# UNITED STATES
# SECURITIES AND EXCHANGE COMMISSION
**Washington, DC 20549**

# FORM 10-K

**(Mark One)**

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

**For the fiscal year ended December 31, 2017**

**OR**

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

**For the transition period from _____ to _____**

**Commission File Number: 001-36829**

# Rocket Pharmaceuticals, Inc.

**(Exact Name of Registrant as Specified in Its Charter)**

| **Delaware** | **04-3475813** |
|---|---|
| **(State or Other Jurisdiction of Incorporation or Organization)** | **(IRS Employer Identification No.)** |
| **430 East 29th Street, Suite 1040 New York, NY** | **10016** |
| **(Address of Principal Executive Offices)** | **(Zip Code)** |

**(646) 440-9100**

**(Registrant's Telephone Number, Including Area Code)**

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

| **Title of each class** | **Name of each exchange on which registered** |
|---|---|
| **Common Stock, $0.01 par value** | **Nasdaq Global Market** |

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

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

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Exchange Act. Yes ☐ No ☒

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

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes ☒ No ☐

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. ☒

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. (Check one):

| | | | |
|---|---|---|---|
| Large accelerated filer | ☐ | Accelerated filer | ☐ |
| Non-accelerated filer | ☐ (Do not check if a smaller reporting company) | Smaller reporting company | ☒ |
| Emerging growth company | ☒ | | |

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

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

The aggregate market value of the voting and non-voting common equity held by non-affiliates of the registrant as of June 30, 2017 was approximately $45.4 million, based upon the closing price on the Nasdaq Global Market reported for such date. Shares of the registrant's common stock held by each officer and director and by each person who is known to own 10% or more of the outstanding common stock have been excluded in that such persons may be deemed to be affiliates of the Company. This determination of affiliate status is not necessarily a conclusive determination for other purposes.

As of March 1, 2018, there were 39,402,023 shares of common stock, $0.01 par value per share, outstanding.

Documents Incorporated by Reference

Part III of this annual report on Form 10-K incorporates by reference information (to the extent specific sections are referred to herein) from the registrant's definitive proxy statement for its 2018 Annual Meeting of Stockholders or an amendment to this Annual Report on Form 10-K, in any case, to be filed within 120 days of the end of the period covered by this Annual Report.

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PRESENTATION NOTE: We implemented a 1-for-4 reverse stock split of our common stock on January 4, 2018. All share numbers and prices have been adjusted to reflect the reverse stock split.

## FORWARD-LOOKING STATEMENTS

This Annual Report on Form 10-K contains forward-looking statements that involve risks and uncertainties, as well as assumptions that, if they never materialize or prove incorrect, could cause our results to differ materially from those expressed or implied by such forward-looking statements. We make such forward-looking statements pursuant to the safe harbor provisions of the Private Securities Litigation Reform Act of 1995 and other federal securities laws. All statements other than statements of historical facts contained in this Annual Report on Form 10-K 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:

- the possibility that the businesses of Inotek Pharmaceuticals Corporation and Rocket Pharmaceuticals, Ltd. may not be integrated successfully or such integration may take longer to accomplish than expected;
- federal, state, and non-U.S. regulatory requirements, including regulation of our current or any other future product candidates by the U.S. Food and Drug Administration (“FDA”);
- the timing of and our ability to submit regulatory filings with the FDA and to obtain and maintain FDA or other regulatory authority approval of, or other action with respect to, our product candidates;
- our competitors’ activities, including decisions as to the timing of competing product launches, generic entrants, pricing and discounting;
- whether safety and efficacy results of our clinical trials and other required tests for approval of our product candidates provide data to warrant progression of clinical trials, potential regulatory approval or further development of any of our product candidates;
- our ability to develop, acquire and advance product candidates into, and successfully complete, clinical studies, and our ability to apply for and obtain regulatory approval for such product candidates, within currently anticipated timeframes, or at all;
- our ability to establish key collaborations and vendor relationships for our product candidates and any other future product candidates;
- our ability to successfully develop and commercialize any technology that we may in-license or products we may acquire;
- unanticipated delays due to manufacturing difficulties, supply constraints or changes in the regulatory environment;
- our ability to successfully operate in non-U.S. jurisdictions in which we currently or in the future do business, including compliance with applicable regulatory requirements and laws;
- uncertainties associated with obtaining and enforcing patents to protect our product candidates, and our ability to successfully defend ourselves against unforeseen third-party infringement claims;
- anticipated trends and challenges in our business and the markets in which we operate;
- our estimates regarding our capital requirements; and
- our ability to obtain additional financing and raise capital as necessary to fund operations or pursue business opportunities.

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

Any forward-looking statements in this Annual Report on Form 10-K reflect our current views with respect to future events or to our future financial performance and involve known and unknown risks, uncertainties and other factors that may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by these forward-looking statements. Factors that may cause actual results to differ materially from current expectations include, among other things, those listed under Part I, Item 1A. Risk Factors and elsewhere in this Annual Report on Form 10-K. Given these uncertainties, you should not place undue reliance on these forward-looking statements. Except as required by law, we assume no obligation to update or revise these forward-looking statements for any reason, even if new information becomes available in the future.

This Annual Report on Form 10-K also contains estimates, projections and other information concerning our industry, our business, and the markets for certain diseases, including data regarding the estimated size of those markets, and the incidence and prevalence of certain medical conditions. Information that is based on estimates, forecasts, projections, market research or similar methodologies is inherently subject to uncertainties and actual events or circumstances may differ materially from events and circumstances reflected in this information. Unless otherwise expressly stated, we obtained this industry, business, market and other data from reports, research surveys, studies and similar data prepared by market research firms and other third parties, industry, medical and general publications, government data and similar sources.

## PART I

### Item 1. Business

**Merger of Inotek Pharmaceuticals Corporation and Rocket Pharmaceuticals, Ltd.**

On January 4, 2018, Inotek Pharmaceuticals Corporation ("Inotek") and privately held Rocket Pharmaceuticals, Ltd. ("Private Rocket") completed a business combination in accordance with the terms of the Agreement and Plan of Merger and Reorganization (the "Merger Agreement"), dated as of September 12, 2017, by and among Inotek, Rome Merger Sub, a wholly owned subsidiary of Inotek ("Merger Sub"), and Private Rocket, pursuant to which Merger Sub merged with and into Private Rocket, with Private Rocket surviving as a wholly owned subsidiary of Inotek. This transaction is referred to as the "Reverse Merger." Immediately following the Reverse Merger, Inotek changed its name to "Rocket Pharmaceuticals, Inc." In connection with the closing of the Reverse Merger, our common stock began trading on The Nasdaq Global Market under the ticker symbol "RCKT" on January 5, 2018.

The Reverse Merger will be accounted for as a reverse merger under the acquisition method of accounting. After reviewing the relative voting rights, the composition of the board of directors and the composition of senior management of the combined company after the Reverse Merger, it was determined that Private Rocket will be treated as the accounting acquirer and Inotek will be treated as the "acquired" company for financial reporting purposes under the acquisition method of accounting.

**Overview**

Prior to the Reverse Merger, Inotek was a clinical-stage biopharmaceutical company focused on the discovery, development and commercialization of therapies for ocular diseases, including glaucoma. After failing to meet the primary endpoints in its first pivotal Phase 3 trial of *trabodenoson* monotherapy ("MATrX-1") and its Phase 2 trial of *trabodenoson* in a fixed-dose combination therapy with *latanoprost* ("FDC"), Inotek voluntarily discontinued its development of *trabodenoson* in 2017.

Rocket Pharmaceuticals, Inc., together with its subsidiaries (collectively, "Rocket"), is a multi-platform biotechnology company focused on the development of first-in-class gene therapies for rare and devastating pediatric diseases. Rocket has two lentiviral vector ("LVV") programs currently undergoing clinical testing targeting Fanconi Anemia ("FA"), a genetic defect in the bone marrow that reduces production of blood cells or promotes the production of faulty blood cells, and three additional LVV programs targeting other rare genetic diseases. In addition, Rocket has an adeno-associated viral vector ("AAV") program for which it expects to file an investigational new drug ("IND") application in the next 12 months, which will permit the commencement of human clinical studies thereafter. Rocket has full global commercialization and development rights to all of its product candidates under royalty-bearing license agreements, with the exception of the CRISPR/Cas9 development program (described below) for which Rocket currently has only development rights.

Rocket's two leading LVV and AAV technology platforms are each being designed in collaboration with leading academic and industry partners. Through its gene therapy platforms, Rocket aims to restore normal cellular function by modifying the defective genes that cause each of the targeted disorders.

***Gene Therapy Overview***

Genes are composed of sequences of deoxyribonucleic acid ("DNA"), which code for proteins that perform a broad range of physiologic functions in all living organisms. Although genes are passed on from generation to generation, genetic changes, also known as mutations, can occur in this process. These changes can result in the lack of production of proteins or the production of altered proteins with reduced or abnormal function, which can in turn result in disease.

Gene therapy is a therapeutic approach in which an isolated gene sequence or segment of DNA is administered to a patient, most commonly for the purpose of treating a genetic disease that is caused by genetic mutations. Currently available therapies for many genetic diseases focus on administration of large proteins or enzymes and typically address only the symptoms of the disease. Gene therapy aims to address the disease-causing effects of absent or dysfunctional genes by delivering functional copies of the gene sequence directly into the patient's cells, offering the potential for curing the genetic disease, rather than simply addressing symptoms.

For the development of Rocket's gene therapy treatments, Rocket is using a modified non-pathogenic virus. Viruses are particularly well suited as delivery vehicles, because they are adept at penetrating cells and delivering genetic material inside a cell. In creating Rocket's viral delivery vehicles, the viral (pathogenic) genes are removed and are replaced with a functional form of the missing or mutant gene that is the cause of the patient's genetic disease. The functional form of a missing or mutant gene is called a therapeutic gene, or the "transgene." The process of inserting the transgene is called "transduction." Once a virus is modified by replacement of the viral genes with a transgene, the modified virus is called a "viral vector." The viral vector delivers the transgene into the targeted tissue or organ (such as the cells inside a patient's bone marrow). Rocket has two types of viral vectors in

development, LVV and AAV. Rocket believes that its LVV and AAV-based programs have the potential to offer a significant therapeutic benefit to patients that is durable (long-lasting).

The gene therapies can be delivered either (1) *ex vivo* (outside the body), in which case the patient's cells are extracted and the vector is delivered to these cells in a controlled, safe laboratory setting, with the modified cells then being reinserted into the patient, or (2) *in vivo* (inside the body), in which case the vector is injected directly into the patient, either intravenously (IV) or directly into a specific tissue at a targeted site, with the aim of the vector delivering the transgene to the targeted cells.

Rocket believes that scientific advances, clinical progress, and the greater regulatory acceptance of gene therapy have created a promising environment to advance gene therapy products as these products are being designed to restore cell function and improve clinical outcomes, which in many cases include prevention of death at an early age. The recent FDA approval of Novartis's treatment for pediatric acute lymphoblastic leukemia ("ALL") indicates that there is a regulatory pathway forward for gene therapy products.

***Pipeline Overview***

*LVV Programs*. Rocket's LVV-based programs utilize third-generation, self-inactivating lentiviral vectors to target selected rare diseases. Currently, Rocket is developing LVV programs to treat FA, Leukocyte Adhesion Deficiency-I ("LAD-I"), Pyruvate Kinase Deficiency ("PKD"), and Infantile Malignant Osteopetrosis ("IMO"). Brief descriptions of these conditions and the Rocket programs for each is set forth below.

*Fanconi Anemia (FA)*

Rocket's LVV-based programs utilize third-generation, self-inactivating lentiviral vectors to correct defects in patients' hematopoietic stem cells ("HSCs"), which are the cells found in bone marrow that are capable of generating blood cells over a patient's lifetime. Defects in the genetic coding of hematopoietic stem cells can result in severe, and potentially life-threatening anemia, which is when a patient's blood lacks enough properly functioning red blood cells to carry oxygen throughout the body. Stem cell defects can also result in severe and potentially life-threatening decreases in white blood cells resulting in susceptibility to infections, and in platelets responsible for blood clotting, which may result in severe and potentially life-threatening bleeding episodes. Patients with FA have a genetic defect that prevents the normal repair of genes and chromosomes within blood cells in the bone marrow, which frequently results in the development of AML (acute myeloid leukemia, a type of blood cancer), as well as bone marrow failure and congenital defects. The average lifespan of an FA patient is estimated to be 30 to 40 years. The prevalence of FA in the US/EU is estimated to be about 2,000.

Rocket currently has the following two LVV-based programs targeting FA:

- RP-L101. RP-L101 is a program that Rocket in-licensed from Fred Hutchinson Cancer Center in Seattle, Washington ("Hutch"). RP-L101 is currently being studied in a Phase 1 clinical trial that is treating FA patients at Hutch under an IND sponsored by Hutch. Rocket is entitled to the data from this clinical study and has the commercial rights to the drug being studied under this IND.
- RP-L102. RP-L102 is a program that Rocket in-licensed from CIEMAT (Centro de Investigaciones Energéticas, Medioambientales y Tecnológicas), which is a leading research institute in Madrid, Spain. RP-L102 is currently being studied in a Phase 1/2 clinical trial treating FA patients with a modified process under an Investigational Medicinal Product Dossier ("IMPD") sponsored by CIEMAT. Rocket is entitled to the data from this clinical study and has the commercial rights to the drug being studied under this IMPD.

Rocket expects to announce clinical data from its LVV-based programs targeting FA during the next 12 to 18 months, with the next update expected in the second quarter of 2018. Rocket expects to advance an LVV-based program targeting FA to the pivotal trial stage in 2019.

*Leukocyte Adhesion Deficiency-I ("LAD-I")*

LAD-I is a genetic disorder that causes the immune system to malfunction, resulting in a form of immunodeficiency. Immunodeficiencies are conditions in which the immune system is unable to protect the body effectively from foreign invaders such as viruses, bacteria, and fungi. Starting from birth, people with LAD-I frequently develop serious bacterial and fungal infections. Life expectancy in individuals with LAD-I is often severely shortened. Due to repeat infections, affected individuals may not survive past infancy.

Rocket currently has one LVV-based program targeting LAD-I, RP-L201. RP-L201 is a preclinical program that Rocket in-licensed from CIEMAT. This program is currently being developed through an ongoing collaboration with CIEMAT, with a rolling IMPD expected to be filed in the fourth quarter of 2018.

*Pyruvate Kinase Deficiency ("PKD")*

PKD is an inherited lack of the enzyme "pyruvate kinase," which is used by red blood cells. Without this enzyme, red blood cells break down too easily, resulting in a low level of these cells, which in turn causes a form of anemia that can range in severity from mild (asymptomatic) to severe (resulting in childhood mortality or the requirement for frequent, lifelong blood transfusions). The pediatric population is the most commonly and severely affected subgroup of patients with PKD, and pediatric patients often undergo splenectomy (removal of the spleen) and experience jaundice and chronic iron overload.

Rocket currently has one LVV-based program targeting PKD, RP-L301. RP-L301 is a preclinical program that Rocket in-licensed from CIEMAT. This program is currently being developed through an ongoing collaboration with CIEMAT, with a rolling IMPD expected to be filed in the next 12 months.

*Infantile Malignant Osteopetrosis ("IMO")*

IMO is a genetic disorder characterized by increased bone density and bone mass secondary to impaired bone resorption. Osteopetrosis is a disorder of bone development in which the bones become thickened. Normally, small areas of bone are constantly being broken down by special cells called osteoclasts, then made again by cells called osteoblasts. In osteopetrosis, the cells that break down bone (osteoclasts) do not work properly, which leads to the bones becoming thicker and not as healthy. IMO is a severe form of osteopetrosis that typically presents in the first year of life and is associated with severe manifestations leading to death within the first decade of life without allogeneic hematopoietic stem cell transplantation ("HSCT"), a procedure in which a person receives blood-forming stem cells from a genetically similar, but not identical donor. For patients who do receive a bone marrow transplant, results have been limited, with frequent graft failure or rejection (graft-versus-host-disease ("GVHD")) and other severe complications. Untreated, IMO patients may suffer from a compression of the bone-marrow space, which results in bone marrow failure, anemia and increased infection risk due to the lack of production of white blood cells. Untreated IMO patients may also suffer from a compression of cranial nerves, which transmit signals between vital organs and the brain, resulting in blindness, hearing loss and other neurologic deficits.

Rocket currently has one LVV-based program targeting IMO, RP-L401. RP-L401 is a preclinical program that Rocket in-licensed from Lund University, Sweden. This program is currently being developed through an ongoing collaboration with Lund University, with an IMPD expected to be filed upon completion of IND/IMPD-enabling studies.

*AAV-based Program*

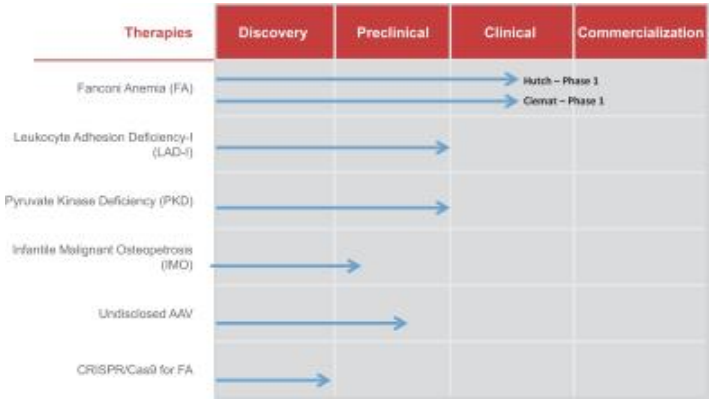
Rocket's AAV-based program involves the direct injection of the viral vector into the patient, rather than modifying the patient's cells *ex-vivo*. In Rocket's preclinical studies of its AAV-based program to date, this method of therapy has displayed substantial tropism, which is the ability to hone in on the organs most afflicted by the underlying disorder, with the aim of modifying cellular function to enable the production of sufficient quantities of a missing protein to restore proper function to the afflicted cells.

Rocket is currently developing RP-A501, which is an AAV-based program for an undisclosed rare disease. This program is currently in preclinical development, with IND-enabling studies ongoing. Rocket expects to announce preclinical data and the indication for this program in the second half of 2018 and to file an IND for this program in the next 12 months.

*CRISPR/Cas9-based program*

In addition to its LVV and AAV programs, Rocket also has a program evaluating CRISPR/Cas9-based gene editing for FA. This program is currently in the discovery phase. CRISPR/Cas9-based gene editing is a different method of correcting the defective genes in a patient, where the editing is very specific and targeted to a particular gene sequence. "CRISPR/Cas9" stands for Clustered, Regularly Interspaced Short Palindromic Repeats ("CRISPR") Associated protein-9. The CRISPR/Cas9 technology can be used to make "cuts" in DNA at specific sites of targeted genes, making it potentially more precise in delivering gene therapies than traditional vector-based delivery approaches. CRISPR/Cas9 can also be adapted to regulate the activity of an existing gene without modifying the actual DNA sequence, which is referred to as gene regulation.

