATED COMPANY or SUBLICENSEE(S) shall test or sell LICENSED PRODUCT(S) and LICENSED SERVICE(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.

[***] = CERTAIN CONFIDENTIAL INFORMATION CONTAINED IN THIS DOCUMENT, MARKED BY BRACKETS, HAS BEEN OMITTED BECAUSE THE INFORMATION (I) IS NOT MATERIAL AND (II) WOULD BE COMPETITIVELY HARMFUL IF PUBLICLY DISCLOSED.

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 the 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, 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: [***]

If to JHU: [***]

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. Notwithstanding the foregoing, either party shall be free to transfer or assign this Agreement without any such prior written consent to its Affiliates (with the right to grant sublicenses) and in connection with any sale of substantially all of its assets to which this Agreement relates, including my way of stock sale, merger or other consolidation with a Third Party, without the consent of the other; provided that: (a) any such assignee shall agree in writing to be bound by the terms and conditions of this Agreement; and (b) the assigning party shall notify the other party of any such assignment. 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.

[***] = CERTAIN CONFIDENTIAL INFORMATION CONTAINED IN THIS DOCUMENT, MARKED BY BRACKETS, HAS BEEN OMITTED BECAUSE THE INFORMATION (I) IS NOT MATERIAL AND (II) WOULD BE COMPETITIVELY HARMFUL IF PUBLICLY DISCLOSED.

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 [***].

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 3.10 (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.

[***] = CERTAIN CONFIDENTIAL INFORMATION CONTAINED IN THIS DOCUMENT, MARKED BY BRACKETS, HAS BEEN OMITTED BECAUSE THE INFORMATION (I) IS NOT MATERIAL AND (II) WOULD BE COMPETITIVELY HARMFUL IF PUBLICLY DISCLOSED.

10.16 Headings. Article headings are for convenient reference and are 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.

[*Signatures on following page.*]

[***] = CERTAIN CONFIDENTIAL INFORMATION CONTAINED IN THIS DOCUMENT, MARKED BY BRACKETS, HAS BEEN OMITTED BECAUSE THE INFORMATION (I) IS NOT MATERIAL AND (II) WOULD BE COMPETITIVELY HARMFUL IF PUBLICLY DISCLOSED.

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

____

Neil Veloso.
Executive Director
Johns Hopkins Technology Ventures

____

(Date)

NEXIMMUNE, INC.

____

Kenneth C. Carter Ph.D
President and CEO

____

(Date)

EXHIBIT A. PATENT RIGHTS
EXHIBIT B. LICENSE FEE & ROYALITIES.
EXHIBIT C. SALES & ROYALTY REPORT FORM.

[***] = CERTAIN CONFIDENTIAL INFORMATION CONTAINED IN THIS DOCUMENT, MARKED BY BRACKETS, HAS BEEN OMITTED BECAUSE THE INFORMATION (I) IS NOT MATERIAL AND (II) WOULD BE COMPETITIVELY HARMFUL IF PUBLICLY DISCLOSED.

EXHIBIT A
PATENT RIGHTS

[***]

[***] = CERTAIN CONFIDENTIAL INFORMATION CONTAINED IN THIS DOCUMENT, MARKED BY BRACKETS, HAS BEEN OMITTED BECAUSE THE INFORMATION (I) IS NOT MATERIAL AND (II) WOULD BE COMPETITIVELY HARMFUL IF PUBLICLY DISCLOSED.

EXHIBIT B

LICENSE FEE & ROYALTIES

1. "LICENSED FIELD" shall mean collectively THERAPEUTIC FIELD, DIAGNOSTIC FIELD, and NON-CLINICAL RESEARCH TOOLS AND SERVICES FIELD.

2. LICENSED TERRITORY: Worldwide

3. License Fee. The License Fee due under Paragraph 3.1 is [***]. The License Fee shall be payable pursuant to the following schedule:

(i) [***] within [***] of the RESTATEMENT DATE; and

(ii) The balance due of [***] upon the first to occur of either an increase in Company capitalization through investment to a total of [***] or more or [***] after the RESTATEMENT DATE.

4. Equity. In accordance with Paragraph 3.2 of the Agreement and in consideration for the rights and licenses granted by JHU to Company and the addition of new intellectual property to the PATENT RIGHTS hereunder, the Company offers and JHU agrees to accept ownership of additional shares of Company common stock such that JHU will own [***] of Company stock as of close of the financing on [***]. JHU' s common stock shall be granted under terms and conditions identical to those afforded to the other investors that invested in the same round of financing.

5. Milestone License Fees. The Milestone License Fees due under Paragraph 3.3 for each LICENSED PRODUCT(S) or LICENSED SERVICE(S) developed by Company, AFFILIATED COMPANIES, or SUBLICENSEES shall be paid as follows:

(i) For LICENSED PRODUCT(S) or LICENSED SERVICE(S) in the THERAPEUTIC FIELD:

(a) [***]; and

(b) [***]; and

(c) [***]; and

(d) [***]; and

(e) [***].

(ii) For LICENSED PRODUCT(S) or LICENSED SERVICE(S) in the DIAGNOSTIC FIELD:

(a) [***];

[***] = CERTAIN CONFIDENTIAL INFORMATION CONTAINED IN THIS DOCUMENT, MARKED BY BRACKETS, HAS BEEN OMITTED BECAUSE THE INFORMATION (I) IS NOT MATERIAL AND (II) WOULD BE COMPETITIVELY HARMFUL IF PUBLICLY DISCLOSED.

(b) [***]; and

(c) [***].

(iii) For LICENSED PRODUCT(S) or LICENSED SERVICE(S) in the NON-CLINICAL FIELD:

(a) [***].

Milestone payments shall be reduced by [***]for the second and third LICENSED PRODUCT and LICENSED SERVICE sold or performed for each of the THERAPEUTIC FIELD and DIAGNOSTIC FIELD. No milestone payments shall be due on the fourth and any subsequent LICENSED PRODUCT or LICENSED SERVICE developed by Company, AFFILIATED COMPANIES or SUBLICENSEES.

6. Minimum Annual Royalties. Commencing with the [***] anniversary of the EFFECTIVE DATE ([***]), the minimum annual royalties pursuant to Paragraph 3.4 are:

Anniversary	Amount
[***]	[***]
[***]	[***]
[***] and each subsequent anniversary during the Term of the Agreement	[***]

7. Royalties. Company shall pay JHU running royalty rates payable under Paragraph 3.5 as follows for each LICENSED PRODUCT sold, and for each LICENSED SERVICE provided, by Company, AFFILIATES and SUBLICENSEES (including multiple tiers of SUBLICENSEE(S)), based on NET SALES and NET SERVICE Revenues for the term specified below. Such payments shall be made quarterly. All non-US taxes related to LICENSED PRODUCT or LICENSED SERVICE sold under this Agreement shall be paid by Company and shall not be deducted from royalty or other payments due to JHU.

(i) For all THERAPEUTIC PRODUCTS (defined below):

(a) [***] on annual NET SALES and NET SERVICE REVENUES less than or equal to [***]; and

(b) [***]on the portion of annual NET SALES and NET SERVICE REVENUES greater than [***].

(ii) For all DIAGNOSTIC PRODUCTS (defined below):

[***] = CERTAIN CONFIDENTIAL INFORMATION CONTAINED IN THIS DOCUMENT, MARKED BY BRACKETS, HAS BEEN OMITTED BECAUSE THE INFORMATION (I) IS NOT MATERIAL AND (II) WOULD BE COMPETITIVELY HARMFUL IF PUBLICLY DISCLOSED.

(a) [***] on annual NET SALES and NET SERVICE REVENUES less than or equal to [***]; and

(b) [***] on the portion of annual NET SALES and NET SERVICE REVENUES greater than [***].

(iii) For all NON-CLINICAL PRODUCTS AND SERVICES: [***] on annual NET REVENUE

“THERAPEUTIC PRODUCT” shall mean a LICENSED PRODUCT sold for use in the THERAPEUTIC FIELD.

“DIAGNOSTIC PRODUCT” shall mean a LICENSED PRODUCT sold for use in the DIAGNOSTIC FIELD.

“NON-CLINICAL PRODUCTS AND SERVICES” shall mean all uses of LICENSED PRODUCTS and LICENSED SERVICES that are not in the DIAGNOSTIC FIELD or the THERAPEUTIC FIELD, including the uses for pre-clinical and clinical research and/or development activities per paragraph 1.15.

8. Sublicense Consideration. Company shall pay to JHU the percent Non-Royalty Sublicense Consideration when received as follows:

(i) [***]; and

(ii) [***].

For clarity, Royalties payable on sales of Licensed Products or performance of Licensed Services shall be governed by Section 7 above.

9. Diligence Milestones: Pursuant to paragraphs 5.3 and 5.4, Company shall use commercially reasonable efforts to complete the following events within the specified time from the EFFECTIVE DATE of this Agreement:

Event	Date
(i) [***] in equity or other increase in capitalization the majority of which is to be [***]	Within [***] of RESTATEMENT DATE of this Agreement
(ii) Raise additional [***] in equity or other increase in capitalization for [***]	[***] after the RESTATEMENT DATE of this Agreement

[***] = CERTAIN CONFIDENTIAL INFORMATION CONTAINED IN THIS DOCUMENT, MARKED BY BRACKETS, HAS BEEN OMITTED BECAUSE THE INFORMATION (I) IS NOT MATERIAL AND (II) WOULD BE COMPETITIVELY HARMFUL IF PUBLICLY DISCLOSED.

(iii) Submission of Investigational New Drug Application (IND) for [***].	[***] after the RESTATEMENT DATE of this Agreement)
(iv) Initiate a clinical study for safety or efficacy [***]	[***] after the submission of first IND
(v) [***]	[***] after the RESTATEMENT DATE of this Agreement

[***] = CERTAIN CONFIDENTIAL INFORMATION CONTAINED IN THIS DOCUMENT, MARKED BY BRACKETS, HAS BEEN OMITTED BECAUSE THE INFORMATION (I) IS NOT MATERIAL AND (II) WOULD BE COMPETITIVELY HARMFUL IF PUBLICLY DISCLOSED.

EXHIBIT C

QUARTERLY SALES & ROYALTY REPORT

FOR EXCLUSIVE LICENSE AGREEMENT

BETWEEN

NEXIMMUNE, INC. AND

THE JOHNS HOPKINS UNIVERSITY

EFFECTIVE DATE June 24, 2011

FOR PERIOD OF ____________________TO __________________

TOTAL ROYALTIES DUE FOR THIS PERIOD $ __________________

PRODUCT ID	PRODUCT NAME	*JHU REFERENCE	1st COMMERCIAL SALE DATE	TOTAL NET SALES/ SERVICES	ROYALTY RATE	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.

[***] = CERTAIN CONFIDENTIAL INFORMATION CONTAINED IN THIS DOCUMENT, MARKED BY BRACKETS, HAS BEEN OMITTED BECAUSE THE INFORMATION (I) IS NOT MATERIAL AND (II) WOULD BE COMPETITIVELY HARMFUL IF PUBLICLY DISCLOSED.

LEASE AGREEMENT

THIS LEASE AGREEMENT, made this 30 day of June 2017, by and between **W. M. RICKMAN CONSTRUCTION CO., LLC** (“LANDLORD”) and **NEXIMMUNE, INC.** (“TENANT”).

W I T N E S S E T H:

1. DEMISE OF PREMISES

Landlord hereby demises unto Tenant, and Tenant hereby leases from Landlord for the terms and upon the conditions set forth in this Lease, approximately 22,800 square feet of space in the building located at 9119 Gaither Road, Rockville, Maryland 20850 (the “Building”), all as set forth on Exhibit A, hereto attached, said space being referred to as the “Premises”.

2. TERM

The term of this Lease shall be for a period five (5) years, commencing on the 1st day of July 2017, and terminating on the 30th day of June 2022, with an option for Tenant to extend the term for an additional five (5) years on the same terms and conditions in this Lease, provided that Tenant shall have given the Landlord written notice of Tenant’s intention to do so at least nine (9) months prior to the expiration of this Lease and that Tenant is not in default under this Lease.

3. RENT

The Tenant shall pay to the Landlord an annual rental (herein called “Minimum Rent”) for the Premises as follows:

Lease Year	Annual Amount	Monthly Amount
Initial Term		
July 1, 2017 thru June 30, 2018	$240,000.00	$20,000.00
July 1, 2018 thru June 30, 2019	$371,315.00	$30,942.92
July 1, 2019 thru June 30, 2020	$382,454.45	$31,871.20
July 1, 2020 thru June 30, 2021	$393,928.08	$32,827.34
July 1, 2021 thru June 30, 2022	$405,745.92	$33,812.16
Extension Option Term		
July 1, 2022 thru June 30, 2023	$417,918.30	$34,826.53
July 1, 2023 thru June 30, 2024	$430,455.85	$35,871.32
July 1, 2024 thru June 30, 2025	$443,369.52	$36,947.46
July 1, 2025 thru June 30, 2026	$456,670.61	$38,055.88
July 1, 2026 thru June 30, 2027	$470,370.73	$39,197.56

Monthly installments of Minimum Rent shall be paid, subject to adjustment as hereinafter set forth, without deduction or set off, in advance, the first installment of which is due and payable upon signing of Lease and all subsequent installments shall be due and payable on the first day of each calendar month thereafter during the term of the Lease until the total rent provided for herein is paid. No payment by Tenant or

receipt of Landlord of a lesser amount than a monthly installment of rent herein stipulated, or endorsement or statement on any check or any letter accompanying any check for payment as rent be deemed an accord and satisfaction, and Landlord may accept such check for payment without prejudice to Landlord's right to recover the balance of such rent or pursue any other remedy provided for in this Lease.