The chart below shows the current phases of development of Rocket's programs and product candidates:




***Strategy***

Rocket seeks to bring hope and relief to patients with devastating, undertreated, rare pediatric diseases through the development and commercialization of potentially curative first-in-class gene therapies. To achieve these objectives, Rocket intends to develop into a fully-integrated biotechnology company. In the near- and medium-term, Rocket intends to develop its first-in-class product candidates, which are targeting devastating diseases with substantial unmet need. In the medium- and long-term, Rocket expects to develop proprietary in-house analytics and manufacturing capabilities, commence registration trials for its currently planned programs and submit its first biologics license applications ("BLAs"), and establish its gene therapy platform and expand its pipeline to target additional indications that Rocket believes to be potentially compatible with its gene therapy technologies. In addition, during that time, Rocket believes that its currently planned programs will become eligible for priority review vouchers from the FDA that provide for expedited review. Rocket has assembled a leadership and research team with expertise in cell and gene therapy, rare disease drug development and commercialization.

Rocket believes that its competitive advantage lies in its disease-based selection approach, a rigorous process with defined criteria to identify target diseases. Rocket believes that this approach to asset development differentiates it as a gene therapy company and potentially provides Rocket with a first-mover advantage.

**Gene Therapy Background**

Genes are the individual protein-encoding units that are located in the chromosomes within the majority of cells that comprise living things. Genes are composed of sequences of DNA and encode for the proteins that perform a broad range of physiologic functions within living organisms. Gene mutations are abnormalities—alterations in the correct sequence of DNA molecules.

Some diseases are known to result directly from gene mutations. Diseases that are caused by mutations in a single gene are known as monogenic diseases. Monogenic diseases are those genetic abnormalities that are the most amenable to gene therapy, since correction of the mutated gene in a sufficient cell population may result in correction of the disorder.

Gene therapy is the use of genetic material (most frequently DNA) to treat a disorder by delivering a correct copy of a gene into a patient's cells. The healthy, functional copy of this gene can enable the cell to function correctly. If a sufficient number of cells within the affected organ or tissue are able to function properly as a result of this therapy, then the disorder may be reversed.

In gene therapy, DNA that encodes for a corrected gene and its associated protein is packaged within a "vector", which is often a virus that has been modified so that it can insert its DNA into specific cells but cannot replicate or cause infections. This vector is used to transfer the DNA to the affected cells within the body. Treatment of blood-based disorders frequently relies on introduction of the vector to blood stem and progenitor cells (hematopoietic stem and progenitor cells ("HSPCs")) after they have been removed from the body and separated from other blood or bone marrow cells. This is known as *ex vivo* transduction. Following *ex vivo* transduction, the corrected HSPCs must then be reinfused into a patient in a way that allows them to grow inside the bone marrow, so that they can replenish a patient's hematopoietic (blood) system with cells that express a corrected (healthy) version of the protein that caused the disease. For Rocket's current gene therapy programs, hematopoietic stem cells are transduced with LVV containing the gene of interest.

When therapeutic vectors are directly injected into the body (either intravenously (IV) or directly into a specific tissue in the body), this is known as *in vivo* gene therapy. As is the case with *ex vivo* gene therapy, *in vivo* gene therapy is effective if the vector is able to enter the appropriate cell population in sufficient number, and is able to insert the corrected gene into these cells' DNA. If the

corrected gene is transferred and subsequently expressed by the cell machinery, the missing or defective protein can be produced and the underlying disorder may be corrected. Gene therapy of monogenic diseases is considered an approach by which the underlying cause of a disease may be treated.

*Essential Terminology.*

Set forth below is an abbreviated index of certain key terms and optimal ranges of values used in the discussion of LVV and AAV gene therapies.

| Term | Definition | Optimal Ranges |
|---|---|---|
| | ***LVV Therapy (hematopoietic disorders)*** | |
| CD34+ cell(s) | Hematopoietic Stem Cell (most CD34+ cells are not true stem cells, but this continues to be the most clinically useful measure) | Will depend on underlying disorder, generally > 1 million CD34+ cells/kg. |
| Vector copy number (VCN) [product] | The average number of gene copies per infused stem cell (as determined by DNA analysis; this is an average ratio, not a precise value) | 2.0 (“normal” value)<br>0.5 to 2 has been target in some LVV clinical studies<br>(5.0 considered maximum) |
| Vector copy number (VCN) [*in vivo*, post-treatment] | The average number of gene copies per peripheral blood or bone marrow cell (as determined by DNA analysis; this is an average ratio, not a precise value) | Will depend on underlying disorder, but many disorders may be correctable with *in vivo* VCNs << 1.0 |
| | ***AAV Therapy*** | |
| Vector copy number (VCN) [*in vivo*, post-treatment] | The average number of gene copies per cell in the organ of interest (as determined by DNA analysis; this is an average ratio, not a precise value) | Will depend on underlying disorder, but many disorders may be correctable with *in vivo* VCNs << 1.0 |

**Development Programs**

***Fanconi Anemia Complementation Group A (FANCA):***

*Fanconi Anemia Overview*

FA, a rare and life-threatening DNA-repair disorder, generally arises from a mutation in a single FA gene. An estimated 60-70% of cases arise from mutations in the Fanconi-A (“FANCA”) gene, which is the focus of the current Rocket programs.

FA results in bone marrow failure, developmental abnormalities, myeloid leukemia and other malignancies, often during the early years and decades of life. Bone marrow aplasia, which is bone marrow that no longer produces any or very few red and white blood cells and platelets leading to infections and bleeding, is the most frequent cause of early morbidity and mortality in FA, with a median onset before 10 years of age. Leukemia is the next most common cause of mortality, ultimately occurring in about 20% of patients later in life. Solid organ malignancies, such as head and neck cancers, can also occur, although at lower rates during the first two to three decades of life.

Although improvements in allogeneic (donor-mediated) HSCT, currently the most frequently utilized therapy for FA, have resulted in more frequent hematologic correction of the disorder, HSCT is associated with both acute and long-term risks, including transplant-related mortality, GVHD, a sometimes fatal side effect of allogeneic transplant characterized by painful ulcers in the GI tract, liver toxicity and skin rashes, as well as increased risk of subsequent cancers. Rocket’s gene therapy programs in FA are designed to enable a minimally toxic hematologic correction using a patient’s own stem cells during the early years of life. Rocket believes that the development of a broadly applicable autologous gene therapy can be transformative for these patients.

*Current Therapy*

Allogeneic HSCT may be curative for the hematologic manifestations of FA and is currently considered a standard-of-care in FA. However, HSCT is limited in that not all patients have a suitable donor and there is associated short term mortality and potential for acute and chronic GVHD with HSCT, especially in patients who do not receive an allograft from a sibling-human leukocyte antigen (HLA)-matched donor. 100-day mortality following allogeneic HSCT continues to be in the 10-15% range due to infection,

graft failure and other complications. In a European Group for Blood and Marrow Transplant 2013 publication, a retrospective analysis detailed results from 795 FA patients receiving HSCT from 1972 to 2010 in which Grade 2-4 Acute GVHD was reported in 19-36% of patients and Chronic GVHD was identified in 16-20% of patients.

HSCT likely increases the already high risk of subsequent solid tumor malignancies for patients with FA, most notably squamous carcinoma of the head and neck ("SCCHN"). Based on the findings in one series of data, HSCT was associated with a 4-fold increase in SCCHN risk relative to FA patients who did not receive a transplant, with cancers developing at an earlier age.

Other therapies utilized for FA include androgens, corticosteroids and hematopoietic growth factors, although the benefits of these therapies are considered modest and transient for the majority of patients. Side effects may also be considerable. For androgens, for example, these include masculinization, short stature, hepatitis, liver adenomas and hepatocellular carcinoma.

Because of the severity of the disease and limitations with existing standards-of-care, additional, minimally-toxic therapies are urgently needed in FA, especially if these can be administered with reduced short- and long-term toxicity relative to allogeneic HSCT.

*Rationale for Gene Therapy in FA*

Gene therapy has been considered a compelling investigative therapeutic option in FA since the genetic basis of the disorder was characterized, and has been the subject of studies in both preclinical models and in several clinical studies. In addition to the monogenic nature of each patient's disease, Rocket believes there are two critical factors that will lead Rocket's gene therapy programs into the next generation of promising therapy:

1. *The ability of HSCT to cure the hematologic component of FA is proof-of-principle that gene therapy will work in FA.* If a sufficient number of hematopoietic stem cells with a correct (non-FA) gene are able to engraft in the bone marrow of an FA patient, the blood component of FA can be eradicated, including both the risk of bone marrow failure and of leukemia. Rocket believes that gene therapy with a patient's own gene-corrected blood stem cells will work in a similar manner, but likely with fewer side effects than those resulting from an allogeneic transplant and with reduced long-term treatment cost burden.
2. *Somatic mosaicism in up to 15% of FA patients leads to stabilization and correct blood counts, in some cases for decades.* We believe this demonstrates that a modest number of gene corrected HSCs can repopulate a patient's blood and bone marrow with corrected (non-FA) cells.
3. *Improved vector design, stem cell selection methods, cell harvest and transduction procedures have the potential to substantially improved the quality of autologous gene therapy cell products; many of these improvements have been included in Rocket's Hutch and CIEMAT programs*. As a result, Rocket believes that there is reliable potential to confer disease correction at levels comparable to allogeneic transplant. For example, stem cell selection methods at both Hutch and CIEMAT have increased both CD34+ cell yield and purity, while retaining select non-CD34+ populations that may be essential for successful engraftment of gene-corrected cells in the bone marrow.

*Clinical Development Programs RP-L101 and RP-L102*

Efforts underway at Rocket partners Hutch (developing RP-L101) and CIEMAT (developing RP-L102) have incorporated the recommendations of an international working group that convened November 2010 with the intent of consolidating medical and scientific findings and optimization of future gene therapy clinical study design, with programs designed to overcome FA-specific gene therapy challenges. Rocket partners have demonstrated the ability to successfully mobilize and harvest target numbers of hematopoietic stem and progenitor cells ("HSPCs") generally acknowledged to be required for successful therapy. This has been accomplished through the selection of younger patients, and mobilization with both granulocyte-colony stimulating factor (G-CSF) and plerixafor drug products, which are both FDA-approved drugs that increase the number of bone marrow-derived stem cells circulating in the blood. Improvements to cell processing, such as reduced transduction time requirements, optimized transduction conditions, and modified HSPC selection processes, have also led to substantive improvements in cell recovery and *in vivo* VCN.

As of March 1, 2018, three patients have received infusion of gene-corrected stem cells with RP-L101 (Hutch) and five patients have received gene-corrected stem cells with RP-L102 (CIEMAT). No cytotoxic conditioning has been used to date. No serious, unexpected side effects have been seen to date in all eight patients.

As of March 1, 2018, Rocket has data for four of the five patients who have received gene-corrected stem cells with RP-L102 (CIEMAT). These four patients have had stable blood counts during the months subsequent to investigational therapy, despite decreases noted during the months and years preceding gene therapy. Additionally, *in vivo* VCN (gene markings) in these four patients have been evident in peripheral blood cells during the months subsequent to therapy, with progressive increases noted over time in each patient.

After the first patient was treated at Hutch, modifications to transduction conditions have yielded improved product VCN data, with transduction products from patients 2 and 3 achieving product VCN levels of 1.83 and at least 0.67, respectively.

Improvements in the clinical and cell-processing components of Rocket's FA trials are expected to yield more robust and readily-identifiable disease-reversal, both for the RP-L101 and RP-L102 programs. These improvements include selection of younger patients and identification of blood count profiles that are indicative of adequate stem cell populations capable of mobilization and engraftment in numbers sufficient for reversal of the disorder.

In contrast to the high doses of cytotoxic conditioning required for allogeneic transplant in most bone marrow disorders, Rocket's expectation is that the selective growth advantage of gene-corrected HSPCs in FA will enable the use of non-cytotoxic conditioning agents, low-dose cytotoxic agents, or quite possibly no conditioning agents to facilitate engraftment.

The engraftment of gene-corrected cells is likely to reduce the incidence of bone marrow failure. In addition, gene-corrected cells are likely to diminish the replicative stress in FA bone marrow, which has been increasingly implicated as a likely driver of the development or bone marrow failure or leukemia.

Low dose non-myeloablative cytotoxic conditioning agents (using lower than standard chemotherapy doses in order to help decrease cell death and prevent the number of normal blood-forming cells from decreasing in the bone marrow) or non-genotoxic antibody-based conditioning agents to facilitate engraftment of corrected stem cells will also be explored. In addition to transduction enhancers, these modifications will be further evaluated in preclinical and/or clinical programs.

*Regulatory Status*

In the United States, the FA program is in the clinical-stage with an IND in place with the FDA since 2011. Three patients have been treated to date, and enrollment continues. The FA program in the European Union is in the clinical-stage with an IMPD in place with the Spanish Agency for Medicines and Health Products. Five patients have been treated to date, and enrollment continues. Both the FDA and the European Medicines Agency ("EMA") have granted orphan drug designation ("ODD") for the "Lentiviral vector carrying the Fanconi anemia-A (FANCA) gene for the treatment of Fanconi anemia type A."

***Leukocyte Adhesion Deficiency-I (LAD-I):***

*Overview of LAD-I*

LAD-I is a rare autosomal recessive disorder of white blood cell adhesion and migration, resulting from mutations in the ITGB2 gene encoding for the Beta-2 Integrin component CD18. Deficiencies in CD18 result in an impaired ability for neutrophils (a subset of infection-fighting white blood cells) to leave blood vessels and enter into tissues where these cells are needed to combat infections. As is the case with many rare diseases, true estimates of incidence are difficult; however, several hundred cases (both living and deceased) have been reported to date.

Most LAD-I patients are believed to have the severe form of the disease. Severe LAD-I is notable for recurrent, life-threatening infections and substantial infant mortality in patients who do not receive an allogeneic HSCT. Mortality for severe LAD-I has been reported as 60-75% by age two in the absence of allogeneic HCST.

*Current Therapy*

Allogeneic HSCT is the only known curative therapy, with survival rates of approximately 75% in recent studies. Allogeneic HSCT in LAD-I has been associated with frequent severe GVHD, including chronic GVHD and high rates of subsequent non-bacterial infections (most notably cytomegalovirus (CMV) and other viral and systemic fungal infections).

Because LAD-I is the result of mutations in a single gene (ITGB2), Rocket is developing RP-L201 to enable a potentially curative therapy utilizing patients' own HSPCs, without the dependency on the rapid identification of an appropriate donor required in allogeneic HSCT therapy. It is anticipated that autologous therapy with RP-L201 will also enable definitive correction of this life-threatening disorder with reduced short- and long-term toxicity relative to allogeneic HSCT.

*Rationale for Gene Therapy in LAD-I*

Rocket believes there are two key reasons why gene therapy could have a transformative role in the treatment of LAD-I: (1) the existence evidence that even modest correction of the expression of the genetic mutation will increase patient survival in severe form of the disease, and (2) consistent and robust improvements in transduction and cell processing. Of note, proprietary transduction protocols currently yield product VCNs $\geq 1$ and transduction efficiencies of $> 50\%$. In addition, with the addition of either of two

transduction enhancing agents, at least a doubling of product VCN has been demonstrated in preliminary experiments. Studies evaluating combinations of transduction enhancers are underway.

Rocket believes that combined with a relatively straightforward cell harvest procedure in LAD-I and the likely modest CD18 expression required for clinical impact, RP-L201 can yield a gene therapy product that confers disease resolution comparable to allogeneic HSCT, and without the severe HSCT-associated acute and chronic toxicities.

*Preclinical Proof of Concept*

Preclinical results have indicated correction of LAD-I in mouse models, including restoration of neutrophils' ability to adhere to endothelial surfaces and migrate from blood vessels towards inflammatory sources. Specifically, gene correction has been shown to restore functional CD18 expression in a CD18 hypomorphic mouse ($CD18^{HYP}$) model, in which a mouse is conferred a CD18 gene mutation resulting in impaired inflammatory responses, leukocytosis (high white blood cell count), and hepatosplenomegaly (swelling of the liver and spleen).

*Regulatory Status*

In the EU, the LAD-I program has been discussed with the Spanish Agency for Medicines and Health in a pre-IMPD submission meeting in 2017. This program has been granted ODD by the EMA and by the FDA.

The program is in preclinical stage of development, with a rolling IMPD expected to be filed in the fourth quarter of 2018.

***Pyruvate Kinase Deficiency (PKD):***

*Overview of PKD*

Red blood cell PKD is a rare autosomal recessive disorder resulting from mutations in the pyruvate kinase L/R ("PKLR") gene encoding for a component of the red blood cell glycolytic pathway. PKD is characterized by chronic non-spherocytic hemolytic anemia, a disorder in which red blood cells do not assume a normal spherical shape and are broken down, leading to decreased ability to carry oxygen to cells, with anemia severity that can range from mild (asymptomatic) to severe forms that may result in childhood mortality or requirement for frequent, lifelong red blood cell ("RBC") transfusions. The pediatric population is the most commonly and severely affected subgroup of patients with PKD, and PKD often results in splenomegaly (abnormal enlargement of the spleen), jaundice and chronic iron overload which is likely the result of both chronic hemolysis and RBC transfusions. The variability in anemia severity is believed to arise in part from the large number of diverse mutations that may affect the PKLR gene. Estimates of disease incidence have ranged between 3.2 and 51 cases per million in the white U.S. and EU population. Industry estimates suggest at least 2,500 cases in the U.S. and EU have already been diagnosed despite the lack of FDA-approved molecularly targeted therapies.

*Current Therapy*

Therapy for PKD is largely supportive, comprised of RBC transfusions and splenectomy for patients who require frequent transfusions. Chronic RBC transfusions alleviate anemia symptoms, but are associated with increased morbidity, predominantly from iron overload which may result in cirrhosis, which is a loss of liver cells and irreversible scarring of the liver, and cardiomyopathy, a chronic disease of the heart muscle that leads to a larger and bulky but inefficient heart, if not diligently managed. Iron chelation, is often considered essential to offset the iron overload associated with chronic hemolysis and RBC transfusions. Iron chelation entails continuous oral or injected therapy, often for the duration of a patient's lifetime and has been associated with diminished quality of life.

Splenectomy may confer a benefit in PKD, frequently yielding increased hemoglobin (Hb) levels of 1-3g/dL and a reduction in transfusion requirements. However, some patients do not benefit from this procedure, and it is estimated that a substantial proportion of PKD patients remain transfusion-dependent despite splenectomy. Splenectomy does not eliminate hemolysis, iron overload or the need for iron chelation. It also confers an increased susceptibility to serious bacterial infections, and potentially increases the risk of other PKD-associated or other complications such as venous thromboembolism and aplastic or hemolytic crises.

Allogeneic HSCT has been performed successfully for a small number of PKD patients, with reported correction of the clinical and laboratory features of the disorder. Although reports of HSCT in PKD suggest that correction of the genetic defect in hematopoietic stem cells may be curative of the disorder, HSCT requires identification of an appropriate HLA-matched donor, is associated with considerable short- and long-term complications including transplant-related mortality and is not considered a standard-of-care in PKD.

*Rationale for Gene Therapy in PKD*

Patients with heterozygous PKLR mutations have 50% of normal enzyme activity and are phenotypically normal. This suggests that it is not necessary for a therapy to achieve normal enzyme levels to have a clinically meaningful effect. In PKD-affected mice transplanted with normal marrow, the presence of 10% normal marrow was sufficient to restore normal red blood cells. Rocket has conducted experiments in which bone marrow cells from healthy mice are transplanted into PKD affected mice and these results suggest that significant improvement in PKD may be achieved with 20% correction of bone marrow, and complete clinical resolution is likely achieved when the percentage of bone marrow gene-corrected cells is in the 20-40% range. An additional study showed that a PKD-affected dog treated with an *ex vivo* gene therapy was rendered transfusion independent with a normalization of lactate dehydrogenase ("LDH"), despite only partial gene correction.