4. ADJUSTMENT OF MINIMUM RENT

After the initial term the Minimum Rent shall be increased at the end of each lease year during the term hereby by three percent (3%) of the rent then being paid, as shown on the rent schedule in Section 3 above. There shall be no additional pass-throughs of increases in operating expenses except for real estate taxes or as otherwise provided for herein.

5. REAL ESTATE TAXES

In the event the real estate taxes levied or assessed against the land and Building on which the Premises are a part in future tax years are greater than the real estate taxes for the Base Year, the Tenant shall pay within fifteen (15) days after submission of the bill to Tenant for the increase in real estate taxes, as additional rent, a proportionate share of such increase, which proportionate share shall be computed at One Hundred percent (100%) of the increase in taxes, but shall exclude any fine, penalty, or interest charge for late or non-payment of taxes by Landlord. The Base Year shall be July 1, 2017, to June 30, 2018.

Any reasonable expense incurred by Landlord (including counsel fees) in contesting any tax increase shall be included as an item of taxes for the purpose of computing additional rent due Landlord. Landlord, however, shall be under no obligation to contest any tax increase.

6. UTILITIES

Tenant shall be responsible for the payment of all utilities used or consumed by the Tenant in and upon the Premises. Electric and Gas shall be separately metered. Water shall be either separately metered or an equitable allocation made between the Tenants in the Building based on the quantity of water consumed. In the event any utility service to the Premises shall be interrupted for a period of more than two (2) days due to the negligence or willful misconduct of Landlord, its agents or servants, the Minimum Rent shall abate until such services are fully rendered.

Landlord shall not be liable to Tenant for any damage or inconvenience caused by the cessation or interruption of any utility service, or the elevators in the Building, occasioned by fire, accident, strike or other cause beyond Landlord's control.

7. SECURITY DEPOSIT

Tenant shall provide a security deposit in the equal to one (1) month's rent in the amount of TWENTY THOUSAND and NO/100 DOLLARS ($20,000.00) at LEASE signing. Such deposit, to the extent not used to cover any unpaid amounts due from Tenant hereunder, shall be returned to Tenant within thirty business days of the expiration or termination of the Lease and subject to the obligations set forth in Section 18 below.

8. USE OF PREMISES

Tenant shall use the Premises only for office and laboratory purposes, and for no other purpose, except as approved by Landlord in advance, in writing, which approval shall not be unreasonably withheld, conditioned or delayed.

Tenant shall not make any use of the Premises which would disturb the quiet enjoyment of the Landlord or other tenants in the Building or prejudice or increase the fire insurance premium for the Building, and shall comply with all laws and regulations of all governmental authorities pertaining to Tenant's use of Premises.

9. WASTE REMOVAL

Tenant shall be responsible for removal of waste generated by Tenant's operation. This includes waste service fees levied by local jurisdictions.

10. HAZARDOUS MATERIALS

Tenant shall be permitted to store Hazardous Materials on the Premises and shall comply with all laws and regulations of all governmental authorities pertaining to Tenant's use of the Premises, including, without limitation, all Environmental Laws (as hereinafter defined) and laws pertaining to Hazardous Materials and Air and Water Quality. The term "Hazardous Materials" means and includes any petroleum products and/or any hazardous toxic or other dangerous waste, substance or material defined as such in the Environmental Laws. The term "Environmental Laws" means the Comprehensive Environmental Response, Compensation and Liability Act, any "Superfund" or "Superlien" law, or any other federal, state or local statute, law, ordinance, code, regulation, order or decree regulating, relating to, or imposing liability or standards of conduct concerning the use or storage of Hazardous Materials. All such materials must be completely removed upon expiration of this Lease, and any de-contamination certificates required by the Landlord or any government authority must be obtained and delivered to the Landlord.

Tenant shall obtain and maintain, in full force and effect, all necessary government licenses, permits and approvals legally required for materials used in the conduct of its business. If the presence of any Hazardous Materials on the Premises caused or permitted by Tenant results in any contamination of the Premises or any portion of the Building or Common Areas, Tenant shall promptly take all actions, at its sole expense, necessary to return the Premises to the condition existing prior to the introduction of such Hazardous Materials, provided that all such actions shall be subject to the approval of Landlord, which approval shall not be unreasonably withheld.

At the Commencement Date of the Lease and on January 1 of each year thereafter, Tenant shall disclose to Landlord the names and amounts of all Hazardous Materials which are to be stored, used or disposed of on the Premises.

Any Hazardous Materials stored or used on the Premises must not in any way prejudice the Landlord's insurance or increase the fire hazards to a greater extent than necessarily incident to the business for which the Premises are leased.

11. LATE CHARGE

If any installment of rent accruing herein shall not be paid within five (5) business days of due date, and other sums not paid within fifteen (15) business days after written notice to Tenant, such installment and other sums shall be increased without affecting the Landlord's other rights under this Lease, by a late charge of ten percent (10%) of the delinquent installment. Anything contained herein to the contrary notwithstanding.

12. REPAIRS AND MAINTENANCE

Landlord shall be responsible for all structural repairs, including repairs to the roof and load-bearing walls of the Building, for maintaining the parking area and sidewalks, and the Common Areas (as hereinafter defined) in the Building. Landlord will repair and replace any glass breakage, provided it is not the result of the Tenant's willful or negligent act.

The Tenant shall be responsible for the maintenance and repair of the Premises and all fixtures, light bulbs, appliances and equipment therein, including, but not limited to, the Heating and Air Conditioning system(s) serving Tenant's suite. Landlord will pay for major Heating and Air Conditioning component replacement and all repairs to the Landlord installed heating and air conditioning system(s) in excess of Five Hundred Dollars ($500.00) per occurrence per Heating and Air Conditioning unit. All major repairs and replacements will be done by Landlord.