Of note, proprietary transduction protocols in PKD now yield product VCNs of 2, with VCNs increasing to ≥ 4 with the addition of transduction enhancers. Rocket expects that mobilization and harvesting procedures will be relatively straightforward for PKD patients.

*Preclinical Proof-of-Concept*

Rocket expects that mobilization and harvesting procedures will be relatively straightforward for PKD patients. Preclinical results have demonstrated that RP-L301 corrects multiple components of the disorder in a PKD mouse model, including increases in hemoglobin (in both primary and secondary transplant recipients), reduction in reticulocytosis, which is an increase in immature red blood cell production, correction of splenomegaly and reduction in hepatic erythroid clusters and iron deposits.

*Regulatory status*

In the EU, the PKD program has been discussed with the EMA via a Scientific Advisory meeting in 2016. This program has been granted EMA orphan drug disease designation and FDA orphan drug disease designation. The program is in the preclinical stage of development, with a rolling IMPD expected to be filed in the next 12 months.

***Infantile Malignant Osteopetrosis (IMO):***

*Overview of Infantile Malignant Osteopetrosis*

IMO represents the autosomal recessive, severe variants of a group of disorders characterized by increased bone density and bone mass secondary to impaired bone resorption. IMO typically presents in the first year of life and is associated with severe manifestations leading to death within the first decade of life in the absence of allogeneic HSCT, although HSCT results have been limited to-date and notable for frequent graft failure, GVHD and other severe complications.

Approximately 50% of IMO results from mutations in the TCIRG1 gene, resulting in cellular defects that prevent osteoclast bone resorption. As a result of this defect, bone growth is markedly abnormal. It is estimated that IMO occurs in 1 out of 250,000-300,000 within the general global population, although incidence is higher in specific geographic regions including Costa Rica, parts of the Middle East, the Chuvash Republic of Russia, and the Vasterbotten Province of Northern Sweden.

IMO is characterized by increased bone mass and density, multiple deformities and a propensity for fractures in patients surviving infancy. Skull deformities include macrocephaly and frontal bossing. Thoracic size may be decreased. Bone sclerosis impinges cranial nerve and spinal foramina with resulting neurologic abnormalities, including hydrocephalus, progressive blindness and auditory impairment. Compression of bone marrow space results in bone marrow failure with compensatory hepatosplenomegaly and increased infection risk secondary to neutropenia.

*Current Therapy*

Allogeneic HSCT is potentially curative, but notable for considerable rates of engraftment failure, GVHD, pulmonary and hepatic complications. In a recent multicenter retrospective series, long-term survival rates for HSCT recipients with IMO were approximately 60% for matched-sibling recipients, and 40% for those with mismatched or unrelated allografts.

*Preclinical Proof-of-Concept*

Because osteoclasts are derived from the monocyte/macrophage lineage, correction of the TCIRG1 gene in hematopoietic stem cells will enable development of functional, bone-resorbing osteoclasts, as has been demonstrated in preclinical models. Preclinical results demonstrate that gene correction of HSPCs from IMO patients is feasible, and that these HSPCs can engraft in

immunocompromised mice. Osteoclasts from these mice demonstrate increased bone resorption in vitro, as measured by increased calcium and collagen fragment CTX-I.

Additional preclinical experiments have demonstrated correction of an osteopetrotic (IMO) phenotype displayed by the oc/oc mouse model, in which even limited engraftment of wild-type murine bone marrow cells (including 4-5% wild-type engraftment) has been associated with reversal of the osteopetrosis phenotype.

*Regulatory status*

This program is currently in preclinical stages of development and additional preclinical studies are planned.

***AAV-Targeted Program:***

RP-A101 is in preclinical development as an *in vivo* therapy of an undisclosed neuromuscular and cardiovascular disorder that is estimated to have a prevalence of 15,000 to 30,000 in the US/EU. This is a monogenic disorder that presents with severe clinical manifestations in childhood, adolescence and young adulthood, and is frequently fatal within several years of presentation in the absence of a curative organ transplant procedures.

Preliminary preclinical studies have indicated that clinically feasible AAV doses can restore functional levels of protein in knockout mouse models, and that gene/protein restoration are associated with marked histologic improvement in the organs in which the disorder causes extensive morbidity and mortality. The figure below shows abnormal tissue in a diseased knockout mouse in the middle (placebo treated), with the AAV gene therapy-treated knockout mouse on the right having tissue comparable to the wild type (i.e. normal) mouse on the left.

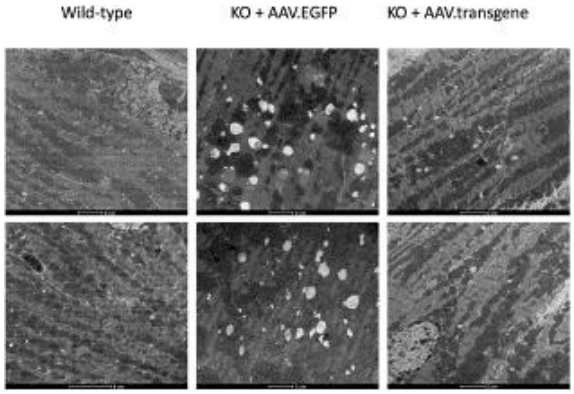



FIGURE: Representative electron microscopy tissue images from animal model of undisclosed AAV program. Left panels indicate wild-type (normal) animals; middle panels indicate diseased animals treated with control (EGFP) vector; and right panels indicate RP-A101 mediated restoration of architecture and resolution of additional abnormalities.

Rocket's AAV program is designed to enable a single-injection definitive therapy for this devastating disease, in which there exists no reliably curative treatment option.

*Regulatory Status*

RP-A101 is currently in preclinical development. A FDA pre-pre-IND meeting occurred in January 2018, and Rocket anticipates filing an IND in the next 12 months.

***CRISPR/Cas9 gene editing in Fanconi Anemia:***

Gene editing by means of CRISPR/Cas9 nucleases continues to be a promising investigational mechanism involving direct correction of a specified gene mutation. Gene editing has been feasible with increasing efficiency in cultured FA lymphoblast cell lines and in CD34+ hematopoietic stem cells from FA patients. Editing in FANCA HSPCs has conferred a proliferation advantage versus uncorrected in-vitro stem cells, conferred resistance to mitomycin-C, which is a chemotherapeutic medicine that fights cancer by interrupting DNA function in rapidly dividing cells, and enabled assembly of FA DNA repair cellular elements.

*Regulatory Status*

This program is currently in the discovery stage of drug development.

**Intellectual property**

Rocket strives to protect and enhance the proprietary technology, inventions, and improvements that are commercially important to the development of its business, including seeking, maintaining, and defending patent rights, whether developed internally or licensed from third parties. Rocket also relies on trade secrets relating to its proprietary technology platform and on know-how, continuing technological innovation and in-licensing opportunities to develop, strengthen and maintain its proprietary position in the field of gene therapy that may be important for the development of Rocket's business. Rocket additionally intends to rely on regulatory protection afforded through orphan drug designations, data exclusivity, market exclusivity, and patent term extensions where available.

Rocket's commercial success may depend in part on its ability to obtain and maintain patent and other proprietary protection for commercially important technology, inventions and know-how related to its business; defend and enforce its patents; preserve the confidentiality of its trade secrets; and operate without infringing the valid enforceable patents and proprietary rights of third parties. Rocket's ability to stop third parties from making, using, selling, offering to sell or importing its future products may depend on the extent to which Rocket has rights under valid and enforceable patents or trade secrets that cover these activities. With respect to both licensed and company-owned intellectual property, Rocket cannot be sure that patents will be granted with respect to any of its pending patent applications or with respect to any patent applications filed by Rocket in the future, nor can Rocket be sure that any of its existing patents or any patents that may be granted to us in the future will be commercially useful in protecting its commercial products and methods of manufacturing the same.

Rocket has in-licensed numerous patent applications and possesses substantial know-how and trade secrets relating to the development and commercialization of gene therapy products. Rocket's proprietary intellectual property, including patent and non-patent intellectual property, is generally directed to gene expression vectors and methods of using the same for gene therapy. As of March 1, 2018, Rocket's patent portfolio includes four in-licensed patent families relating to its product candidates and related technologies, discussed more fully below. Specifically, Rocket has in-licensed two pending international patent applications, filed under the Patent Cooperation Treaty (PCT), relating to Rocket's disclosed product candidates, one pending PCT application relating to an undisclosed product candidate, and pending patent applications in the U.S., Europe and Japan relating to devices, methods, and kits for harvesting and genetically-modifying target cells.

***Fanconi Anemia***

Rocket's Fanconi Anemia program includes two in-licensed patent families. The first family includes a pending PCT application with claims directed to polynucleotide cassettes and expression vector compositions containing Fanconi Anemia complementation group genes and methods for using such vectors to provide gene therapy in mammalian cells for treating Fanconi Anemia. This application was exclusively in-licensed from CIEMAT, Centro de Investigacion Biomedica En Red, ("CIBER"), Fundacion Instituto de investigacion Sanitaria Fundacion Jimenez Diaz, ("FIISFJD"), and Fundacion Para la Investigacion Biomedica del Hospital Del Nino Jesus, ("FIBHNJS"). Rocket expects any patents in this family, if issued, and if the appropriate maintenance, renewal, annuity, or other governmental fees are paid, to expire in 2037, absent any patent term adjustments or extensions.

The second family includes pending U.S., Japanese, and European patent applications related to a portable platform for use in hematopoietic stem/progenitor cell-based gene therapy. This patent family was exclusively in-licensed from the Fred Hutchinson Cancer Research Center. Rocket expects any patents in this portfolio, if issued, and if the appropriate maintenance, renewal, annuity, or other governmental fees are paid, to expire in 2036, absent any patent term adjustments or extensions.

***Pyruvate Kinase Deficiency (PKD)***

Rocket's PKD patent portfolio includes a pending PCT application with claims directed to polynucleotide cassettes and expression vector compositions containing pyruvate kinase genes and methods for using such vectors to provide gene therapy in mammalian cells for treating pyruvate kinase deficiency. This application was exclusively in-licensed from CIEMAT, CIBER, and FIISFJD. Rocket expects any patents in this portfolio, if issued, and if the appropriate maintenance, renewal, annuity, or other governmental fees are paid, to expire in 2037, absent any patent term adjustments or extensions.

Rocket's objective is to continue to expand its portfolio of patents and patent applications in order to protect Rocket's gene therapy product candidates and manufacturing processes. From time to time, Rocket may also evaluate opportunities to sublicense its portfolio of patents and patent applications that it owns or exclusively licenses, and Rocket may enter into such licenses from time to time. The term of individual patents depends upon the legal term of the patents in the countries in which they are obtained. In most countries in which Rocket files, the patent term is 20 years from the date of filing the non-provisional application. In the United States, a patent's term may be lengthened by patent term adjustment, which compensates a patentee for administrative delays by the U.S. Patent and Trademark Office in granting a patent, or may be shortened if a patent is terminally disclaimed over an earlier-filed patent.

The term of a patent that covers an FDA-approved drug may also be eligible for patent term extension, which permits patent term restoration of a U.S. patent as compensation for the patent term lost during the FDA regulatory review process. The Hatch-Waxman Act permits a patent term extension of up to five years beyond the expiration of the patent. The length of the patent term extension is related to the length of time the drug is under regulatory review. A patent term extension cannot extend the remaining term of a patent beyond a total of 14 years from the date of product approval and only one patent applicable to an approved drug may be extended. Moreover, a patent can only be extended once, and thus, if a single patent is applicable to multiple products, it can only be extended based on one product. Similar provisions are available in Europe and other foreign jurisdictions to extend the term of a patent that covers an approved drug. When possible, depending upon the length of clinical trials and other factors involved in the filing of a BLA, Rocket expects to apply for patent term extensions for patents covering Rocket's product candidates and their methods of use.

Rocket may rely, in some circumstances, on trade secrets to protect its technology. However, trade secrets can be difficult to protect. Rocket seeks to protect its proprietary technology and processes, in part, by entering into confidentiality agreements with its employees, consultants, scientific advisors and third parties. Rocket also seeks to preserve the integrity and confidentiality of its data and trade secrets by maintaining physical security of its premises and physical and electronic security of its information technology systems. While Rocket has confidence in these individuals, organizations and systems, agreements or security measures may be breached, and Rocket may not have adequate remedies for any breach. In addition, Rocket's trade secrets may otherwise become known or be independently discovered by competitors. To the extent that Rocket's consultants or collaborators use intellectual property owned by others in their work for Rocket, disputes may arise as to the rights in related or resulting know-how and inventions.

**Material Contracts**

***License Agreements with Fred Hutchinson Cancer Research Center ("Hutch")***

In November 2015, Rocket entered into an exclusive license agreement with Hutch granting Rocket worldwide, sublicensable, exclusive rights to certain patents, materials and other intellectual property relating to lentiviral vector-based technology for patient stem cell transduction useful for, among other things, treating Fanconi Anemia. Under the terms of the agreement, Rocket is obligated to use commercially reasonable efforts (a) to research, develop, obtain regulatory approval for and commercialize products based on the licensed intellectual property, generally, and (b) to follow an agreed development plan and to achieve specific development, regulatory and commercial milestones for such products, in particular. In exchange for the license, Rocket is obligated to pay Hutch an up-front payment (in the form of Rocket equity), an annual license maintenance fee, royalty payments based on net sales of products covered by a valid claim within the licensed patents, developmental and commercial milestone payments, and sublicense revenue payments. Hutch is responsible for prosecuting and maintaining the licensed patents (the cost of which is to be reimbursed by Rocket), but Hutch will follow any reasonable comments of Rocket with respect to such prosecution. Rocket has first right to enforce the licensed patents against infringement unless the parties agree otherwise.

As consideration for the licensed rights, in November 2015, Rocket issued to Hutch ordinary shares valued at $0.3 million as an upfront license fee that was expensed as research and development costs. Rocket is obligated to make aggregate cash milestone payments of up to $1.6 million to Hutch upon the achievement of specified development and regulatory milestones. With respect to any commercialized products covered by the license, Rocket is obligated to pay a low to mid-single digit percentage royalty on net sales, subject to specified adjustments, by Rocket or its sublicensees or affiliates. In the event that Rocket enters into a sublicense agreement with a sublicensee, Rocket will be obligated to pay a portion of any consideration received from such sublicenses in specified circumstances.

Rocket may terminate this agreement at any time by providing Hutch with 180 days advance notice. The license agreement is in effect until the earlier of (a) the expiration date of the last-to-expire patent, on a country-by-country basis, in which a valid claim covers a product in the country in which the product is sold, or (b) 15 years following regulatory approval of the first product. The license was amended on January 16, 2016 to include additional patents. No additional consideration was provided by Rocket in connection with the amendment and no other changes were made to the terms of the license.

In December 2015, Rocket entered into an exclusive license agreement with Hutch granting Rocket worldwide, sublicensable, exclusive rights to certain patents covering Hutch's "Prodigy" platform, a portable platform for hematopoietic stem/progenitor cell gene therapy. Under the terms of the agreement, Rocket is obligated to use commercially reasonable efforts (a) to research, develop, obtain regulatory approval for and commercialize products based on the licensed patents, generally, and (b) to follow an agreed development plan and to achieve specific development milestones for such products, in particular. In exchange for the license, Rocket is obligated to pay Hutch an up-front payment (in the form of Rocket equity), developmental milestone payments, and sublicense revenue payments. Hutch is responsible for prosecuting and maintaining the licensed patents (the cost of which is to be reimbursed by Rocket), but Hutch will follow any reasonable comments of Rocket with respect to such prosecution. Rocket has first right to enforce the licensed patents against infringement unless the parties agree otherwise.

As consideration for the licensed rights, in January 2016 Rocket issued to Hutch ordinary shares valued at $0.1 million as an upfront license that was expensed as research and development costs.

Rocket is obligated to make aggregate milestone payments of up to $0.2 million, which may include amounts already paid, to Hutch upon the achievement of specified development and regulatory milestones. In the event that Rocket enters into a sublicense agreement with a sublicensee, Rocket will be obligated to pay a portion of any consideration received from such sublicenses in specified circumstances.

Rocket may terminate this agreement at any time by providing Hutch with 180 days advance notice. The agreement will expire upon the expiration, lapse, abandonment or invalidation of the last claim of the licensed patent rights to expire, lapse or become abandoned or unenforceable in all countries worldwide.

***License Agreements with CIEMAT***

In March 2016, Rocket entered into a license agreement with CIEMAT, CIBER, and FIISFJD, (collectively, "CIEMAT"), granting Rocket worldwide, exclusive rights to certain patents, know-how and other intellectual property relating to lentiviral vectors containing the human PKLR gene solely within the field of treating pyruvate kinase deficiency (PKD). Under the terms of the agreement, Rocket is obligated to use commercially reasonable efforts to (a) develop and obtain regulatory approval for one or more products or processes covered by the licensed intellectual property, introduce such products or processes into the commercial market and then make them reasonably available to the public (b) develop or commercialize at least one product or process covered by the licensed intellectual property in at least one country for at least two uninterrupted years following regulatory approval, and (c) use the licensed intellectual property in an adequate, ethical and legitimate manner. In exchange for the license, Rocket is obligated to pay CIEMAT an up-front payment, royalty payments based on net sales of products or processes involving any of the licensed intellectual property, developmental and regulatory milestone payments, and sublicense revenue payments. Rocket is responsible for prosecuting and maintaining the licensed patents at Rocket's expense, in cooperation with CIEMAT. Rocket also has the first responsibility to enforce and defend the licensed patents against infringement and/or challenge, in cooperation with CIEMAT. For five years following the effective date of the license agreement, Rocket has a right of first refusal to license any improvements to the licensed intellectual property obtained by CIEMAT at market value. Rocket is obligated to license (without charge) to CIEMAT for non-commercial use any improvements to the licensed intellectual property that Rocket creates.

As consideration for the licensed rights, Rocket paid CIEMAT an initial upfront license fee of €0.03 million (approximately $0.03 million) which was expensed as research and development costs. Rocket is obligated to make aggregate milestone payments of up to €1.4 million (approximately $1.5 million) to CIEMAT upon the achievement of specified development and regulatory milestones. With respect to any commercialized products covered by the PKD license, Rocket is obligated to pay a low to mid-single digit percentage royalty on net sales, subject to specified adjustments, by Rocket or its sublicensees or affiliates. In the event that Rocket enters into a sublicense agreement with a sublicensee, Rocket will be obligated to pay a portion of any consideration received from such sublicensees in specified circumstances.

Rocket may terminate this agreement at any time by providing CIEMAT with 90 days advance notice. The license is in effect for a duration for each of the countries defined in this agreement for as long as a license right exists that covers the licensed product or process in such country, or until the end of any additional legal protection that should be obtained for the license rights in each country.

In July 2016, Rocket entered into a license agreement with CIEMAT granting Rocket worldwide, exclusive rights to certain patents, know-how, data and other intellectual property relating to lentiviral vectors containing the Fanconi Anemia-A gene solely within the field of human therapeutic uses of VSV-G packaged integration component lentiviral vectors for Fanconi Anemia type-A gene therapy. This license is only sublicensable with the prior consent of CIEMAT, not to be unreasonably withheld. Under the terms of the agreement, Rocket is obligated to use commercially reasonable efforts to (a) develop and obtain regulatory approval for one or more products or processes covered by the licensed intellectual property, introduce such products or processes into the commercial market and then make them reasonably available to the public (b) develop or commercialize at least one product or process covered by the licensed intellectual property in at least one country for at least two uninterrupted years following regulatory approval, and (c) use the licensed intellectual property in an adequate, ethical and legitimate manner. In exchange for the license, Rocket is obligated to pay CIEMAT an up-front payment, royalty payments based on net sales of products or processes involving any of the licensed intellectual property, regulatory and financing milestone payments, and sublicense revenue payments. Rocket is responsible for prosecuting and maintaining the licensed patents at Rocket's expense, in cooperation with CIEMAT. Rocket also has the first responsibility to enforce and defend the licensed patents against infringement and/or challenge, in cooperation with CIEMAT. For five years following the effective date of the license agreement, Rocket has a right of first refusal to license any improvements to the licensed intellectual property obtained by CIEMAT at market value. Rocket is obligated to license (without charge) to CIEMAT for non-commercial use any improvements to the licensed intellectual property that Rocket creates.

As consideration for the licensed rights, Rocket paid CIEMAT an initial upfront license fee of €0.1 million (approximately $0.1 million), which was expensed as research and development costs. Rocket is obligated to make aggregate milestone payments of up to €5.0 million (approximately $6.0 million) to CIEMAT upon the achievement of specified development and regulatory milestones. With respect to any commercialized products covered by the license, Rocket is obligated to pay a mid-single digit percentage royalty on net sales, subject to specified adjustments, by Rocket or its sublicensees or affiliates. In the event that Rocket enters into a sublicense agreement with a sublicensee, Rocket will be obligated to pay a portion of any consideration received from such sublicensees in specified circumstances.

Rocket may terminate this agreement at any time by providing CIEMAT with 90 days' advance notice. The license is in effect for a duration for each of the countries defined in this agreement for as long as a license right exists that covers the licensed product or process in such country, or until the end of any additional legal protection that should be obtained for the license rights in each country.

***Contract Research and Collaboration Agreement with Lund University and J. Richter***

In August 2016, Rocket entered into a research and collaboration agreement with Lund University and Johan Richter, M.D., Ph.D. under which Dr. Richter grants to Rocket an exclusive, perpetual, sublicensable, worldwide license to certain intellectual property rights of Dr. Richter relating to lentiviral-mediated gene transfer to treat Osteopetrosis. In exchange for the license, Rocket is obligated to make an up-front payment, certain clinical and commercial milestone payments, royalty payments (on net sales of products covered by a valid claim within the licensed intellectual property) and sublicense revenue payments to Dr. Richter. Under the terms of the agreement, Lund University and Dr. Richter are obligated to perform contract research for Rocket regarding the use of lentiviral-mediated gene transfer to treat Osteopetrosis. Intellectual property resulting from the contract research created by Dr. Richter is included in the license described above and also subject to an option for Rocket to purchase ownership of such rights. Intellectual property created by Lund University in conducting such research is non-exclusively licensed to Rocket for non-commercial use and also subject to an option for Rocket to purchase or license such intellectual property under commercially reasonable terms. Rocket is obligated to pay for the contract research according to an agreed budget in quarterly installments in advance.

As consideration for an option to acquire rights from Lund University on commercially reasonable terms and conditions, Rocket paid Lund University an upfront license fee of €.02 million (approximately $.02 million), which was expensed as research and development costs. Rocket is obligated to make aggregate milestone payments of up to €0.1 million (approximately $0.1 million) to Lund University and Dr. Richter upon the achievement of specified development and regulatory milestones. With respect to any commercialized products covered by the Lund University agreement, Rocket is obligated to pay a low single digit percentage royalty on net sales, subject to specified adjustments, by Rocket or its sublicensees or affiliates. In the event that Rocket enters into a sublicense agreement with a sublicensee, Rocket will be obligated to pay a portion of any consideration received from such sublicensees in specified circumstances.

Rocket may terminate this agreement at any time by providing Lund University and Dr. Richter with 90 days' advance notice. The research agreement has a term of 24 months.

***License Agreement for LAD-I with CIEMAT and UCLB***

Rocket entered into a license agreement in November 2017, effective September 2017, with CIEMAT, CIBER, and FIISFJD (collectively, "CIEMAT") and UCL Business PLC ("UCLB"), collectively referred to as Licensors, granting Rocket worldwide, exclusive rights to certain patents, know-how and other intellectual property relating to lentiviral vectors containing the human LAD-I gene solely within the field of treating LAD-I. Under the terms of the agreement, Rocket is obligated to use commercially reasonable efforts to (a) develop and obtain regulatory approval for one or more products or processes covered by the licensed intellectual property, introduce such products or processes into the commercial market and then make them reasonably available to the public, (b) develop or commercialize at least one product or process covered by the licensed intellectual property in at least one country for at least two uninterrupted years following regulatory approval, and (c) use the licensed intellectual property in an adequate, ethical and legitimate manner. In exchange for the license, Rocket is obligated to pay Licensors an up-front payment, royalty payments in the mid-single digit percentages based on net sales of products or processes involving any of the licensed intellectual property, developmental and regulatory milestone payments, and sublicense revenue payments. Rocket is responsible for prosecuting and maintaining the licensed patents at Rocket's expense, in cooperation with Licensors. Rocket also has the first responsibility to enforce and defend the licensed patents against infringement and/or challenge, in cooperation with Licensors. For five years following the effective date of the license agreement, Rocket has a right of first refusal to license any improvements to the licensed intellectual property obtained by Licensors at market value. Rocket is obligated to license (without charge) to Licensors for non-commercial use any improvements to the licensed intellectual property that Rocket creates.

As consideration for the licensed rights, Rocket shall pay Licensors an initial upfront license fee of €.03 million (approximately $.04 million), which was expensed as research and development costs. Rocket is obligated to make aggregate payments of up to €1.4 million (approximately $1.5 million) to Licensors upon the achievement of specified development and regulatory milestones. With respect to any commercialized products covered by the LAD-I license, Rocket is obligated to pay a mid-single digit percentage royalty on net sales, subject to specified adjustments, by Rocket or its sublicensees or affiliates. In the event that Rocket enters into a sublicense agreement with a sublicensee, Rocket will be obligated to pay a portion of any consideration received from such sublicensees in specified circumstances.

Rocket may terminate this agreement at any time by providing Licensors with 90 days advance notice. The license is in effect for a duration for each of the countries defined in this agreement for as long as a license right exists that covers the licensed product or process in such country, or until the end of any additional legal protection that should be obtained for the license rights in each country.

**Competition**

The biotechnology and pharmaceutical industries, including in the field of gene therapy, are characterized by rapidly advancing technologies, intense competition and a strong emphasis on proprietary products and novel therapies. While Rocket believes that its experience and scientific knowledge provides it with competitive advantages, Rocket faces potential competition from many different sources, including larger and better-funded pharmaceutical and biotechnology companies, new market entrants and new technologies, as well as from academic institutions, government agencies and private and public research institutions, which may in the future develop products to treat the indications targeted by Rocket's pipeline that have not yet been conceived. Any product candidates that Rocket successfully develops and commercializes will compete with existing therapies such as bone marrow transplantation and new therapies that may become available in the future. Rocket believes that the key competitive factors affecting the success of Rocket's product candidates, if approved, are likely to be efficacy, safety, convenience, price, pharmaco-economic value, tolerability and the availability of coverage and adequate reimbursement from governmental authorities and other third-party payors. In addition, Rocket intends to develop single treatment curative therapies for clinical indications that address mortality or high morbidity, which could differentiate Rocket from potential competitors developing alternative competitive therapies that may require chronic or repetitive treatment.

Other early-stage companies may also compete through collaborative arrangements with large and established companies. Mergers and acquisitions in the pharmaceutical and biotechnology industries may result in even more resources being concentrated among a smaller number of companies developing gene therapies. These companies also compete with Rocket in recruiting and retaining qualified scientific and management personnel and establishing clinical trial sites and patient registration for clinical trials, as well as in acquiring technologies complementary to, or necessary for, Rocket's programs.

Rocket anticipates that it will face intense and increasing competition as new drugs and therapeutic modalities enter the market and advanced technologies become available. Rocket's commercial opportunity could be reduced or eliminated if Rocket's potential competitors develop and commercialize products that are safer, more effective, have fewer adverse effects, are more convenient or are less expensive than any products that Rocket may develop. Rocket's potential competitors also may obtain FDA or other regulatory approval for their products more rapidly than Rocket may obtain approval for its products.

**Manufacturing**

Rocket's gene therapy platform has two main components: the production of LVV vectors and AAV vectors and the target cell transduction process, which results in drug product. Rocket does not currently operate manufacturing facilities for clinical or commercial production of its product candidates. Rocket currently relies on third-party manufacturers to produce the plasmids, vectors, cell banks and final drug product for its clinical trials. Rocket manages such production with its vendors on a purchase order basis in accordance with applicable master service and supply agreements. Rocket has not yet entered into long-term agreements with these manufacturers or any other third-party suppliers, as it is customary in the industry to enter into commercial supply agreements upon either achievement of proof-of-concept or as a company approaches registration trials. Rocket, however, intends to procure quantities on a purchase order basis from redundant and multiple sources for Rocket's clinical and commercial production to mitigate risk. If any of Rocket's existing third-party suppliers should become unavailable to Rocket for any reason, Rocket believes that there are a number of potential replacements, although Rocket might experience a delay in its ability to obtain alternative suppliers. Rocket also does not have any current contractual relationships for the manufacture of commercial supplies of its product candidates if they become registered. With respect to commercial production of Rocket's product candidates in the future, Rocket plans to outsource production of the active pharmaceutical (drug substance) ingredients as well as final drug product manufacturing (drug product) if they are approved and registered for marketing authorization by the applicable regulatory bodies.

Rocket expects to continue to develop drug candidates that can be produced in a cost effective manner at contract manufacturing facilities. However, should a supplier or manufacturer on which Rocket has relied to produce a product candidate provide Rocket with a faulty product or such product is later recalled, Rocket would likely experience delays and additional costs, each of which could be significant.

**Government Regulation**

***FDA Regulation and Marketing Approval***

In the United States, the FDA regulates drugs under the Federal Food, Drug and Cosmetic Act ("FDCA"), and biologics under the Public Health Service Act ("PHSA"), the regulations promulgated under both laws and other federal, state and local statutes and regulations. Failure to comply with the applicable United States regulatory requirements at any time during the product development process, approval process or after approval may subject an applicant to administrative or judicial sanctions and non-approval of product candidates. These sanctions could include, among other things, the imposition by the FDA of a clinical hold on trials, the FDA's refusal to approve pending applications or related supplements, withdrawal of an approval, untitled or warning letters, product recalls, product seizures, total or partial suspension of production or distribution, injunctions, fines, restitution, disgorgement, civil penalties or criminal prosecution. Such actions by government agencies could also require us to expend a large amount of resources to respond to the actions. Any agency or judicial enforcement action could have a material adverse effect on us.

The FDA and comparable regulatory agencies in state and local jurisdictions and in foreign countries impose substantial requirements upon the clinical development, approval, manufacture, distribution and marketing of pharmaceutical products. These agencies and other federal, state and local entities regulate research and development activities and the testing, manufacture, quality control, safety, effectiveness, labeling, packaging, storage, distribution, record keeping, approval, post-approval monitoring, advertising, promotion, sampling and import and export of our products. Rocket's drugs must be approved by the FDA through the NDA process, and Rocket's biologics, including its gene therapy product candidate, through the BLA process, before they may be legally marketed in the United States.

Within the FDA, the FDA's Center for Biologics Evaluation and Research ("CBER") regulates gene therapy products and has published guidance documents with respect to the development these types of products. The FDA also has published guidance documents related to, among other things, gene therapy products in general, their preclinical assessment, observing subjects involved in gene therapy studies for delayed adverse events, potency testing, and chemistry, manufacturing and control information in gene therapy INDs.

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

- completion of non-clinical laboratory tests, animal studies and formulation studies conducted according to Good Laboratory Practice ("GLP"), or other applicable regulations;
- submission of an IND, which allows clinical trials to begin unless FDA objects within 30 days;
- performance of adequate and well-controlled human clinical trials to establish the safety and efficacy of the proposed drug or biologic for its intended use or uses conducted in accordance with FDA regulations and Good Clinical Practices ("GCP"), which are international ethical and scientific quality standards meant to ensure that the rights, safety and well-being of trial participants are protected and that the integrity of the data is maintained;
- preparation and submission to the FDA of an NDA in the case of a drug or BLA in the case of a biologic;
- review of the product by an FDA advisory committee, where appropriate or if applicable;
- satisfactory completion of pre-approval inspection of manufacturing facilities and clinical trial sites at which the product, or components thereof, are produced to assess compliance with cGMP requirements and of selected clinical trial sites to assess compliance with GCP requirements; and
- FDA approval of an NDA or BLA which must occur before a drug or biologic can be marketed or sold.

***Preclinical Studies***

Preclinical studies include laboratory evaluation of the purity and stability of the manufactured drug substance or active pharmaceutical ingredient and the formulated drug or drug product, as well as in vitro and animal studies to assess the safety and activity of the drug for initial testing in humans and to establish a rationale for therapeutic use. The conduct of preclinical studies is subject to federal regulations and requirements, including GLP regulations. The results of the preclinical tests, together with

manufacturing information, analytical data, any available clinical data or literature and plans for clinical studies, among other things, are submitted to the FDA as part of an IND.

Companies usually must complete some long-term preclinical testing, such as animal tests of reproductive adverse events and carcinogenicity, and must also develop additional information about the chemistry and physical characteristics of the drug and finalize a process for manufacturing the drug in commercial quantities in accordance with current Good Manufacturing Practice ("cGMP") requirements. The manufacturing process must be capable of consistently producing quality batches of the drug candidate and, among other things, the manufacturer must develop methods for testing the identity, strength, quality and purity of the final drug product. Additionally, appropriate packaging must be selected and tested and stability studies must be conducted to demonstrate that the drug candidate does not undergo unacceptable deterioration over its shelf life.

***IND and Clinical Trials***

Clinical trials involve the administration of the investigational product to human subjects under the supervision of qualified investigators in accordance with GCP requirements. Clinical trials are conducted under written study protocols detailing, among other things, the objectives of the study, the parameters to be used in monitoring safety and the effectiveness criteria to be evaluated. Prior to commencing the first clinical trial, an initial IND, which contains the results of preclinical testing along with other information, such as information about product chemistry, manufacturing and controls and a proposed protocol, must be submitted to the FDA. The IND automatically becomes effective 30 days after receipt by the FDA unless the FDA within the 30-day time period raises concerns or questions about the drug product or the conduct of the clinical trial and imposes a clinical hold. A clinical hold may also be imposed at any time while the IND is in effect. In such a case, the IND sponsor must resolve any outstanding concerns with the FDA before the clinical trial may begin or re-commence. Accordingly, submission of an IND may or may not result in the FDA allowing clinical trials to commence or continue.

Where a gene therapy trial is conducted at, or sponsored by, institutions receiving National Institutes of Health ("NIH"), funding for recombinant DNA research, prior to the submission of an IND to the FDA, a protocol and related documentation is submitted to and the study is registered with the NIH Office of Biotechnology Activities ("OBA"), pursuant to the NIH Guidelines for Research Involving Recombinant DNA Molecules ("NIH Guidelines"). Compliance with the NIH Guidelines is mandatory for investigators at institutions receiving NIH funds for research involving recombinant DNA; however, many companies and other institutions not otherwise subject to the NIH Guidelines voluntarily follow them. The NIH is responsible for convening the Recombinant DNA Advisory Committee ("RAC"), a federal advisory committee that discusses protocols that raise novel or particularly important scientific, safety or ethical considerations, at one of its quarterly public meetings. The OBA will notify the FDA of the RAC's decision regarding the necessity for full public review of a gene therapy protocol. RAC proceedings and reports are posted to the OBA website and may be accessed by the public.

A sponsor who wishes to conduct a clinical trial outside the United States may, but need not, obtain FDA authorization to conduct the clinical trial under an IND. If a foreign clinical trial is not conducted under an IND, the sponsor may submit data from the clinical trial to the FDA in support of an NDA, BLA or IND so long as the clinical trial is conducted in compliance with GCP, and the FDA is able to validate the data from the study through an onsite inspection if the agency deems it necessary.

A separate submission to the existing IND must be made for each successive clinical trial to be conducted during product development. Further, an independent Institutional Review Board ("IRB") for each site at which the clinical trial will be conducted must review and approve the clinical trial before it commences at that site. Informed written consent must also be obtained from each trial subject. Regulatory authorities, including the FDA, an IRB, a data safety monitoring board or the sponsor, may suspend or terminate a clinical trial at any time on various grounds, including a finding that the participants are being exposed to an unacceptable health risk or that the clinical trial is not being conducted in accordance with FDA requirements.

For purposes of an NDA or BLA approval, human clinical trials are typically conducted in sequential phases that may overlap:

- Phase 1: The drug is initially given to healthy human subjects or patients and tested for safety, dosage tolerance, absorption, metabolism, distribution and excretion. These trials may also provide early evidence on effectiveness. During Phase 1 clinical trials, sufficient information about the investigational drug's pharmacokinetics and pharmacologic effects may be obtained to permit the design of well-controlled and scientifically valid Phase 2 clinical trials.
- Phase 2: Trials are conducted in a limited number of patients in the target population to identify possible adverse effects and safety risks, to determine the efficacy of the product for specific targeted diseases and to determine dosage tolerance and optimal dosage. Multiple Phase 2 clinical trials may be conducted by the sponsor to obtain information prior to beginning larger and more expensive Phase 3 clinical trials.
- Phase 3: When Phase 2 evaluations demonstrate that a dosage range of the product appears effective and has an acceptable safety profile, and provide sufficient information for the design of Phase 3 trials, Phase 3 trials are undertaken to provide statistically significant evidence of clinical efficacy and to further test for safety in an expanded patient population at

multiple clinical trial sites. They are intended to further evaluate dosage, effectiveness and safety, to establish the overall benefit-risk relationship of the investigational drug and to provide an adequate basis for product labeling and approval by the FDA. In most cases, the FDA requires two adequate and well-controlled Phase 3 clinical trials to demonstrate the efficacy of the drug.

All clinical trials must be conducted in accordance with FDA regulations, GCP requirements and their protocols in order for the data to be considered reliable for regulatory purposes. 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 occur. Phase 1, Phase 2 and Phase 3 clinical trials may not be completed successfully within any specified period, or at all.

An investigational drug product that is a combination of two different drugs in a single dosage form must comply with an additional rule that requires that each component make a contribution to the claimed effects of the drug product and the dosage of each component (amount, frequency, duration) is such that the combination is safe and effective for a significant patient population requiring such concurrent therapy as defined in the labeling of the drug product. This typically requires larger studies that test the drug against each of its components. In addition, typically, if a drug product is intended to treat a chronic disease, as is the case with our products, safety and efficacy data must be gathered over an extended period of time, which can range from six months to three years or more.

Government regulation may delay or prevent marketing of product candidates or new drugs for a considerable period of time and impose costly procedures upon our activities.