Tenant shall provide its own cleaning and refuse service. Tenant, at its sole expense, shall keep all Tenant fixtures and equipment in the Premises in safe and sanitary condition and good order and repair, together with related plumbing, electrical or other utility service, whether installed by Tenant or by Landlord on Tenant's behalf. Tenant shall pay for all damage to the Building and any fixtures and appurtenances related thereto due to the malfunction, lack of repair, or improper installation of the Tenant's fixtures and equipment.

13. COMMON AREAS

In addition to the use of the Premises, Tenant, its employees and business invitees shall have the right to use the Common Areas in common with Landlord and other tenants of the Building, their employees and visitors. The term "Common Areas" shall mean those portions of the Building and the land upon which the Building is erected which Landlord may from time to time designate for Tenant's non-exclusive use, which may include the entrance, foyer and lobby corridors, lavatories, stairwells, elevators, and parking areas.

All Common Areas shall be subject to the exclusive control of the Landlord. The Landlord shall operate, manage, light and maintain the Common Areas. Landlord reserves the right to change the size, area, level, location and arrangement of the Common Areas and any such change or-rearrangement shall not affect the obligations of the Landlord and Tenant hereunder.

14. LANDLORD'S WORK PRIOR TO COMMENCEMENT OF TERM

None. Tenant takes premises "as is".

15. TENANT ALTERATIONS

All alterations, improvements, or additions to the demised Premises to be made by Tenant shall be subject to the written consent of the Landlord, which consent shall not be unreasonably withheld, conditioned or delayed, provided such alterations and improvements do not weaken the structural integrity of the Building or detract from its dignity and/or uniformity. All alterations and improvements and/or additions made by Tenant shall remain upon the Premises at the expiration or earlier termination of this Lease and shall become the property of the Landlord, unless Landlord shall, at the time of approval of the alteration, provide written notice to Tenant to remove the same, in which event Tenant shall remove such alterations, improvements and/or additions, and restore the Premises to the same good order and condition in which it was at the commencement of this Lease, reasonable wear and tear and unavoidable casualty excepted. Should Tenant fail to do so, Landlord may do so, collecting the reasonable cost and expense thereof from Tenant as additional rent.

16. TRADE FIXTURES

All trade fixtures, telephone equipment, and apparatus installed by Tenant in the Premises shall remain the property of Tenant and shall be removed at the expiration or earlier termination of this Lease and, upon such removal, Tenant shall repair any damage caused by the removal and shall promptly restore the Premises to their good order and condition. Any such trade fixture not removed prior to such termination shall be considered abandoned property, but such abandonment shall not release Tenant of its obligation to pay for the cost of removing such trade fixtures and repairing any damage caused by the removal.

17. QUIET ENJOYMENT

Landlord covenants that, upon payment of the rent herein provided and performance by the Tenant of all other covenants herein contained, Tenant shall and may peaceably and quietly have, hold and enjoy the Premises for the term hereof and options.

18. SURRENDER OF PREMISES

Upon the expiration or termination of this Lease, Tenant shall quit and surrender the Premises to the Landlord broom clean and shall remove all of its property therefrom. If the removal of any such property shall result in damaging the premises, or leaving any holes in the floors, walls or ceiling therein, the Tenant shall make the appropriate repairs with Landlord approved building materials prior to the expiration of this lease. The obligation of this paragraph shall survive the termination of the Lease.

19. INSURANCE

Tenant covenants and agrees to maintain and carry, at all times during the term of this Lease, in companies qualified and authorized to transact business in the State of Maryland, general liability insurance in amounts of $1,000,000.00 per occurrence, $2,000,000.00 in aggregate and $1,000,000.00 for damage to property on the Premises or arising out of the use thereof by Tenant or its agents.

All policies of insurance shall provide that they may not be cancelled, except on thirty (30) days written notice to Landlord, and all such policies shall name Landlord as an additional insured.

Prior to commencement, Tenant shall furnish Landlord with satisfactory proof that the insurance herein provided for is at all times in full force and effect.

If either party hereto is paid any proceeds under any policy of insurance naming such party as an insured on account of any loss, damage or liability, then such party hereby releases the other party to (and only to) the extent of the amount of such proceeds, from any and all liability for such loss or damage, notwithstanding negligent or intentionally tortuous act or omission of the other party, its agents or employees; provided, such release shall be effective only as to a loss of damage occurring while the appropriate policy of insurance of the releasing party provides that such release shall not impair the effectiveness of such policy or the insured's ability to recover thereunder. Each party hereto shall use reasonable efforts to have a clause to such effect included in its said policies, and shall promptly notify the other in writing if which clause cannot be included in any such policy.

20. INDEMNIFICATION

Tenant shall indemnify and hold harmless the Landlord from, and name LANDLORD as additional insured on policy regarding, any and all liability, damage, expense, cause of action, or claims arising out of injury to persons or to property on the Premises, except for the negligence or willful misconduct of Landlord, its agents, employees, or servants.

21. DAMAGE BY FIRE OR CASUALTY

(a) If the Premises are damaged by fire or other casualty, but are not thereby rendered untenantable in whole or in part, Landlord, at its own expense, and subject to the limitations set forth in this Lease, shall cause such damage to be repaired and the Minimum Rent and Additional Rent shall not be abated.

If, by reason of any damage or destruction, the Premises shall be rendered untenantable in whole or in part and cannot be repaired and made tenantable within one hundred twenty (120) days after such damage: (i) Landlord, at its option and its own expense, may cause the damage to be repaired and the Minimum Rent and Additional Rent shall be abated proportionately as to the portion of the Premises rendered untenantable while it is untenantable; or (ii) either party shall have the right, to be exercised by notice in writing delivered to the other within thirty (30) days of the occurrence of such damage or destruction, to terminate this Lease, whereupon the Minimum Rent and Additional Rent shall be adjusted as of the date of such termination.

(b) In the event that twenty-five percent (25%) or more of the rentable floor area of the Building shall be damaged or destroyed by fire or other cause, notwithstanding that the Premises may be unaffected by such fire or other damage, either party shall have the right, to be exercised by notice in writing delivered to the other within thirty (30) days after such occurrence, to terminate this Lease. Upon the giving of such notice, the Minimum Rent and Additional Rent shall be adjusted as of the date of termination and this Lease shall thereupon terminate.

22. ASSIGNMENT AND SUBLETTING

Tenant acknowledges that Landlord has entered into this Lease because of Tenant's financial strength, goodwill, ability and expertise and that accordingly, this lease is personal to Tenant. Taking this into consideration, tenant shall not assign, mortgage, sublet, pledge or encumber this Lease, in whole or in part, except with the written consent of the Landlord, which shall not be unreasonably withheld, conditioned or delayed. Tenant agrees that, in the event of any assignment, subletting or license, Tenant shall nevertheless remain liable for the performance of all terms, covenants, and conditions of this Lease.