***Disclosure of Clinical Trial Information***

Sponsors of clinical trials of FDA-regulated products, including drugs, are required to register and disclose certain clinical trial information. Information related to the product, patient population, phase of investigation, study sites and investigators, and other aspects of the clinical trial is then made public as part of the registration. Sponsors are also obligated to disclose the results of their clinical trials after completion. Disclosure of the results of these trials can be delayed until the new product or new indication being studied has been approved up to a maximum of two years. Competitors may use this publicly available information to gain knowledge regarding the progress of development programs.

***The NDA and BLA Approval Process***

In order to obtain approval to market a drug in the United States, a marketing application must be submitted to the FDA that provides data establishing to the FDA's satisfaction the safety and effectiveness of the investigational drug for the proposed indication. Each NDA or BLA submission requires a substantial user fee payment unless a waiver or exemption applies. The application includes all relevant data available from pertinent non-clinical or preclinical studies and clinical trials, including negative or ambiguous results as well as positive findings, together with detailed information relating to the product's chemistry, manufacturing, controls and proposed labeling, among other things. Data can come from company-sponsored clinical trials intended to test the safety and effectiveness of a use of a product, or from a number of alternative sources, including studies initiated by investigators that meet GCP requirements.

During the development of a new drug, sponsors are given opportunities to meet with the FDA at certain points. These points may be prior to submission of an IND, at the End-of-Phase 1 or 2, and before an NDA is submitted. Meetings at other times may be requested. 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 2 meetings to discuss their Phase 2 clinical results and present their plans for the pivotal Phase 3 trials that they believe will support approval of the new drug.

The results of product development, non-clinical studies and clinical trials, along with descriptions of the manufacturing process, analytical tests conducted on the chemistry of the drug, proposed labeling and other relevant information are submitted to the FDA as part of an NDA or BLA requesting approval to market the product. The FDA reviews all NDAs and BLAs submitted to ensure that they are sufficiently complete for substantive review before it accepts them for filing. It may request additional information rather than accept an NDA or BLA for filing. In this event, the NDA or BLA must be resubmitted with the additional information. The resubmitted application also is subject to review before the FDA accepts it for filing. The FDA has 60 days from its receipt of an NDA or BLA to conduct an initial review to determine whether the application will be accepted for filing based on the agency's threshold determination that the application is sufficiently complete to permit substantive review. If the NDA submission is accepted for filing, the FDA reviews the NDA to determine, among other things, whether the proposed product is safe and effective for its intended use, and whether the product is being manufactured in accordance with cGMP to assure and preserve the product's identity, strength, quality and purity. The FDA reviews a BLA to determine, among other things, whether the proposed product is safe and potent, or effective, for its intended use, and has an acceptable purity profile, and whether the product is being manufactured in accordance with cGMP to assure and preserve the product's identity, safety, strength, quality, potency and purity. The FDA has agreed to specific performance goals on the review of NDAs and BLAs and seeks to review standard NDAs for new molecular entities in 10 months

from the 60-day filing date (typically 12 months from submission of the NDA). The review process may be extended by the FDA for three additional months to consider certain late-submitted information or information intended to clarify information already provided in the submission. After the FDA completes its substantive review of an NDA or BLA, it will communicate to the sponsor that the drug will either be approved, or it will issue a complete response letter to communicate that the NDA or BLA will not be approved in its current form and inform the sponsor of changes that must be made or additional clinical, non-clinical or manufacturing data that must be received before the application can be approved, with no implication regarding the ultimate approvability of the application or the timing of any such approval, if ever. If or when those deficiencies have been addressed to the FDA's satisfaction in a resubmission of the NDA or BLA, the FDA may issue an approval letter. FDA has committed to reviewing such resubmissions in two to six months depending on the type of information included. The FDA may refer applications for novel drug products or drug 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, if so, under what conditions. The FDA is not bound by the recommendations of an advisory committee, but it considers such recommendations carefully when making decisions.

Before approving an NDA or BLA, the FDA typically will inspect the facilities at which the product is manufactured. The FDA will not approve the product unless it determines that the manufacturing processes and facilities are in compliance with cGMP requirements and adequate to assure consistent production of the product within required specifications. Additionally, before approving an NDA or BLA, the FDA may inspect one or more clinical sites to assure compliance with GCP. If the FDA determines that the application, manufacturing process or manufacturing facilities are not acceptable, it typically will outline the deficiencies and often will request additional testing or information. This may significantly delay further review of the application. If the FDA finds that a clinical site did not conduct the clinical trial in accordance with GCP, the FDA may determine the data generated by the clinical site should be excluded from the primary efficacy analyses provided in the NDA or BLA. Additionally, notwithstanding the submission of any requested additional information, the FDA ultimately may decide that the application does not satisfy the regulatory criteria for approval.

The FDA may require, or companies may pursue, additional clinical trials after a product is approved. These so-called Phase 4 trials may be made a condition to be satisfied for continuing drug approval. The results of Phase 4 trials can confirm the effectiveness of a product candidate and can provide important safety information. In addition, the FDA has authority to require sponsors to conduct post-marketing trials to specifically address safety issues identified by the agency. See "Post-Marketing Requirements" below.

The FDA also has authority to require a Risk Evaluation and Mitigation Strategy ("REMS"), from manufacturers to ensure that the benefits of a drug outweigh its risks. A sponsor may also voluntarily propose a REMS as part of the NDA or BLA submission. The need for a REMS is determined as part of the review of the NDA or BLA. Based on statutory standards, elements of a REMS may include "Dear Doctor letters," a medication guide, more elaborate targeted educational programs, and in some cases distribution and use restrictions, referred to as "elements to assure safe use," or ETASU. ETASU can include, but are not limited to, special training or certification for prescribing or dispensing, dispensing only under certain circumstances, special monitoring and the use of patient registries. These elements are negotiated as part of the NDA or BLA approval, and in some cases the approval date may be delayed. Once adopted, REMS are subject to periodic assessment and modification.

Changes to some of the conditions established in an approved application, including changes in indications, labeling, manufacturing processes or facilities, require submission and FDA approval of a new NDA or NDA supplement before the change can be implemented. An NDA or BLA supplement for a new indication typically requires clinical data similar to that in the original application, and the FDA uses the same procedures and actions in reviewing NDA or BLA supplements as it does in reviewing NDAs or BLAs.

Even if a product candidate receives regulatory approval, the approval may be limited to specific disease states, patient populations and dosages, or might contain significant limitations on use in the form of warnings, precautions or contraindications, or in the form of onerous risk management plans, restrictions on distribution or use, or post-marketing trial requirements. Further, even after regulatory approval is obtained, later discovery of previously unknown problems with a product may result in restrictions on the product, including safety labeling or imposition of a REMS, the requirement to conduct post-market studies or clinical trials or even complete withdrawal of the product from the market. Delay in obtaining, or failure to obtain, regulatory approval for our products, or obtaining approval but for significantly limited use, would harm our business. In addition, we cannot predict what adverse governmental regulations may arise from future United States or foreign governmental action.

***The Hatch-Waxman Amendments***

Under the Drug Price Competition and Patent Term Restoration Act of 1984, referred to as the Hatch-Waxman Amendments, a portion of a product's U.S. patent term that was lost during clinical development and regulatory review by the FDA may be restored by returning up to five years of patent life for a patent that covers a new product or its use. This period is generally one-half the time between the effective date of an IND (falling after issuance of the patent) and the submission date of an NDA, plus the time between

the submission date of an NDA and the approval of that application, provided that the sponsor acted with diligence. Patent term restorations, however, cannot extend the remaining term of a patent beyond a total of 14 years from the date of product approval and only one patent applicable to an approved drug may be extended and the extension must be applied for prior to expiration of the patent. The U.S. Patent and Trademark Office, in consultation with the FDA, reviews and approves the application for any patent term extension or restoration.

***Market Exclusivity***

Market exclusivity provisions under the FDCA also can delay the submission or the approval of certain competing applications. The FDCA provides a five-year period of non-patent marketing exclusivity within the United States to the first applicant to gain approval of an NDA for a new chemical entity. A drug is a new chemical entity if the FDA has not previously approved any other new drug containing the same active moiety, which is the molecule or ion responsible for the action of the drug substance. During the exclusivity period, the FDA may not accept for review an Abbreviated New Drug Application ("ANDA"), or a 505(b)(2) NDA submitted by another company for a drug product that contains the protected active moiety. However, an application may be submitted after four years if it contains a certification of patent invalidity or non-infringement to one of the patents listed with the FDA by the innovator NDA holder. The FDCA also provides three years of marketing exclusivity for an NDA, 505(b)(2) NDA or supplement to an existing NDA if new clinical investigations, other than bioavailability studies, that were conducted or sponsored by the applicant are deemed by the FDA to be essential to the approval of the application, or supplement, for example, for new indications, dosages or strengths of an existing drug. During the exclusivity period, the FDA may not approve an ANDA or 505(b)(2) application for the same conditions of approval as the innovator drug. This three-year exclusivity protects only the conditions of approval associated with the new clinical investigations and does not prohibit the FDA from approving ANDAs or 505(b)(2) applications with different conditions of approval. For example, if three-year exclusivity protected a new extended-release dosage form, the exclusivity would not block approval of an ANDA or 505(b)(2) application for the original immediate-release version of the drug. Five-year and three-year exclusivity will not delay the submission or approval of a full NDA; however, an applicant submitting a full NDA would be required to conduct or obtain a right of reference to all of the non-clinical studies and adequate and well-controlled clinical trials necessary to demonstrate safety and effectiveness.

Pediatric exclusivity is another type of non-patent marketing exclusivity in the United States and, if granted, provides for the attachment of an additional six months of marketing protection to the term of any existing regulatory exclusivity, including the non-patent exclusivity. This six-month exclusivity may be granted if an NDA sponsor submits pediatric data that fairly respond to a written request from the FDA for such data.

***Post-Marketing Requirements***

Following approval of a new product, a pharmaceutical company and the approved product are subject to continuing regulation by the FDA, including, among other things, monitoring and recordkeeping activities, reporting to the applicable regulatory authorities of adverse experiences with the product, providing the regulatory authorities with updated safety and efficacy information, product sampling and distribution requirements, and complying with promotion and advertising requirements, which include, among others, standards for direct-to-consumer advertising, restrictions on promoting drugs for uses or in patient populations that are not described in the drug's approved labeling, or off-label use, limitations on industry-sponsored scientific and educational activities and requirements for promotional activities involving the internet. Although physicians may, in their independent professional medical judgment, prescribe legally available drugs for off-label uses, manufacturers typically may not market or promote such off-label uses. Modifications or enhancements to the product or its labeling or changes of the site of manufacture are often subject to the approval of the FDA and other regulators, who may or may not grant approval or may include a lengthy review process.

Prescription drug advertising is subject to federal, state and foreign regulations. In the United States, the FDA regulates prescription drug promotion, including direct-to-consumer advertising. Prescription drug promotional materials must be submitted to the FDA in conjunction with their first use. Any distribution of prescription drug products and pharmaceutical samples must comply with the U.S. Prescription Drug Marketing Act ("PDMA"), a part of the FDCA.

In the United States, once a product is approved, its manufacturing is subject to comprehensive and continuing regulation by the FDA. The FDA regulations require that products be manufactured in specific approved facilities and in accordance with cGMP. 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. cGMP regulations require among other things, quality control and quality assurance as well as the corresponding maintenance of records and documentation and the obligation to investigate and correct any deviations from cGMP. Drug manufacturers and other entities involved in the manufacture and distribution of approved drugs 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. These regulations also impose certain organizational, procedural and documentation requirements with respect to manufacturing and quality assurance activities. NDA holders using

contract manufacturers, laboratories or packagers are responsible for the selection and monitoring of qualified firms, and, in certain circumstances, qualified suppliers to these firms. These firms and, where applicable, their suppliers are subject to inspections by the FDA at any time, and the discovery of violative conditions, including failure to conform to cGMP, could result in enforcement actions that interrupt the operation of any such product or may result in restrictions on a product, manufacturer, or holder of an approved NDA, including, among other things, recall or withdrawal of the product from the market.

In addition, the manufacturer and/or sponsor under an approved NDA are subject to annual product and establishment fees. These fees are typically increased annually.

The FDA also may require post-marketing testing, also known as Phase 4 testing, to monitor the effects of an approved product or place conditions on an approval via a REMS that could restrict the distribution or use of the product. Discovery of previously unknown problems with a product or the failure to comply with applicable FDA requirements can have negative consequences, including adverse publicity, judicial or administrative enforcement, untitled or warning letters from the FDA, mandated corrective advertising or communications with doctors, withdrawal of approval, and civil or criminal penalties, among others. Newly discovered or developed safety or effectiveness data may require changes to a product's approved labeling, including the addition of new warnings and contraindications, and also may require the implementation of other risk management measures. Also, new government requirements, including those resulting from new legislation, may be established, or the FDA's policies may change, which could delay or prevent regulatory approval of our products under development.

***Coverage and Reimbursement***

Sales of any products for which we receive regulatory approval for commercial sale will depend in part on the availability of reimbursement from third-party payors, including government healthcare program administrative authorities, managed care organizations, private health insurers, and other entities. Patients who are prescribed medications for the treatment of their conditions, and their prescribing physicians, generally rely on third-party payors to reimburse all of part of the costs associated with their prescription drugs. Patients are unlikely to use our products unless coverage is provided and reimbursement is adequate to cover a significant portion of the cost of our products. Therefore, our products, once approved, may not obtain market acceptance unless coverage is provided and reimbursement is adequate to cover a significant portion of the cost of our products.

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

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

In particular, our success may depend on our ability to obtain coverage and adequate reimbursement through Medicare Part D plans for our products that obtain regulatory approval. The Medicare Part D program provides a voluntary prescription drug benefit to Medicare beneficiaries. Under Part D, Medicare beneficiaries may enroll in prescription drug plans offered by private entities which will provide coverage of outpatient prescription drugs. Part D plans include both stand-alone prescription drug benefit plans and prescription drug coverage as a supplement to Medicare Advantage plans. Unlike Medicare Parts A and B, Part D coverage is not standardized. In general, Part D prescription drug plan sponsors have flexibility regarding coverage of Part D drugs, and each drug plan can develop its own drug formulary that identifies which drugs it will cover and at what tier or level. However, Part D prescription drug formularies must include drugs within each therapeutic category and class of covered Part D drugs, though not necessarily all the drugs in each category or class, with certain exceptions. Any formulary used by a Part D prescription drug plan must be developed and reviewed by a pharmacy and therapeutics committee. Government payment for some of the costs of prescription drugs may increase demand for products for which we receive regulatory approval. However, any negotiated prices for

our future products covered by a Part D prescription drug plan will likely be discounted, thereby lowering the net price realized on our sales to pharmacies. Moreover, while the Part D program applies only to drug benefits for Medicare beneficiaries, private payors often follow Medicare coverage policy and payment limitations in setting their own payment rates. Any reduction in payment that results from Medicare Part D may result in a similar reduction in payments from non-government payors.

The American Recovery and Reinvestment Act of 2009 provides funding for the federal government to compare the effectiveness of different treatments for the same illness. A plan for the research will be developed by the U.S. Department of Health and Human Services, the Agency for Healthcare Research and Quality and the National Institutes for Health, and periodic reports on the status of the research and related expenditures will be made to Congress. Although the results of the comparative effectiveness studies are not intended to mandate coverage policies for public or private payors, it is not clear what effect, if any, the research will have on the sales of our product candidates, if any such product or the condition that it is intended to treat is the subject of a study. It is also possible that comparative effectiveness research demonstrating benefits in a competitor's product could adversely affect the sales of our product candidates, once approved. If third-party payors do not consider our products to be cost-effective compared to other available therapies, they may not cover our products after approval as a benefit under their plans or, if they do, the level of payment may not be sufficient to allow us to sell our products on a 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. 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. 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 be significantly lower.

***Anti-Kickback and False Claims Laws and Other Regulatory Matters***

In the United States, among other things, the research, manufacturing, distribution, sale and promotion of drug products and medical devices are potentially subject to regulation and enforcement by various federal, state and local authorities in addition to the FDA, including the Centers for Medicare & Medicaid Services, other divisions of the United States Department of Health and Human Services (e.g., the Office of Inspector General), the Drug Enforcement Administration, the Consumer Product Safety Commission, the Federal Trade Commission, the Occupational Safety & Health Administration, the Environmental Protection Agency, state Attorneys General and other state and local government agencies. Our current and future business activities, including for example, sales, marketing and scientific/educational grant programs must comply with healthcare regulatory laws, as applicable, which may include the Federal Anti-Kickback Statute, the Federal False Claims Act, as amended, the privacy and security regulations promulgated under the Health Insurance Portability and Accountability Act ("HIPAA"), as amended, physician payment transparency laws, and similar state laws. Pricing and rebate programs must comply with the Medicaid Drug Rebate Program requirements of the Omnibus Budget Reconciliation Act of 1990, as amended, and the Veterans Health Care Act of 1992, as amended. If products are made available to authorized users of the Federal Supply Schedule of the General Services Administration, additional laws and requirements apply. The handling of any controlled substances must comply with the U.S. Controlled Substances Act and Controlled Substances Import and Export Act. Products must meet applicable child-resistant packaging requirements under the U.S. Poison Prevention Packaging Act. All of these activities are also potentially subject to federal and state consumer protection and unfair competition laws.

The distribution of pharmaceutical products is subject to additional requirements and regulations, including extensive record-keeping, licensing, storage and security requirements intended to prevent the unauthorized sale of pharmaceutical products.

The Federal Anti-Kickback Statute makes it illegal for any person or entity, including a prescription drug manufacturer (or a party acting on its behalf) to knowingly and willfully, directly or indirectly, in cash or in kind, solicit, receive, offer, or pay any remuneration that is intended to induce the referral of business, including the purchasing, leasing, ordering or arranging for or recommending the purchase, lease or order of, any good, facility, item or service for which payment may be made, in whole or in part, under a federal healthcare program, such as Medicare or Medicaid. The term "remuneration" has been broadly interpreted to include anything of value. The Federal Anti-Kickback Statute has been interpreted to apply to arrangements between pharmaceutical manufacturers on one hand and prescribers, purchasers and formulary managers on the other. Although there are a number of statutory exceptions and regulatory safe harbors protecting some common activities from prosecution, the exceptions and safe harbors are drawn narrowly. Practices that involve remuneration that may be alleged to be intended to induce prescribing, purchases or recommendations may be subject to scrutiny if they do not qualify for an exception or safe harbor. Failure to meet all of the requirements of a particular applicable statutory exception or regulatory safe harbor does not make the conduct per se illegal under the Federal Anti-Kickback Statute. Instead, the legality of the arrangement will be evaluated on a case-by-case basis based on a cumulative review of all of its facts and circumstances. Additionally, the intent standard under the Federal Anti-Kickback Statute was amended by the Patient Protection and Affordable Care Act, as amended by the Health Care Education and Reconciliation Act

(collectively, the "ACA"), to a stricter standard such that a person or entity no longer needs to have actual knowledge of the statute or specific intent to violate it in order to have committed a violation. In addition, the ACA codified case law that a claim including items or services resulting from a violation of the Federal Anti-Kickback Statute constitutes a false or fraudulent claim for purposes of the Federal False Claims Act. Violations of this law are punishable by up to five years in prison, criminal fines, administrative civil money penalties, and exclusion from participation in federal healthcare programs. In addition, many states have adopted laws similar to the Federal Anti-Kickback Statute. Some of these state prohibitions apply to the referral of patients for healthcare services reimbursed by any insurer, not just federal healthcare programs such as Medicare and Medicaid. Due to the breadth of these federal and state anti-kickback laws, and the potential for additional legal or regulatory change in this area, it is possible that our future business activities, including our sales and marketing practices and/or our future relationships with ophthalmologists and optometrists might be challenged under anti-kickback laws, which could harm us.