In the event the Landlord consents to an assignment of the Lease, any money or consideration to be paid to Tenant for the assignment shall be paid to the Landlord as partial consideration for the Landlord's consent to the assignment.

In the event the Landlord consents to a sublease of the Premises, or any portion thereof, Tenant shall pay to the Landlord a sum equal to (1) any money, rent or other consideration paid to the Tenant by any subtenant in excess of the pro-rata portion of the rent for such space then being paid by Tenant to Landlord under this Lease and (2) any other profit or gain realized by the Tenant from such subletting. All sums payable hereunder by Tenant shall be paid to Landlord as additional rent immediately upon the receipt thereof by Tenant.

Notwithstanding the foregoing, during the initial five (5) Years of the Lease the Tenant shall be entitled to sublet all or portions of the Premises and/or enter into license agreements for the usage of portions of the Premises by third parties, without any further consent of Landlord and without any additional sums being owed to Landlord as defined in this section, provided that any such third parties shall comply with the usage provisions set forth in Section 8.

23. SUBORDINATION AND ATTORNMENT

This Lease shall be subject to and subordinate at all times to the lien of any mortgage and/or deeds of trust and all land leases now or hereafter made on any portion of the Premises, and to all advances thereunder, provided the mortgagee or trustee named in said mortgage or deed of trust shall agree to recognize this Lease and agrees, in the event of foreclosure, not to disturb the Tenant's possession hereunder, provided Tenant is not in material default under this Lease beyond any applicable notice and cure period. This subordination shall be self-operative and no further instrument of subordination shall be required.

If any proceedings are commenced to foreclose any mortgage or deed of trust encumbering the Premises, Tenant agrees to attorn to the purchaser at the foreclosure sale, if requested to do so by any such purchaser, and to recognize such purchaser as the Landlord under this Lease, provided purchaser shall agree that Tenant's rights hereunder shall not be disturbed so long as Tenant has not committed any event of default as to which the applicable cure period has expired.

24. CONDEMNATION

(a) If the whole of the Premises shall be taken by any public or quasi-public authority under the power of eminent domain, condemnation or conveyance in lieu thereof, then this Lease shall terminate as of the date on which possession of the Premises is required to be surrendered to the condemning authority and the Tenant shall have no claim against Landlord or the condemning authority for the value of the unexpired term of this Lease. Tenant shall have the right to claim, however, the unamortized cost of any improvements or additions made to the Premises by Tenant at its cost, the value of any Tenant fixtures and furnishings and any moving expenses.

(b) If a portion of the Premises shall be so taken or conveyed, and if such partial taking or conveyance shall render the Premises unsuitable for the business of the Tenant, then the term of this Lease shall cease and terminate as of the date on which possession of the portion of the Premises is surrendered to the condemning authority, and Tenant shall have no claim against Landlord or the condemning authority for the value of any unexpired term of this Lease.

In the event such partial taking or conveyance is not extensive enough to render the Premises untenantable for the business of Tenant, this Lease shall continue in full force and effect, except that the Minimum Rent shall be reduced in the same proportion that the floor area of the Premises so taken or conveyed bears to such floor area immediately prior to such taking or conveyance.

In the event of such partial taking and continuation of Lease, Landlord shall promptly restore the Premises as nearly as practical to the condition comparable to that which existed prior to the condemnation.

25. EVENTS OF DEFAULT

The occurrence of any of the following shall constitute an event of default here under:

(a) Failure of Tenant to pay installment of rent within five (5) days of the due date, or failure of Tenant to pay within fifteen (15) days any other sum herein required to be paid by Tenant, provided that no such failure shall constitute an event of default unless and until Landlord has provided notice thereof, and Tenant has failed to cure such default within three (3) business days of receipt of such written notice.

(b) Tenant’s failure to perform any other covenant or condition of this Lease within thirty (30) days of notice thereof, unless the failure is of such a character as to require more than thirty (30) days to cure in which event Tenant’s failure to proceed diligently to cure such failure shall constitute an event of default.

26. LANDLORD'S REMEDIES

Upon the occurrence of any event of default, Landlord may, at Landlord's sole option, exercise any or all of the following remedies, together with any such other remedies as may be available to Landlord at law or in equity.

(a) Landlord may terminate this Lease by giving Tenant written notice of its election to do so, as of a specified date not less than thirty (30) days after the date of the giving of such notice and this Lease shall then expire on the date so specified, and Landlord shall then be entitled to immediately regain possession of the Premises as if the date had been originally fixed as the expiration date of the term of this Lease. Landlord may then re-enter upon the Premises, either with or without due process of law, and remove all persons therefrom, the statutory notice to quit or any other notice to quit being hereby expressly waived by Tenant. Tenant expressly agrees that the exercise by Landlord of the right of re-entry shall not be a bar to or prejudice in any way other legal remedies available to Landlord. In that event, Landlord shall be entitled to recover from Tenant as and for liquidated damages an amount equal to the rent and additional rent reserved in this Lease less any and all amounts received by Landlord from the rental of the Premises to another tenant. Nothing herein contained, however, shall limit or prejudice the right of Landlord to prove for and obtain as liquidated damages, by reason of such termination, an amount equal to the maximum allowed by any statute or rule of law in effect at the time when, and governing the proceedings in which such damages are to be proved, whether or not such amount may be greater, equal to, or less than the amount of the difference referred to above, and Landlord may, in his own name, but as agent for Tenant, re-let the Premises. Any recovery by the Landlord shall be limited to the rent hereunder (plus any costs incurred in re-letting) less any rent actually paid by the new tenant.

(b) No termination of this Lease or any taking of possession of the Premises shall deprive Landlord of any of its remedies or actions against Tenant for past or future rent, nor shall the bringing of any action for rent or breach of covenant, or the resort to any other remedy herein provided for the recovery of rent, be construed as a waiver of the right to obtain possession of the Premises.

(c) In addition to any damages becoming due under this paragraph, Landlord shall be entitled to recover from Tenant and Tenant shall pay to Landlord an amount equal to all expenses, including reasonable attorneys' fees, if any, incurred by the Landlord in recovering possession of the Premises, and all reasonable costs and charges for the care of said Premises while vacant, which damages shall be due and payable by Tenant to Landlord at such time or times as such expenses are incurred by the Landlord.

(d) In the event of a default or threatened default by Tenant of any of the terms or conditions of this Lease, Landlord shall have the right of injunction and the right to invoke any remedy allowed by law or in equity as if no specific remedies of Landlord were set forth in this Lease.

(e) If default be made and a compromise and settlement shall be had thereupon, it shall not constitute a waiver of any covenant herein contained, nor of the Lease itself.

27. RIGHTS OF LANDLORD

Landlord reserves the following rights with respect to the Premises:

(a) During normal business hours, upon 24 hours notice, to go upon and inspect the Premises, and at Landlord's option, to make repairs, alterations and additions to the Premises or the Building of which the Premises are a part, provided there is no interference with Tenant's occupancy. An Agent of the Tenant may be present for inspection, if requested by Tenant.

(b) To display, within sixty (60) days prior to the expiration of this Lease or after notice from either party of intention to terminate this Lease, a "For Rent" sign, and all of said signs which shall be placed upon such part of the Premises as Landlord shall determine, except on doors leading into the Premises. Prospective purchasers or tenants authorized by Landlord may inspect the Premises during normal business hours following adequate notice to Tenant.

(c) To install, place upon, or fix to the roof and exterior walls of the Premises, equipment, signs, displays, antennae, and any other object or structure of any kind, providing the same shall not materially impair the structural integrity of the Building or interfere with Tenant's occupancy.

28. HOLDING OVER

If Tenant holds possession of the Leased Premises after the Expiration Date or other termination of this Lease, Landlord shall, at its sole option, have the right to treat Tenant as a tenant by the month commencing with the first day after the termination of the Lease at one hundred fifty percent (150%) the Basic Monthly Rent paid during the last month of the Term, and upon all the other terms of this Lease, including the provisions of this paragraph. Said holdover term shall terminate upon thirty (30) days notice from one party to the other. Notwithstanding the foregoing, nothing contained herein shall be construed as a requirement that Landlord consent to the occupancy or possession of the Leased Premises by Tenant after the termination of the Lease, and Landlord, upon said termination of this Lease, if Landlord elects to treat Tenant as a trespasser, shall be entitled to the benefit of all public general or public laws relating to the speedy recovery of the possession of land and tenements held over by Tenant, whether now or hereafter in force and effect. If Tenant fails to surrender the Leased Premises upon the expiration or other termination of this Lease despite demand to do so by Landlord, Tenant shall indemnify and hold Landlord harmless from all injury, loss, claims, expenses and liability, including without limitation, any claim made by any succeeding tenant and reasonable attorneys' fees, founded on or resulting from such failure by Tenant to surrender possession of the Leased Premises on the date required hereby.

29. WAIVER OF CLAIMS

Except as may result from their gross negligence, Landlord and Landlord's agents, employees, and contractors shall not be liable for, and Tenant hereby releases all claims for, damages to persons or property sustained by Tenant (or any person claiming through Tenant) resulting from any fire, accident, occurrence or condition in or upon the Premises or Building, including but not limited to such claims for damage resulting from (1) any defect in or failure of plumbing, heating or air-conditioning equipment, electric wiring or installation thereof, water pipes, stairs, railings or walks; (2) any equipment or apparatus becoming out of repair; (3) the bursting, leaking or running of any tank, washstand, water closet, waste pipe, drain or any other pipe or tank, upon or about such building or premises; (4) the backing up of any sewer pipe or downspout; (5) the escape of steam or hot water; (6) water, snow or ice being upon or coming through the roof or any other place upon or near the Building or Premises or otherwise; (7) the falling of any fixtures, plaster or stucco; (8) broken glass; and (9) any act or omission or occupants of adjoining or contiguous property or buildings.

30. NOTICE

All notices required under this Lease shall be given in writing and shall be deemed to be properly serviced if hand delivered, sent by certified or registered United States Mail or sent by national courier service such as FedEx, UPS or DHL, as follows:

If to the Landlord: W. M. Rickman Construction Co. LLC
15215 Shady Grove Road
Suite 201
Rockville, Maryland 20850

If to the Tenant: NexImmune, Inc.
9119 Gaither Rd.
Rockville, Maryland 20850
Attn:

or to such other address as either may have designated from time to time by written notice to the other. The date of service of such notices shall be the date of hand delivery or delivery as confirmed by the delivery service.

31. COVENANTS OF TENANT

Tenant covenants and agrees:

(a) To give to Landlord prompt written notice of any accident, fire, or damage occurring on or to the Premises.

(b) To keep the thermostat in the Premises set at a temperature sufficient to prevent freezing of water pipes, fixtures and HVAC units.

(c) To keep the Premises clean, orderly, sanitary, and free from all objectionable odors and from insects, vermin and other pests.

(d) To comply with the requirements of the State, Federal and County statutes, ordinances, and regulations applicable to Tenant and its use of the Premises, and to save Landlord harmless from penalties, fines, costs, and expenses resulting from failure to do so, provided Tenant shall not be obligated to make structural repairs or alterations to so comply.

(e) Tenant shall promptly pay all contractors, suppliers of material and persons it engages to perform work and provide materials for construction work on the Premises so as to minimize the possibility of a lien attaching to the Premises. Should any such lien be made or filed, Tenant shall cause the same to be discharged and released of record by bond or otherwise within ten (10) days of receipt of written request from Landlord.

(f) Tenant is responsible for the security of the Premises.

32. LANDLORD'S RIGHT TO ALTER SITE PLAN

LANDLORD shall, from time to time, have the right to alter or modify the site plan of the Building and to rearrange the driveways and parking areas, as well as the entrance and exits to the Premises.

34. PARKING SPACES

LANDLORD agrees to furnish 3 1/3 unreserved parking spaces per thousand square feet of space occupied by the TENANT.

35. ENTIRE AGREEMENT

This Lease contains the entire agreement of the parties. There are no oral agreements existing between them.

36. SUCCESSORS AND ASSIGNS

This Lease, and the covenants and conditions herein contained shall inure to the benefit of and be binding upon the Landlord, its successors and assigns, and shall inure to the benefit of and be binding upon the Tenant, its successors and assigns, if permitted.

37. BANKRUPTCY

If Tenant shall make an assignment of its assets for the benefit of creditors, or if Tenant shall file a voluntary petition in bankruptcy, or if any involuntary petition in bankruptcy or for receivership be instituted against the Tenant and the same be not dismissed within thirty (30) days of the filing thereof, or if Tenant shall be adjudged bankrupt, then and in any of said events, this Lease shall immediately cease and terminate at the option of the Landlord with the same force and effect as though the date of said event was the date herein fixed for expiration of the term of this Lease.

38. NON-DELIVERY

In the event the Landlord shall be unable to give possession of the Premises because construction of the Building is not complete or for any other cause reasonably beyond the control of the Landlord, the Landlord shall not be liable to Tenant for any damage resulting from failure to give possession.