Federal false claims and false statement laws, including the civil False Claims Act, prohibits any person or entity from, among other things, knowingly presenting, or causing to be presented, for payment to federal programs (including Medicare and Medicaid) claims for items or services, including drugs, that are false or fraudulent. This statute has been interpreted to prohibit presenting claims for items or services not provided as claimed, or claims for medically unnecessary items or services. Although we would not submit claims directly to payors, manufacturers can be held liable under these laws if they are deemed to "cause" the submission of false or fraudulent claims by, for example, providing inaccurate billing or coding information to customers or promoting a product off-label. In addition, our future activities relating to the reporting of wholesaler or estimated retail prices for our products, the reporting of prices used to calculate Medicaid rebate information and other information affecting federal, state and third-party reimbursement for our products, and the sale and marketing of our products, are subject to scrutiny under this law. For example, pharmaceutical companies have been found liable under the Federal Civil False Claims Act in connection with their off-label promotion of drugs. Penalties for a civil False Claims Act violation include three times the actual damages sustained by the government, plus mandatory civil penalties of between $5,500 and $11,000 for each separate false claim, the potential for exclusion from participation in federal healthcare programs, and, although the Federal False Claims Act is a civil statute, conduct that results in a False Claims Act violation may also implicate various federal criminal statutes. If the government were to allege that we were, or convict us of, violating these false claims laws, we could be subject to a substantial fine and may suffer a decline in our stock price. In addition, private individuals have the ability to bring actions under the Federal Civil False Claims Act and certain states have enacted laws modeled after the Federal False Claims Act.

Additionally, HIPAA created additional federal criminal statutes that prohibit, among other things, knowingly and willfully executing, or attempting to execute, a scheme to defraud any healthcare benefit program, including private third-party payors and knowingly and willfully falsifying, concealing or covering up a material fact or making any materially false, fictitious or fraudulent statement in connection with the delivery of or payment for healthcare benefits, items or services.

There are also an increasing number of state laws that require manufacturers to make reports to states on pricing and marketing information. Many of these laws contain ambiguities as to what is required to comply with the laws. In addition, as discussed below, a similar federal requirement under the Physician Payments Sunshine Act, requires certain manufacturers to track and report to the federal government certain payments provided to physicians and teaching hospitals made in the previous calendar year, as well as certain ownership and investment interests held by physicians and their immediate family members. These laws may affect our sales, marketing and other promotional activities by imposing administrative and compliance burdens on us. In addition, given the lack of clarity with respect to these laws and their implementation, our reporting actions could be subject to the penalty provisions of the pertinent state and federal authorities.

In addition, we may be subject to data privacy and security regulation by both the federal government and the states in which we conduct our business. HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act ("HITECH"), and their respective implementing regulations, including the Final Omnibus Rule published on January 25, 2013, imposes specified requirements relating to the privacy, security and transmission of individually identifiable health information on certain types of individuals and organizations. In addition, certain state laws govern the privacy and security of health information in certain circumstances, many of which differ from each other and from HIPAA in significant ways and may not have the same effect, thus complicating compliance efforts.

The failure to comply with regulatory requirements subjects us to possible legal or regulatory action. Depending on the circumstances, failure to meet applicable regulatory requirements can result in significant criminal, civil and/or administrative penalties, damages, fines, disgorgement, exclusion from participation in federal healthcare programs, such as Medicare and Medicaid, injunctions, recall or seizure of products, total or partial suspension of production, denial or withdrawal of product approvals, refusal to allow us to enter into supply contracts, including government contracts, contractual damages, reputational harm, administrative burdens, diminished profits and future earnings, and the curtailment or restructuring of our operations, any of which could adversely affect our ability to operate our business and our results of operations.

We plan to develop a comprehensive compliance program that establishes internal controls to facilitate adherence to the law and program requirements to which we will or may become subject because we intend to commercialize products that could be reimbursed under a federal healthcare program and other governmental healthcare programs.

Changes in law or the interpretation of existing law could impact our business in the future by requiring, for example: (i) changes to our manufacturing arrangements; (ii) additions or modifications to product labeling; (iii) the recall or discontinuation of our products; or (iv) additional record-keeping requirements. If any such changes were to be imposed, they could adversely affect the operation of our business.

***Affordable Care Act and Other Reform Initiatives***

In the United States and some foreign jurisdictions, there have been, and likely will continue to be, a number of legislative and regulatory changes and proposed changes regarding the healthcare system directed at broadening the availability of healthcare and containing or lowering the cost of healthcare.

By way of example, in March 2010, the ACA was enacted. The ACA includes measures that have or will significantly change the way healthcare is financed by both governmental and private insurers. Among the provisions of the ACA of greatest importance to the pharmaceutical industry are the following:

- The Medicaid Drug Rebate Program requires pharmaceutical manufacturers to enter into and have in effect a national rebate agreement with the Secretary of the U.S. Department of Health and Human Services in exchange for state Medicaid coverage of most of the manufacturer's drugs. The ACA made several changes to the Medicaid Drug Rebate Program, including increasing pharmaceutical manufacturers' rebate liability by raising the minimum basic Medicaid rebate on most branded prescription drugs and biologic agents to 23.1% of average manufacturer price ("AMP") and adding a new rebate calculation for "line extensions" (i.e., new formulations, such as extended release formulations) of solid oral dosage forms of branded products, as well as potentially impacting their rebate liability by modifying the statutory definition of AMP.
- The ACA expanded the types of entities eligible to receive discounted 340B pricing, although, with the exception of children's hospitals, these newly eligible entities will not be eligible to receive discounted 340B pricing on orphan drugs used in orphan indications. In addition, because 340B pricing is determined based on AMP and Medicaid drug rebate data, the revisions to the Medicaid rebate formula and AMP definition described above could cause the required 340B discounts to increase. The ACA imposed a requirement on manufacturers of branded drugs and biologic agents to provide a 50% discount off the negotiated price of branded drugs dispensed to Medicare Part D beneficiaries in the coverage gap (i.e., "donut hole").
- The ACA imposed an annual, nondeductible fee on any entity that manufactures or imports certain branded prescription drugs and biologic agents, apportioned among these entities according to their market share in certain government healthcare programs, although this fee would not apply to sales of certain products approved exclusively for orphan indications.
- The ACA included the Federal Physician Payments Sunshine Act, which requires certain pharmaceutical manufacturers of drugs, devices, biologics and medical supplies for which payment is available under Medicare, Medicaid, or the Children's Health Insurance Program, with specific exception, to track certain financial arrangements with physicians and teaching hospitals, including any "transfer of value" provided, as well as any ownership or investment interests held by physicians and their immediate family members. Covered manufacturers were required to begin collecting data on August 1, 2013 and submit reports on aggregate payment data to CMS for the first reporting period (August 1, 2013—December 31, 2013) by March 31, 2014, and were required to report detailed payment data for the first reporting period and submit legal attestation to the completeness and accuracy of such data by June 30, 2014. Thereafter, covered manufacturers must submit reports by the 90th day of each subsequent calendar year. The information reported was made publicly available on a searchable website in September 2014.
- The ACA established a new Patient-Centered Outcomes Research Institute to oversee, identify priorities in, and conduct comparative clinical effectiveness research, along with funding for such research. The research conducted by the Patient-Centered Outcomes Research Institute may affect the market for certain pharmaceutical products.
- The ACA created the Independent Payment Advisory Board which has the authority to recommend certain changes to the Medicare program to reduce expenditures by the program that could result in reduced payments for prescription drugs. Under certain circumstances, these recommendations will become law unless Congress enacts legislation that will achieve the same or greater Medicare cost savings.
- The ACA established the Center for Medicare and Medicaid Innovation within CMS to test innovative payment and service delivery models to improve quality of care and lower program costs of Medicare, Medicaid and the Children's

Health Insurance Program, potentially including prescription drug spending. Funding has been allocated to support the mission of the Center for Medicare and Medicaid Innovation through 2019.

Many of the details regarding the implementation of the ACA are yet to be determined, and at this time, it remains unclear the full effect that the ACA would have on our business.

Other legislative changes have been proposed and adopted in the United States since the ACA was enacted. For example, 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 2012 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 up to 2% per fiscal year, which went into effect in April 2013 and will remain in effect through 2024 unless additional Congressional action is taken. In January 2013, President Obama signed into law the American Taxpayer Relief Act of 2012, which, among other things, further reduced Medicare payments to several providers, including hospitals, imaging centers and cancer treatment centers, and increased the statute of limitations period for the government to recover overpayments to providers from three to five years. Any reduction in reimbursement from Medicare or other government programs may result in a similar reduction in payments from private payors, which may adversely affect our future profitability.

***European Union Drug Development***

In the European Union, our products will also be subject to extensive regulatory requirements. As in the United States, medicinal products can only be marketed if a marketing authorization application ("MAA") from the competent regulatory agencies has been obtained, and the various phases of preclinical and clinical research in the European Union are subject to significant regulatory controls. Although the EU Clinical Trials Directive 2001/20/EC has sought to harmonize the EU clinical trial regulatory framework, setting out common rules for the control and authorization of clinical trials in the EU, the EU Member States have transposed and applied the provisions of the Directive differently. This has led to significant variations in the member state regimes. Under the current regime, before a clinical trial can be initiated it must be approved by two distinct bodies in each of the EU countries where the trial is to be conducted: the National Competent Authority ("NCA") and one or more Ethics Committees ("ECs"). In addition, all serious adverse reactions to the investigated drug that occur during the clinical trial must be reported to the NCA and ECs of the Member State where they occurred.

The EU clinical trials legislation is currently undergoing a revision process mainly aimed at making more uniform and streamlining the clinical trials authorization process, simplifying adverse event reporting procedures, improving the supervision of clinical trials and increasing the transparency of clinical trials.

***European Union Drug Review Approval***

In the European Economic Area ("EEA"), which is comprised of the 28 Member States of the European Union plus Norway, Iceland and Liechtenstein, medicinal products can only be commercialized after obtaining an MAA. There are two types of MAAs: (1) the Community MAA, which is issued by the European Commission through the Centralized Procedure based on the opinion of the Committee for Medicinal Products for Human Use ("CHMP"), a body of the EMA, and which is valid throughout the entire territory of the EEA; and (2) the National MAA, which is issued by the competent authorities of the Member States of the EEA and only authorized marketing in that Member State's national territory and not the EEA as a whole.

The Centralized Procedure is mandatory for certain types of products, such as biotechnology medicinal products, orphan medicinal products and medicinal products containing a new active substance indicated for the treatment of AIDS, cancer, neurodegenerative disorders, diabetes, auto-immune and viral diseases. The Centralized Procedure is optional for products containing a new active substance not yet authorized in the EEA, or for products that constitute a significant therapeutic, scientific or technical innovation or which are in the interest of public health in the EU. The National MAA is for products not falling within the mandatory scope of the Centralized Procedure. Where a product has already been authorized for marketing in a Member State of the EEA, this National MAA can be recognized in another Member States through the Mutual Recognition Procedure. If the product has not received a National MAA in any Member State at the time of application, it can be approved simultaneously in various Member States through the Decentralized Procedure. Under the Decentralized Procedure an identical dossier is submitted to the competent authorities of each of the Member States in which the MAA is sought, one of which is selected by the applicant as the Reference Member State ("RMS"). If the RMS proposes to authorize the product, and the other Member States do not raise objections, the product is granted a national MAA in all the Member States where the authorization was sought. Before granting the MAA, 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.

In addition, in the European Union, the EMA's Committee for Advanced Therapies ("CAT") is responsible for assessing the quality, safety and efficacy of advanced therapy medicinal products. The role of the CAT is to prepare a draft opinion on an application for marketing authorization for a gene therapy medicinal candidate that is submitted to the EMA. The development and evaluation of a gene therapy medicinal product must be considered in the context of the relevant European Union guidelines, and the EMA may issue new guidelines concerning the development and marketing authorization for gene therapy medicinal products and require that we comply with these new guidelines.

***Other Regulations***

We are also subject to numerous federal, state and local laws relating to such matters as safe working conditions, manufacturing practices, environmental protection, fire hazard control and disposal of hazardous or potentially hazardous substances. We may incur significant costs to comply with such laws and regulations now or in the future.

**Research and Development**

For the years ended December 31, 2017 and 2016, Private Rocket's research and development expenses were $14.9 million and $6.0 million, respectively.

**Employees**

We had 20 employees as of March 1, 2018. None of our employees are represented by any collective bargaining unit. We believe that we maintain good relations with our employees.

**Corporate Information**

We were incorporated in Delaware in 1999 as Inotek Pharmaceuticals Corporation. In January 2018, we merged with Rocket Pharmaceuticals, Ltd. and changed our name to Rocket Pharmaceuticals, Inc. Our principal executive offices are located at The Alexandria Center for Life Science, 430 East 29th Street, Suite 1040, New York, NY 10016, and our telephone number is (646) 440-9100. Our internet address is www.rocketpharma.com. We use our website as means of disclosing material non-public information and for complying with our disclosure obligations under Regulation FD. We make available on our website, free of charge, our Annual Report on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and any amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Exchange Act as soon as reasonably practicable after we electronically file such material with, or furnish it to, the Securities and Exchange Commission ("SEC"). Our SEC reports can be accessed through the Investors section of our website. Further, a copy of this Annual Report on Form 10-K is located at the SEC's Public Reference Room at 100 F Street, N.E., Washington, D. C. 20549. Information on the operation of the Public Reference Room can be obtained by calling the SEC at 1-800-SEC-0330. The SEC maintains a website that contains reports, proxy and information statements and other information regarding our filings at www.sec.gov. The information found on our website is not incorporated by reference into this report or any other report we file with or furnish to the SEC. Our common stock is listed on the Nasdaq Global Market under the symbol "RCKT."

**Item 1A. Risk Factors**

*We operate in an industry that involves numerous risks and uncertainties. You should carefully consider the following information about these risks, together with the other information appearing elsewhere in this Annual Report on Form 10-K, including our financial statements and related notes hereto. The occurrence of any of the following risks could have a material adverse effect on our business, financial condition, results of operations and future growth prospects. The risks and uncertainties described below may change over time and other risks and uncertainties, including those that we do not currently consider material, may impair our business. In these circumstances, the market price of our common stock could decline.*

**Risks Related to Rocket's Financial Position**

***Rocket has a history of operating losses, and Rocket may not achieve or sustain profitability. Rocket anticipates that it will continue to incur losses for the foreseeable future. If Rocket fails to obtain additional funding to conduct its planned research and development effort, Rocket could be forced to delay, reduce or eliminate its product development programs or commercial development efforts.***

Rocket is an early-stage gene therapy company with a limited operating history on which to base your investment decision. Gene therapy product development is a highly speculative undertaking and involves a substantial degree of risk. Rocket's operations to date have been limited primarily to organizing and staffing its company, business planning, raising capital, acquiring and developing product and technology rights and conducting preclinical research and development activities for its product candidates. Rocket has

never generated any revenue from product sales. Rocket has not obtained regulatory approvals for any of its product candidates, and has funded its operations to date through proceeds from sales of its preferred stock.

Private Rocket has incurred net losses since its inception. Private Rocket incurred net losses of $19.6 million and $7.6 million for the years ended December 31, 2017 and 2016, respectively. As of December 31, 2017, Private Rocket had an accumulated deficit of $31.3 million. Substantially all of its operating losses have resulted from costs incurred in connection with its research and development programs and from general and administrative costs associated with its operations. Rocket expects to continue to incur significant expenses and operating losses over the next several years and for the foreseeable future as Rocket intends to continue to conduct research and development, clinical testing, regulatory compliance activities, manufacturing activities, and, if any of its product candidates is approved, sales and marketing activities that, together with anticipated general and administrative expenses, will likely result in Rocket incurring significant losses for the foreseeable future. Rocket's prior losses, combined with expected future losses, have had and will continue to have an adverse effect on Rocket's stockholders' deficit and working capital.

***Rocket may need to raise additional funding, which may not be available on acceptable terms, or at all. Failure to obtain this necessary capital when needed may force Rocket to delay, limit or terminate certain of its licensing activities, product development efforts or other operations.***

Rocket expects to require substantial future capital in order to seek to broaden licensing of its gene therapy platforms, complete preclinical and clinical development for its current product candidates and other future product candidates, if any, and potentially commercialize these product candidates. Rocket expects its spending levels to increase in connection with its preclinical and clinical trials. In addition, if Rocket obtains marketing approval for any of its product candidates, Rocket expects to incur significant expenses related to product sales, medical affairs, marketing, manufacturing and distribution. Furthermore, Rocket expects to incur additional costs associated with operating as a public company. Accordingly, Rocket will need to obtain substantial additional funding in connection with its continuing operations. If Rocket is unable to raise capital when needed or on acceptable terms, Rocket could be forced to delay, reduce or eliminate certain of its licensing activities, its research and development programs or other operations.

Private Rocket's operations have consumed significant amounts of cash since inception. As of December 31, 2017, Private Rocket's cash was $18.1 million. Rocket's future capital requirements will depend on many factors, including:

- the timing of enrollment, commencement, completion and results of Rocket's clinical trials, including Rocket's only current clinical trial for Fanconi Anemia;
- the results of Rocket's preclinical studies for Rocket's current product candidates and any subsequent clinical trials;
- the scope, progress, results and costs of drug discovery, laboratory testing, preclinical development and clinical trials, if any, for Rocket's internal product candidates;
- the costs associated with building out additional laboratory and manufacturing capacity, if any;
- the costs, timing and outcome of regulatory review of Rocket's product candidates;
- the costs of future activities, including product sales, medical affairs, marketing, manufacturing and distribution, for any of Rocket's product candidates for which Rocket receives marketing approval;
- the costs of preparing, filing and prosecuting patent applications, maintaining and enforcing its intellectual property rights and defending any intellectual property-related claims;
- Rocket's current licensing agreements or collaborations remaining in effect;
- Rocket's ability to establish and maintain additional licensing agreements or collaborations on favorable terms, if at all;
- the extent to which Rocket acquires or in-licenses other product candidates and technologies; and
- the costs associated with being a public company.

Many of these factors are outside of Rocket's control. Identifying potential product candidates and conducting preclinical testing and clinical trials is a time-consuming, expensive and uncertain process that takes years to complete, and Rocket may never generate the necessary data or results required to obtain regulatory and marketing approval and achieve product sales. In addition, Rocket's product candidates, if approved, may not achieve commercial success. Accordingly, Rocket will need to continue to rely on additional financing to achieve its business objectives.

To the extent that additional capital is raised through the sale of equity or equity-linked securities, the issuance of those securities could result in substantial dilution for Rocket's current shareholders and the terms may include liquidation or other preferences that adversely affect the rights of Rocket's current shareholders. Adequate additional financing may not be available to Rocket on acceptable terms, or at all. Rocket also could be required to seek funds through arrangements with partners or otherwise that may require Rocket to relinquish rights to its intellectual property, its product candidates or otherwise agree to terms unfavorable to Rocket.