39. PARTIAL INVALIDITY

If any term, covenant, or condition of this Lease or the application thereof to any person or circumstance shall be held to be invalid and unenforceable, the remainder of this Lease, and the application of such terms, covenants, or conditions shall be valid and enforceable to the fullest extent permitted by law.

40. FORCE MAJEURE

With the exception of those provisions contained herein regarding the payment of rent, the inability of either party to perform any of the terms, covenants or conditions of this Lease shall not be deemed a default if the same shall be due to any cause beyond the control of that party.

41. ESTOPPEL CERTIFICATE

The Tenant shall from time to time, within five (5) business days after being requested to do so by the Landlord or any Mortgagee, execute, acknowledge and deliver to the Landlord (or, at the Landlord's request, to any existing or prospective purchaser, transferee, assignee or Mortgagee of any or all of the Premises) an instrument in recordable form, certifying (a) that this Lease is unmodified and in full force and effect (or, if there has been any modification thereof, that it is in full force and effect as so modified, stating therein the nature of such modification); (b) as to the dates to which the Minimum Rent and other charges arising hereunder have been paid; (c) as to the amount of any prepaid Rent or any credit due to the Tenant hereunder; (d) that the Tenant has accepted possession of the Premises, and the date on which the Term commenced; (e) as to whether, to the best knowledge, information and belief of the signer of such certificate, the Landlord or the Tenant is then in default in performing any of its obligations hereunder (and, if so, specifying the nature of each such default); and (f) as to any other fact or condition reasonably requested by the Landlord or such other addressee. In the event the Tenant fails or refuses to provide such a certificate, Tenant shall be liable to Landlord for any loss or damage (including reasonable counsel fees) arising out of or in connection with such failure or refusal.

[*signature page follows*]

IN WITNESS WHEREOF, the parties have caused this Lease Agreement to be executed on the year and date first written.

WITNESS:	LANDLORD:
	W. M. RICKMAN CONSTRUCTION CO. LLC
______________________________	______________________________
	By: William M. Rickman
WITNESS:	TENANT:
	NEXIMMUNE, INC
______________________________	______________________________
	By:

Exhibit A

FLOORPLAN TO BE ADDED

Exhibit 10.13

SUBLEASE AGREEMENT

THIS REVISED SUBLEASE is made and executed the 11th day of December, 2017 by and between Nexlmmune, Inc. (a Maryland corporation), (hereinafter called "Tenant"), and Modavar Pharmaceuticals LLC (a Delaware corporation) (hereinafter called "Subtenant").

W I T N E S S E T H

WHEREAS, Tenant and W. M. Rickman Construction Co., LLC (hereinafter called "Landlord") entered into a lease executed for 22,800 square feet, which encompasses the entire building at 9119 Gaither Road in Gaithersburg, Maryland (hereinafter called "Master Lease").

NOW THEREFORE, Landlord and Tenant hereby covenant and agree to sublease the space to Subtenant.

1. Demised Space- Upon and subject to the terms covenants and conditions hereinafter set forth, Tenant hereby subleases to Subtenant and Subtenant hereby subleases from Tenant the premises consisting of 1,658 rentable square feet, starting December 11, 2017, being the area outlined on the attached floor plan as Exhibit "A" (hereinafter defined as "Demised Premises").

2. Term- The term of this Sublease shall remain as October 1, 2017 and shall expire on March 31, 2018.

3. Use- The Subleasee shall use and occupy the Demised Premises in connection with its conduct of general office usage and for no other purpose, except as otherwise provided herein. Subtenant may place its name on whichever door or doors are used for ingress and egress to the Demised Premises, provided such signs are not in conflict with the Master Lease.

4. Parking- Tenant shall have the right to use parking spaces in common with others currently allocated in the Master Lease.

5. Rental- Subtenant shall pay base monthly rent to Tenant for the Demised Premises in the sum of Six Thousand Two Hundred Seventeen and 50/100 Dollars ($6,217.50) per month for January through March, payable in advance, on or before the first day of each and every month during the term at the office of the Tenant herein designated or such other place as Tenant may designate by written notice to the Subtenant. The rent for the month of December shall be prorated to begin on December 11, 2017 and will be in the amount of $5,803.79 and due by December 15th, 2017.

The first installment of rent shall be due and payable upon occupancy of the premises. Notwithstanding any provision in the Master Lease, there shall be no base rental escalations, operating expenses or additional rent of any kind.

6. Security Deposit- Simultaneously with the execution of this Lease, Subtenant shall deposit with Tenant the sum of Four Thousand Nine Hundred Thirty-Five and 00/100 Dollars ($4,935.00) as a security deposit. Such security deposit shall be considered as security for the payment and performance by Subtenant of all of Subtenant's obligations, covenants, conditions and agreement sunder this Lease. Upon the expiration of the term hereof, Tenant shall (provided that Subtenant is not in default under the terms hereof) return and pay back such security deposit to Subtenant, less such portion thereof as Tenant shall have appropriated to make good any default by Subtenant with respect to any of Subtenant's aforesaid obligations, covenants, conditions or agreements. In the event of any default by Subtenant hereunder, Tenant shall have the right, but shall not be obligated, to apply all or any portion of the security deposit to cure such default, in which event Subtenant shall be obligated to promptly deposit with Tenant the amount necessary to restore the security deposit to its original amount. In the event of the sale or transfer of Tenant's interest in the Building, Tenant shall have the right to transfer the security deposit to such purchaser or transferee, in which event Subtenant shall be entitled to look to the transferee for the return of the security deposit and Tenant shall thereupon be released from liability to Subtenant for the return of such security deposit.

7. Hold Harmless- Subtenant agrees to indemnify, hold harmless and defend the Landlord and Tenant from any and all liability, damages, expenses, claims, suits or judgments arising out of injury or damage to persons or property on the leased premises or arising out of the use or occupancy of said premises or of subtenant's operations therein. Notwithstanding the foregoing, Tenant agrees to indemnify and hold Subtenant harmless from any claims by Landlord, provided that Subtenant has paid the specified rent to Tenant and is not in default of this Sublease.

8. Default- Tenant agrees to provide Subtenant, within five (5) business days of receiving notice of any default, and within five business (5) days of Tenant's non-receipt of any rental payment when due, with written notice of such default. Subtenant shall have ten (10) business days to cure such default after receipt of such notice.