***Rocket's limited operating history may make it difficult for Rocket to evaluate the success of its business to date and to assess Rocket's future viability.***

Rocket's operations to date have predominantly focused on organizing and staffing its company, business planning, raising capital, acquiring its technology, administering and expanding its gene therapy platforms, identifying potential product candidates, undertaking research, preclinical studies and clinical trials of its product candidates and establishing licensing arrangements and collaborations. Rocket has not yet completed clinical trials of its product candidates, obtained marketing approvals, manufactured a commercial-scale product or conducted sales and marketing activities necessary for successful commercialization. Consequently, any predictions made about Rocket's future success or viability may not be as accurate as they could be if Rocket had a longer operating history.

In addition, as a new business, Rocket may encounter unforeseen expenses, difficulties, complications, delays and other known and unknown factors. Rocket expects to eventually transition from a company with a licensing and research focus to a company that is also capable of supporting clinical development activities and Rocket may need to transition to supporting commercial activities in the future. Rocket cannot guarantee that it will be successful in these transitions.

***Rocket's ability to use its net operating loss carryforwards and certain other tax attributes may be limited.***

Under Section 382 of the Internal Revenue Code of 1986, as amended, if a corporation undergoes an "ownership change," generally defined as a greater than 50% change (by value) in its equity ownership over a three-year period, the corporation's ability to use its pre-change net operating loss ("NOL") carryforwards and other pre-change tax attributes to offset its post-change income may be limited. Rocket may experience ownership changes in the future. As a result, if Rocket earns net taxable income, Rocket's ability to use its pre-change net operating loss carryforwards to offset U.S. federal taxable income may be subject to limitations, which could potentially result in increased future tax liability to Rocket. Furthermore, Rocket's ability to use net operating loss carryforwards to offset U.S. federal taxable income in the future may be further limited by certain provisions set forth in The Tax Cuts and Jobs Act, which could potentially result in increased future tax liability to Rocket. In addition, at the state level, there may be periods during which the use of NOL carryforwards is suspended or otherwise limited, which could accelerate or permanently increase state taxes owed. At December 31, 2017, Private Rocket had net operating losses of approximately $24.8 million for New York City tax purposes. As of December 31, 2017, Rocket had no unrecognized tax benefits or liabilities for uncertain tax positions. Rocket files income tax returns in the United States and New York State and New York City, but for the year ended December 31, 2017, did not report any income effectively connected with a U.S. trade or business.

As of December 31, 2017, Inotek had federal NOL carryforwards for income tax purposes of $127.1 million that will expire at various dates through 2037 and state NOL carryforwards of $83.4 million that will expire at various dates through 2037, available to reduce future federal and state income taxes, if any. As of December 31, 2017, Inotek had federal research and development tax credits of $5.2 million and state research and development tax credits of $0.8 million. The pre-change NOL carryforwards, although subject to an annual limitation, as well as any post-change NOL carryforwards, can be utilized in future years, provided that sufficient income is generated and no future ownership changes occur that may limit Inotek's NOL carryforwards. Additionally, the Reverse Merger on January 4, 2018 is expected to significantly limit utilization of Inotek's NOL carryforwards as the Reverse Merger was considered to be an ownership change, though the actual amount of the NOL limitation has not yet been determined.

***Rocket has never generated any revenue from product sales and may never be profitable.***

Rocket's ability to generate revenue and achieve profitability depends on Rocket's ability, alone or with strategic collaboration partners, to successfully complete the development of, and obtain the regulatory, pricing and reimbursement approvals necessary to commercialize its product candidates. Rocket does not anticipate generating revenues from product sales for the foreseeable future, if ever. Rocket's ability to generate future revenues from product sales depends heavily on its success in:

- completing research and preclinical and clinical development of Rocket's product candidates;
- seeking and obtaining regulatory and marketing approvals for product candidates for which Rocket completes clinical studies;

- developing a sustainable, commercial-scale, reproducible, and transferable manufacturing process for Rocket's vectors and product candidates;
- establishing and maintaining supply and manufacturing relationships with third parties that can provide adequate (in amount and quality) products and services to support clinical development and the market demand for Rocket's product candidates, if approved;
- launching and commercializing product candidates for which Rocket obtains regulatory and marketing approval, either by collaborating with a partner or, if launched independently, by establishing a sales force, marketing and distribution infrastructure;
- obtaining sufficient pricing and reimbursement for Rocket's product candidates from private and governmental payors;
- obtaining market acceptance of Rocket's product candidates and gene therapy as a viable treatment option;
- addressing any competing technological and market developments;
- identifying and validating new gene therapy product candidates;
- negotiating favorable terms in any collaboration, licensing or other arrangements into which Rocket may enter; and
- maintaining, protecting and expanding Rocket's portfolio of intellectual property rights, including patents, trade secrets and know-how.

Even if one or more of the product candidates that Rocket will develop is approved for commercial sale, Rocket anticipates incurring significant costs associated with commercializing any approved product candidate. Rocket's expenses could increase beyond expectations if Rocket is required by the FDA, the EMA, or other regulatory agencies, domestic or foreign, to perform clinical and other studies in addition to those that Rocket currently anticipates. Even if Rocket is able to generate revenues from the sale of any approved products, Rocket may not become profitable and may need to obtain additional funding to continue operations.

**Risks Related to Product Regulatory Matters**

***Rocket's gene therapy product candidates are based on novel technology, which makes it difficult to predict the time and cost of product candidate development and subsequently obtaining regulatory approval. Currently, only a few gene therapy products have been approved in the United States and the European Union.***

Rocket has concentrated its research and development efforts to date on a gene therapy platform, and Rocket's future success depends on the successful development of viable gene therapy product candidates. Rocket cannot guarantee that it will not experience problems or delays in developing current or future product candidates or that such problems or delays will not cause unanticipated costs, or that any such development problems or delays can be resolved. Rocket may also experience unanticipated problems or delays in developing Rocket's manufacturing capacity or transferring Rocket's manufacturing process to commercial partners, which may prevent Rocket from completing its clinical studies or commercializing its products on a timely or profitable basis, if at all.

In addition, the clinical study requirements of the FDA, the European Medicines Agency, or the EMA, and other regulatory agencies and the criteria these regulators use to determine the safety and efficacy of a product candidate vary substantially according to the type, complexity, novelty and intended use and market of the potential products. The regulatory approval process for novel product candidates such as Rocket's can be more expensive and take longer than for other, better known or more extensively studied pharmaceutical or other product candidates. Currently, only a few gene therapy products have received marketing authorization in the U.S. or the European Union, including Novartis Pharmaceuticals' Kymriah, Kite Pharma's Yescarta, and Spark Therapeutics' Luxturna. It is therefore difficult to determine how long it will take or how much it will cost to obtain regulatory approvals for Rocket's product candidates in the United States, the European Union or other jurisdictions. Approvals by the EMA may not be indicative of what the FDA may require for approval. Delay or failure to obtain, or unexpected costs in obtaining, the regulatory approvals necessary to bring a potential product to market could decrease Rocket's ability to generate sufficient product revenue and Rocket's business, financial condition, results of operations and prospects could be materially harmed.

Regulatory requirements governing gene therapy products have evolved and may continue to change in the future. For example, CBER may require Rocket to perform additional nonclinical studies or clinical trials that may increase Rocket's development costs, lead to changes in regulatory positions and interpretations, delay or prevent approval and commercialization of Rocket's gene therapy product candidates or lead to significant post-approval limitations or restrictions.

In addition, EMA's CAT and other regulatory review committees and advisory groups and any new guidelines they promulgate may lengthen the regulatory review process, require us to perform additional studies, increase our development costs, lead to changes in regulatory positions and interpretations, delay or prevent approval and commercialization of our product candidates or lead to significant post-approval limitations or restrictions. As we advance our product candidates, we will be required to consult with these regulatory and advisory groups, and comply with applicable guidelines. If we fail to do so, we may be required to delay or discontinue development of certain of our product candidates. These additional processes may result in a review and approval process that is longer than we otherwise would have expected. Delay or failure to obtain, or unexpected costs in obtaining, the regulatory approval necessary to bring a potential product to market could decrease our ability to generate product revenue, and our business, financial condition, results of operations and prospects would be materially harmed.

***Rocket may encounter substantial delays in commencement, enrollment or completion of Rocket's clinical trials or may fail to demonstrate safety and efficacy to the satisfaction of applicable regulatory authorities, which could prevent Rocket from commercializing its current and future product candidates on a timely basis, if at all.***

Before obtaining marketing approval from regulatory authorities for the sale of Rocket's current and future product candidates, Rocket must conduct extensive clinical trials to demonstrate the safety and efficacy of Rocket's product candidates. Clinical trials are expensive, time-consuming, and outcomes are uncertain.

To date, Rocket's experience with clinical trials has been limited. Rocket's only clinical programs to date have been performed under a physician-sponsored investigational new drug application, or IND, held by the Fred Hutchinson Cancer Research Center in Seattle, Washington, or Hutch, and under an Investigational Medicinal Product Dossier, or IMPD, in Spain sponsored by CIEMAT. The clinical trials performed by these sponsors are for a lentiviral treatment for Fanconi Anemia, a rare mutation of the FANC-A gene, which are still ongoing. Rocket intends to assume responsibility for or obtain the authority to reference the clinical trials performed under one or both of the IND and IMPD held by its collaborators, but has not completed any clinical trials to date. Rocket cannot guarantee that any clinical trials will be conducted as planned or completed on schedule, if at all. A clinical trial failure can occur at any stage of testing.

Identifying and qualifying patients to participate in clinical trials of Rocket's product candidates is critical to Rocket's success. Rocket may not be able to identify, recruit and enroll a sufficient number of patients, or those with required or desired characteristics, to complete clinical trials in a timely manner. Patient enrollment and trial completion is affected by numerous factors including:

- severity of the disease under investigation;
- design of the study protocol;
- size of the patient population;
- eligibility criteria for the study in question;
- perceived risks and benefits of the product candidate under study, including as a result of adverse effects observed in similar or competing therapies;
- proximity and availability of clinical study sites for prospective patients;
- availability of competing therapies and clinical studies;
- efforts to facilitate timely enrollment in clinical studies;
- patient referral practices of physicians; and
- ability to monitor patients adequately during and after treatment.

In particular, each of the conditions for which Rocket plans to evaluate its current product candidates are rare genetic diseases with limited patient pools from which to draw for clinical studies. Additionally, the process of finding and diagnosing patients may prove costly. Finally, the treatment process requires that the cells be obtained from patients and then shipped to a transduction facility within the required timelines, and this may introduce unacceptable shipping-related delays to the process.

In addition, to the extent Rocket seeks to obtain regulatory approval for its product candidates in foreign countries, Rocket's ability to successfully initiate, enroll and complete a clinical study in any foreign country is subject to numerous risks unique to conducting business in foreign countries, including:

- difficulty in establishing or managing relationships with clinical research organizations, or CROs, and physicians;
- different standards for the conduct of clinical trials;

- absence in some countries of established groups with sufficient regulatory expertise for review of AAV gene therapy protocols;
- Rocket's inability to locate qualified local partners or collaborators for such clinical trials; and
- the potential burden of complying with a variety of foreign laws, medical standards and regulatory requirements, including the regulation of pharmaceutical and biotechnology products and treatment.

If Rocket has difficulty enrolling a sufficient number of patients to conduct its clinical trials as planned, Rocket may need to delay, limit or terminate planned clinical trials, the occurrence of any of which would harm our business, financial condition, results of operations and prospects. Moreover, Rocket intends to rely on the nonclinical studies and clinical trials performed by Hutch and CIEMAT, and the FDA or the regulatory authority in any other country in which we decide to perform clinical trials or seek approval may not accept that results of the Hutch and CIEMAT studies and trials. Any inability to successfully complete preclinical studies and clinical trials could result in additional costs to Rocket or impair Rocket's ability to generate revenues from product sales, regulatory and commercialization milestones and royalties.

***Rocket has not completed any clinical studies of its current product candidates. Initial results in Rocket's ongoing clinical studies may not be indicative of results obtained when these studies are completed. Furthermore, success in early clinical studies may not be indicative of results obtained in later studies.***

Rocket's Fanconi Anemia gene therapy treatments are currently in clinical trials being conducted by Rocket's partners, Hutch and CIEMAT. Several of Rocket's other gene therapy programs are in the preclinical stages. Study designs and results from previous or ongoing studies and clinical trials are not necessarily predictive of future study or clinical trial results, and initial or interim results may not continue or be confirmed upon completion of the study or trial. Positive data may not continue or occur for subjects in Rocket's clinical studies or for any future subjects in Rocket's ongoing or future clinical studies, and may not be repeated or observed in ongoing or future studies involving Rocket's product candidates. Furthermore, Rocket's product candidates may also fail to show the desired safety and efficacy in later stages of clinical development despite having successfully advanced through initial clinical studies. Rocket cannot guarantee that any of these studies will ultimately be successful or that preclinical or early stage clinical studies will support further clinical advancement or regulatory approval of Rocket's product candidates.

Data obtained from preclinical and clinical activities are subject to varying interpretations, which may delay, limit or prevent regulatory approval. In addition, regulatory delays or rejections may be encountered as a result of many factors, including changes in regulatory policy during the period of product development.

***Even if Rocket successfully completes the necessary preclinical studies and clinical trials, Rocket cannot predict when, or if, Rocket will obtain regulatory approval to commercialize a product candidate and the approval may be for a more narrow indication than Rocket seeks.***

Rocket cannot commercialize a product candidate until the appropriate regulatory authorities have reviewed and approved the product candidate. Rocket has not received approval from regulatory authorities in any jurisdiction to market any of its product candidates. Even if Rocket's product candidates meet their safety and efficacy endpoints in clinical trials, the regulatory authorities may not complete their review processes in a timely manner, issue a complete response letter, or ultimately, Rocket may not be able to obtain regulatory approval. In addition, Rocket may experience delays or rejections if an FDA Advisory Committee recommends disapproval or restrictions on use. In addition, Rocket may experience delays or rejections based upon additional government regulation from future legislation or administrative actions, or changes in regulatory authority policy during the period of product development, clinical trials and the review process. Regulatory authorities have substantial discretion in the approval process and may refuse to accept any application or may decide that Rocket's data are insufficient for approval and require additional preclinical, clinical or other studies. In addition, varying interpretations of data obtained from preclinical and clinical testing could delay, limit or prevent the receipt of marketing approval for a product candidate.

Regulatory authorities also may approve a product candidate for more limited indications than requested or they may impose significant limitations in the form of narrow indications, warnings or Risk Evaluation and Mitigation Strategies, or REMS. These regulatory authorities may require precautions or contra-indications with respect to conditions of use or they may grant approval subject to the performance of costly post-marketing clinical trials. In addition, regulatory authorities may not approve the labeling claims that are necessary or desirable for the successful commercialization of Rocket's product candidates. Any of the foregoing scenarios could materially harm the commercial prospects for Rocket's product candidates and materially harm its business, financial condition, results of operations and prospects.

***Even if Rocket obtains regulatory approval for a product candidate, its products will remain subject to regulatory scrutiny.***

Even if Rocket obtains regulatory approval in a jurisdiction, the applicable regulatory authority may still impose significant restrictions on the indicated uses or marketing of Rocket's product candidates, or impose ongoing requirements for potentially costly post-approval studies, post-market surveillance or patient or drug restrictions. Additionally, the holder of an approved Biologics License Application, or BLA, is obligated to monitor and report adverse events and any failure of a product to meet the specifications in the BLA. The holder of an approved BLA must also submit new or supplemental applications and obtain FDA approval for certain changes to the approved product, product labeling or manufacturing process. FDA guidance advises that patients treated with some types of gene therapy undergo follow-up observations for potential adverse events for as long as 15 years. Advertising and promotional materials must comply with FDA rules and are subject to FDA review, in addition to other potentially applicable federal and state laws.

In addition, product manufacturers and their facilities are subject to payment of user fees and continual review and periodic inspections by the FDA and other regulatory authorities for compliance with good manufacturing practices, or GMP, and current good tissue practice, or cGMP, adherence to commitments made in the BLA. If Rocket or a regulatory agency discovers previously unknown problems with a product such as adverse events of unanticipated severity or frequency, or problems with the facility where the product is manufactured, a regulatory agency may impose restrictions relative to that product or the manufacturing facility, including requiring recall or withdrawal of the product from the market or suspension of manufacturing.

If Rocket fails to comply with applicable regulatory requirements following approval of any of its product candidates, a regulatory agency may take a variety of actions, including:

- issue a warning letter asserting that Rocket is in violation of the law;
- seek an injunction or impose civil or criminal penalties or monetary fines;
- suspend or withdraw regulatory approval;
- suspend any ongoing clinical studies;
- refuse to approve a pending marketing application, such as a BLA or supplements to a BLA submitted by Rocket;
- seize products; or
- refuse to allow Rocket to enter into supply contracts, including government contracts.

Any government investigation of alleged violations of law could require Rocket to expend significant time and resources in response and could generate negative publicity. The occurrence of any event or penalty described above may inhibit Rocket's ability to commercialize its product candidates and generate revenues and could harm its business, financial condition, results of operations and prospects.

In addition, the FDA's policies, and those of comparable foreign regulatory authorities, may change and additional government regulations may be enacted that could prevent, limit or delay regulatory approval of Rocket's product candidates. Rocket cannot predict the likelihood, nature or extent of government regulation that may arise from future legislation or administrative actions, either in the U.S. or abroad. If Rocket is slow or unable to adapt to changes in existing requirements or the adoption of new requirements or policies, or if Rocket is not able to maintain regulatory compliance, Rocket may lose any marketing approval which Rocket may have obtained and Rocket may not achieve or sustain profitability, which would materially harm Rocket's business, financial condition, results of operations and prospects.

***Rocket may never obtain FDA approval for any of its product candidates in the United States, and even if Rocket does, Rocket may never obtain approval for or commercialize any of its product candidates in any other jurisdiction, which would limit Rocket's ability to realize its full market potential.***

In order to eventually market any of Rocket's product candidates in any particular foreign jurisdiction, Rocket must establish and comply with numerous and varying regulatory requirements regarding safety and efficacy on a jurisdiction-by-jurisdiction basis. Approval by the FDA in the United States, if obtained, does not ensure approval by regulatory authorities in other countries or jurisdictions. In addition, preclinical studies and clinical trials conducted in one country may not be accepted by regulatory authorities in other countries, and regulatory approval in one country does not guarantee regulatory approval in any other country. Approval processes vary among countries and can involve additional product testing and validation and additional administrative review periods. Seeking foreign regulatory approval could result in difficulties and costs for Rocket and require additional preclinical studies or clinical trials which could be costly and time-consuming. Regulatory requirements can vary widely from country to country and could delay or prevent the introduction of Rocket's products in those countries. The foreign regulatory approval process involves

similar risks to those associated with FDA approval. Rocket does not have any product candidates approved for sale in any jurisdiction, including international markets, nor has Rocket attempted to obtain such approval. If Rocket fails to comply with regulatory requirements in international markets or to obtain and maintain required approvals, or if regulatory approvals in international markets are delayed, Rocket's target market will be reduced and Rocket's ability to realize the full market potential of its products will be unrealized.

***Rocket's product candidates may cause undesirable and unforeseen side effects or be perceived by the public as unsafe, which could delay or prevent their advancement into clinical trials or regulatory approval, limit the commercial potential or result in significant negative consequences.***

Gene therapy is still a relatively new approach to disease treatment and adverse side effects could develop with Rocket's product candidates. There also is the potential risk of delayed adverse events following exposure to gene therapy products due to persistent biologic activity of the genetic material or other components of products used to carry the genetic material.