9. Master Lease- It is hereby understood and agreed between Tenant and Subtenant that the Leases now in existence between the Landlord and Tenant, copies of which have been provided to Subtenant and which are attached to this Sublease as Exhibit "B," shall be incorporated by reference in whole in this Sublease. Provided, however, that all references to Landlord in the Lease between the Tenant and Landlord shall mean the present Owner of 9119 Gaither Road or its assigns or transferees. Tenant shall have no obligations to provide any of the services to the Subtenant which are called for in the Lease of the Tenant with the Landlord, but such services and obligations shall be fully provided by the Landlord or by its transferees as set forth in this Sublease in the foregoing paragraphs. The rights and obligations of the Subtenant to Tenant and Landlord shall be those obligations as set forth for the Tenant in the Lease between Tenant hereunder and landlord, attached hereto as Exhibit "B."

10. Liability Insurance- In full accordance with the Master Lease, Subtenant shall procure and maintain comprehensive general liability insurance, including contractual liability.

11. Subletting of Premises- Tenant agrees that Subtenant shall have the right to further sublease or assign its Sublease of the Premises, provided that such further Subtenant is approved by Tenant and Landlord, whose consent shall not be unreasonably withheld. Upon receipt of notice of Subtenant's intention to further sublease or assign its Sublease of the demised space, Tenant shall use its best efforts to obtain Landlord's approval of such Sublease or Assignment.

12. Broker - Tenant recognizes Scheer Partners, Inc. as the sole procuring cause in this transaction.

13. Miscellaneous- This constitutes the entire agreement between the parties; any additional amendment or notification of the terms hereto shall not be effective unless made in writing and attached to the original hereof, executed by all parties. This Agreement shall be binding upon the successors, assigns and heirs of the respective parties. By its approval of this Sublease, Landlord consents to Subtenant's alterations to the demised space as described in this agreement.

IN WITNESS WHEREOF, the parties have caused this Sublease to be duly executed as of the day and year first above written.

WITNESS:

SUBTENANT: Modavar Pharmaceuticals LLC

12/8/2017

By:

WITNESS:

DEBY PAN 08 DEC 2017

TENANT: NexImmune, Inc.

By: Alain D. Cappeluti

WITNESS:

LANDLORD: W. M. Rickman Construction Co., LLC

N/A

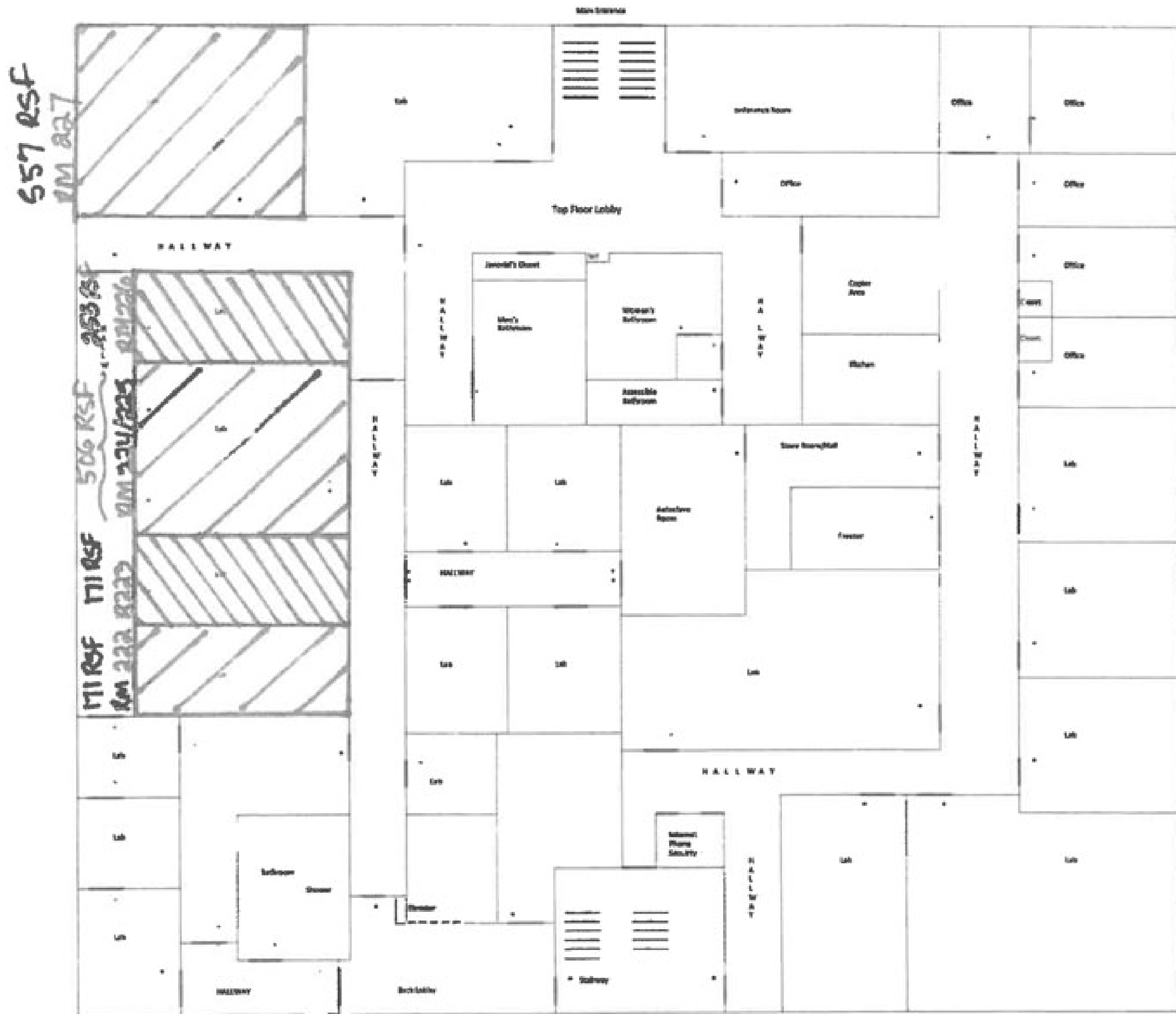
BY:
01 FEB 2018

Exhibit A

Demising plan

9119 Gaither Road • - 2nd Floor Plan

Gaither Road - Front of Building



Modavar Rent Calculation

Room	Sq Feet	Annual Rate	New Monthly Rent	Current Monthly Rent
227	557	S 45.00	$ 2,088.75	$ 2,088.75
226	253	$ 45.00	$ 948.75	$ 948.75
224/225	506	$ 45.00	$ 1,897.50	$ 1,897.50
223	171	$ 45.00	$ 641.25	
222	171	$ 45.00	$ 641.25	
Total	1,658		$ 6,217.50	$ 4,935.00

Exhibit B

Master Lease