Possible adverse side effects that could occur with treatment with gene therapy products include an immunologic reaction soon after administration which could substantially limit the effectiveness and durability of the treatment. If certain side effects are observed in testing of Rocket's potential product candidates, Rocket may decide or be required to halt or delay further clinical development of its product candidates.

In addition to side effects caused by the product candidate, the administration process or related procedures associated with a given product candidate also can cause adverse side effects. If any such adverse events occur, Rocket's clinical trials could be suspended or terminated. Under certain circumstances, the FDA, the European Commission, the EMA or other regulatory authorities could order Rocket to cease further development of, or deny approval of, Rocket's product candidates for any or all targeted indications. Moreover, if Rocket elects, or is required, to not initiate or to delay, suspend or terminate any future clinical trial of any of its product candidates, the commercial prospects of such product candidates may be harmed and Rocket's ability to generate product revenues from any of these product candidates may be delayed or eliminated. Any of these occurrences may harm Rocket's ability to develop other product candidates, and may harm Rocket's business, financial condition and prospects significantly.

Furthermore, if undesirable side effects caused by Rocket's product candidate are identified following regulatory approval of a product candidate, several potentially significant negative consequences could result, including:

- regulatory authorities may suspend or withdraw approvals of such product candidate;
- regulatory authorities may require additional warnings on the label;
- Rocket may be required to change the way a product candidate is administered or conduct additional clinical trials; and
- Rocket's reputation may suffer.

Any of these occurrences may harm Rocket's business, financial condition and prospects significantly.

***Rocket may be unable to obtain orphan drug designation or exclusivity for some product candidates. If Rocket's competitors are able to obtain orphan drug exclusivity for products that constitute the same drug and treat the same indications as its product candidates, Rocket may not be able to have competing products approved by the applicable regulatory authority for a significant period of time.***

Regulatory authorities in some jurisdictions, including the U.S. and the European Union, may designate drugs for relatively small patient populations as orphan drugs. Under the Orphan Drug Act of 1983, the FDA may designate a product candidate as an orphan drug if it is intended to treat a rare disease or condition, which is generally defined as having a patient population of fewer than 200,000 individuals in the U.S., or a patient population greater than 200,000 in the U.S. where there is no reasonable expectation that the cost of developing the drug will be recovered from sales in the U.S. In the European Union, following the opinion of the EMA's Committee for Orphan Medicinal Products, the European Commission grants orphan drug designation to promote the development of products that are intended for the diagnosis, prevention or treatment of a life-threatening or chronically debilitating condition affecting not more than five in 10,000 persons in the European Union. Additionally, orphan designation is granted for products intended for the diagnosis, prevention or treatment of a life-threatening, seriously debilitating or serious and chronic condition and when, without incentives, it is unlikely that sales of the drug in the European Union would be sufficient to justify the necessary investment in developing the drug or biologic product.

Generally, if a product candidate with an orphan drug designation receives the first marketing approval for the indication for which it has such designation, the product is entitled to a period of marketing exclusivity, which precludes the FDA or the European Commission from approving another marketing application for a product that constitutes the same drug treating the same indication for that marketing exclusivity period, except in limited circumstances. If another sponsor receives such approval before Rocket does (regardless of Rocket's orphan drug designation), Rocket will be precluded from receiving marketing approval for Rocket's product for the applicable exclusivity period. The applicable period is seven years in the U.S. and 10 years in the European Union. The exclusivity period in the U.S. can be extended by six months if the BLA sponsor submits pediatric data that fairly respond to a written request from the FDA for such data. The exclusivity period in the European Union can be reduced to six years if a product no longer meets the criteria for orphan drug designation or if the product is sufficiently profitable so that market exclusivity is no longer justified. Orphan drug exclusivity may be revoked if any regulatory agency determines that the request for designation was materially defective or if the manufacturer is unable to assure sufficient quantity of the product to meet the needs of patients with the rare disease or condition.

Even if Rocket requests orphan drug designation for any of its product candidates, Rocket cannot guarantee that the FDA or the European Commission will grant any of its product candidates such designation. Additionally, the designation of any of Rocket's product candidates as an orphan product does not guarantee that any regulatory agency will accelerate regulatory review of, or ultimately approve, that product candidate, nor does it limit the ability of any regulatory agency to grant orphan drug designation to product candidates of other companies that treat the same indications as Rocket's product candidates prior to Rocket's product candidates receiving exclusive marketing approval.

Even if Rocket obtains orphan drug exclusivity for a product candidate, that exclusivity may not effectively protect the product candidate from competition because different drugs can be approved for the same condition. In the U.S., even after an orphan drug is approved, the FDA may subsequently approve another drug for the same condition if the FDA concludes that the latter drug is not the same drug or is clinically superior in that it is shown to be safer, more effective or makes a major contribution to patient care. In the European Union, marketing authorization may be granted to a similar medicinal product for the same orphan indication if:

- the second applicant can establish in its application that its medicinal product, although similar to the orphan medicinal product already authorized, is safer, more effective or otherwise clinically superior;
- the holder of the marketing authorization for the original orphan medicinal product consents to a second orphan medicinal product application; or
- the holder of the marketing authorization for the original orphan medicinal product cannot supply sufficient quantities of orphan medicinal product.

**Risks Related to Manufacturing, Development and Commercialization of Rocket's Product Candidates**

***Products intended for use in gene therapies are novel, complex and difficult to manufacture. Rocket could experience production problems that result in delays in its development or commercialization programs, limit the supply of its products or otherwise harm its business.***

Rocket currently has development, manufacturing and testing agreements with third parties to manufacture supplies of its product candidates. Several factors could cause production interruptions, including equipment malfunctions, facility contamination, raw material shortages or contamination, natural disasters, disruption in utility services, human error or disruptions in the operations of suppliers.

Rocket's product candidates require processing steps that are more complex than those required for small molecule pharmaceuticals.

Rocket may encounter problems contracting with, hiring and retaining the experienced scientific, quality control and manufacturing personnel needed to operate Rocket's manufacturing process which could result in delays in Rocket's production or difficulties in maintaining compliance with applicable regulatory requirements.

Any problems in Rocket's manufacturing process or the facilities with which Rocket contracts could make Rocket a less attractive collaborator for potential partners, including larger pharmaceutical companies and academic research institutions, which could limit Rocket's access to attractive development programs. Problems in third-party manufacturing processes or facilities also could restrict Rocket's ability to meet market demand for Rocket's products. Additionally, should Rocket manufacturing agreements with third parties be terminated for any reason, there may be a limited number of manufacturers who would be suitable replacements and it could take a significant amount of time to transition the manufacturing to a replacement.

***Rocket may not successfully commercialize Rocket's drug candidates.***

Rocket's gene therapy product candidates are subject to the risks of failure inherent in the development of pharmaceutical products based on new technologies, and Rocket's failure to develop safe, commercially viable products would severely limit Rocket's ability to become profitable or to achieve significant revenues. Rocket may be unable to successfully commercialize Rocket's product candidates because of several reasons, including:

- some or all of Rocket's product candidates may be found to be unsafe or ineffective or otherwise fail to meet applicable regulatory standards or receive necessary regulatory clearances;
- Rocket's product candidates, if safe and effective, may nonetheless not be able to be developed into commercially viable products;
- it may be difficult to manufacture or market its product candidates on a scale that is necessary to ultimately deliver its products to end-users;
- proprietary rights of third parties may preclude Rocket from marketing its product candidates; and
- third parties may market superior or equivalent drugs which could adversely affect the commercial viability and success of Rocket's product candidates.

***Rocket's ability to successfully develop and commercialize its product candidates will substantially depend upon the availability of reimbursement funds for the costs of the resulting drugs and related treatments.***

Market acceptance and sales of Rocket's product candidates may depend on coverage and reimbursement policies and health care reform measures. Decisions about formulary coverage as well as levels at which government authorities and third-party payors, such as private health insurers and health maintenance organizations, reimburse patients for the price they pay for Rocket's products as well as levels at which these payors pay directly for Rocket's products, where applicable, could affect whether Rocket is able to successfully commercialize these products. Rocket cannot guarantee that reimbursement will be available for any of its product candidates. Nor can Rocket guarantee that coverage or reimbursement amounts will not reduce the demand for, or the price of, its product candidates. Rocket has not commenced efforts to have its product candidates reimbursed by government or third-party payors. If coverage and reimbursement are not available or are available only at limited levels, Rocket may not be able to successfully commercialize its products. In March 2010, the Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act, or the PPACA, was signed into law, and in recent years, numerous proposals to change the health care system in the U.S. have been made. These reform proposals include measures that would limit or prohibit payments for certain medical treatments or subject the pricing of drugs to government control. In addition, in many foreign countries, particularly the countries of the European Union, the pricing of prescription drugs is subject to government control. If Rocket's products are or become subject to government regulation that limits or prohibits payment for Rocket's products, or that subjects the price of Rocket's products to governmental control, Rocket may not be able to generate revenue, attain profitability or commercialize its products.

In addition, third-party payors are increasingly limiting both coverage and the level of reimbursement of new drugs. They may also impose strict prior authorization requirements and/or refuse to provide any coverage of uses of approved products for medical indications other than those for which the FDA has granted market approvals. As a result, significant uncertainty exists as to whether and how much third-party payors will reimburse patients for their use of newly-approved drugs. If Rocket is unable to obtain adequate levels of reimbursement for its product candidates, Rocket's ability to successfully market and sell its product candidates will be harmed. The manner and level at which reimbursement is provided for services related to Rocket's product candidates (e.g., for administration of Rocket's product to patients) is also important to successful commercialization of its product candidates. Inadequate reimbursement for such services may lead to physician resistance and limit Rocket's ability to market or sell its products.

***Rocket faces intense competition and rapid technological change and the possibility that its competitors may develop therapies that are more advanced or effective than Rocket's, which may adversely affect Rocket's financial condition and its ability to successfully commercialize its product candidates.***

Rocket is engaged in gene therapy for severe genetic and rare diseases, which is a competitive and rapidly changing field. Although Rocket is not currently aware of any gene therapy competitors addressing any of the same indications as those in Rocket's pipeline, Rocket may have competitors both in the United States and internationally, including major multinational pharmaceutical companies, biotechnology companies and universities and other research institutions.

Rocket's potential competitors may have substantially greater financial, technical and other resources, such as larger research and development staff, manufacturing capabilities, experienced marketing and manufacturing organizations. These competitors may succeed in developing, acquiring or licensing on an exclusive basis, products that are more effective or less costly than any product

candidate that Rocket may develop, or achieve earlier patent protection, regulatory approval, product commercialization and market penetration than Rocket. Additionally, technologies developed by Rocket's competitors may render its potential product candidates uneconomical or obsolete, and Rocket may not be successful in marketing Rocket's product candidates against those of Rocket's competitors.

In addition, as a result of the expiration or successful challenge of Rocket's patent rights, Rocket could face increased litigation with respect to the validity and/or scope of patents relating to Rocket's competitors' products. The availability of Rocket's competitors' products could limit the demand, and the price Rocket is able to charge, for any products that Rocket may develop and commercialize, thereby causing harm to Rocket's business, financial condition, results of operations and prospects.

***Rocket may not be successful in its efforts to build a pipeline of additional product candidates.***

Rocket's business model is centered on applying its expertise in rare genetic diseases by establishing focused selection criteria to develop and advance a portfolio of gene therapy product candidates through development into commercialization. Rocket may not be able to continue to identify and develop new product candidates in addition to the pipeline of product candidates that its research and development efforts to date have resulted in. Even if Rocket is successful in continuing to build Rocket's pipeline, the potential product candidates that Rocket identifies may not be suitable for clinical development. If Rocket does not successfully develop and commercialize product candidates based upon its approach, Rocket will not be able to obtain product revenue in future periods, which would likely result in significant harm to Rocket's financial position and results of operations.

***The success of Rocket's research and development activities, upon which Rocket primarily focuses, is uncertain.***

Rocket's primary focus is on its research and development activities and the clinical testing and commercialization of its product candidates. Research and development was Rocket's most significant operating expense for the year ended December 31, 2017. Research and development activities, by their nature, preclude definitive statements as to the time required and costs involved in reaching certain objectives. Actual research and development costs, therefore, could significantly exceed budgeted amounts and estimated time frames may require significant extension. Cost overruns, unanticipated regulatory delays or demands, unexpected adverse side effects or insufficient therapeutic efficacy will prevent or substantially slow Rocket's research and development effort and Rocket's business could ultimately suffer. Rocket anticipates that it will remain principally engaged in research and development activities for an indeterminate, but substantial, period of time.

**Risks Related to Third Parties**

***Rocket relies on third parties to conduct its preclinical studies and clinical trials and perform other tasks for Rocket. If these third parties do not successfully carry out their contractual duties, meet expected deadlines, or comply with regulatory requirements, Rocket may not be able to obtain regulatory approval for or commercialize Rocket's product candidates and Rocket's business, financial condition and results of operations could be substantially harmed.***

Rocket has relied upon and plans to continue to rely upon third parties, including contract research organizations, which we refer to as CROs, medical institutions, and contract laboratories to monitor and manage data for Rocket's ongoing preclinical and clinical programs. Nevertheless, Rocket maintains responsibility for ensuring that each of Rocket's clinical trials and preclinical studies is conducted in accordance with the applicable protocol, legal, regulatory, and scientific standards and Rocket's reliance on these third parties does not relieve Rocket of its regulatory responsibilities. Rocket and its vendors are required to comply with current requirements on GMP, good clinical practice, or GCP, and good laboratory practice, or GLP, which are a collection of laws and regulations enforced by the FDA, EMA or comparable foreign authorities for all of Rocket's drug candidates in clinical development.

Regulatory authorities enforce these regulations through periodic inspections of preclinical study and clinical trial sponsors, principal investigators, preclinical study and clinical trial sites, and other contractors. If Rocket or any of its vendors fails to comply with applicable regulations, the data generated in Rocket's preclinical studies and clinical trials may be deemed unreliable and the FDA, EMA or comparable foreign authorities may require Rocket to perform additional preclinical studies and clinical trials before approving Rocket's marketing applications. Rocket cannot assure you that upon inspection by a given regulatory authority, such regulatory authority will determine that any of Rocket's clinical trials comply with GCP regulations. In addition, Rocket's clinical trials must be conducted with products produced consistent with GMP regulations. Rocket's failure to comply with these regulations may require Rocket to repeat clinical trials, which would delay the development and regulatory approval processes.

If any of Rocket's relationships with these third parties, medical institutions, clinical investigators or contract laboratories terminate, Rocket may not be able to enter into arrangements with alternative CROs on commercially reasonable terms, or at all. In addition, Rocket's CROs are not its employees, and except for remedies available to Rocket under its agreements with such CROs, Rocket cannot control whether or not they devote sufficient time and resources to Rocket's ongoing preclinical and clinical programs.

If Rocket's CROs 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 data they obtain is compromised due to the failure to adhere to Rocket's protocols, regulatory requirements, or for other reasons, Rocket's clinical trials may be extended, delayed or terminated and Rocket may not be able to obtain regulatory approval for or successfully commercialize its product candidates. CROs may also generate higher costs than anticipated. As a result, Rocket's business, financial condition and results of operations and the commercial prospects for Rocket's product candidates could be materially and adversely affected, Rocket's costs could increase, and its ability to generate revenue could be delayed.

Switching or adding additional CROs, medical institutions, clinical investigators or contract laboratories involves additional cost and requires management time and focus. In addition, there is a natural transition period when a new CRO commences work replacing a previous CRO. As a result, delays occur, which can materially impact Rocket's ability to meet its desired clinical development timelines. Though Rocket carefully manages its relationships with its CROs, Rocket cannot guarantee that Rocket will not encounter similar challenges or delays in the future or that these delays or challenges will not have a material adverse effect on its business, financial condition or results of operations.

***Rocket expects to rely on third parties to conduct some or all aspects of its drug product manufacturing, research and preclinical and clinical testing, and these third parties may not perform satisfactorily.***

Rocket does not expect to independently conduct all aspects of its gene therapy production, product manufacturing, research and preclinical and clinical testing. Rocket currently relies, and expects to continue to rely, on third parties with respect to these items. In some cases, these third parties are academic, research or similar institutions that may not apply the same quality control protocols utilized in certain commercial settings.

Rocket's reliance on these third parties for research and development activities will reduce Rocket's control over these activities but will not relieve Rocket of its responsibility to ensure compliance with all required regulations and study protocols. If these third parties do not successfully carry out their contractual duties, meet expected deadlines or conduct Rocket's studies in accordance with regulatory requirements or Rocket's stated study plans and protocols, Rocket will not be able to complete, or may be delayed in completing, the preclinical and clinical studies required to support future product submissions and approval of its product candidates.

Generally, these third parties may terminate their engagements with Rocket at will upon notice. If Rocket needs to enter into alternative arrangements, it could delay Rocket's product development activities.

Reliance on third-party manufacturers entails risks to which Rocket would not be subject if Rocket manufactured the product candidates itself, including:

- the inability to negotiate manufacturing agreements with third parties under commercially reasonable terms;
- reduced control as a result of using third-party manufacturers for all aspects of manufacturing activities;
- the risk that these activities are not conducted in accordance with Rocket's study plans and protocols;
- termination or nonrenewal of manufacturing agreements with third parties in a manner or at a time that is costly or damaging to Rocket; and
- disruptions to the operations of its third-party manufacturers or suppliers caused by conditions unrelated to its business or operations, including the bankruptcy of the manufacturer or supplier.

Any of these events could lead to clinical study delays or failure to obtain regulatory approval, or impact Rocket's ability to successfully commercialize future products. Some of these events could be the basis for FDA action, including an injunction, recall, seizure or total or partial suspension of production.

***Rocket may not be successful in finding strategic collaborators for continuing development of certain of its product candidates or successfully commercializing its product candidates.***

Rocket may seek to establish strategic partnerships for developing and/or commercializing certain of Rocket's product candidates due to relatively high capital costs required to develop the product candidates, manufacturing constraints or other reasons. Rocket may not be successful in its efforts to establish such strategic partnerships or other alternative arrangements for its product candidates for several reasons, including because its research and development pipeline may be insufficient, Rocket's product candidates may be deemed to be at too early of a stage of development for collaborative effort or third parties may not view Rocket's

product candidates as having the requisite potential to demonstrate efficacy or market opportunity. In addition, Rocket may be restricted under existing agreements from entering into future agreements with potential collaborators.

If Rocket is unable to reach agreements with suitable licensees or collaborators on a timely basis, on acceptable terms or at all, Rocket may have to curtail the development of a product candidate, reduce or delay its development program, delay its potential commercialization, reduce the scope of any sales or marketing activities or increase Rocket's expenditures and undertake development or commercialization activities at its own expense. If Rocket elects to independently fund development or commercialization activities, Rocket may need to obtain additional expertise and additional capital, which may not be available on acceptable terms or at all. If Rocket fails to enter into collaboration arrangements and does not have sufficient funds or expertise to undertake necessary development and commercialization activities, Rocket may not be able to further develop its product candidates and Rocket's business, financial condition, results of operations and prospects may be materially harmed.

***The commercial success of any of Rocket's product candidates will depend upon its degree of market acceptance by physicians, patients, third-party payors and others in the medical community.***

Ethical, social, legal and other concerns about gene therapy could result in additional regulations restricting or prohibiting Rocket's products. Even with the requisite approvals from the FDA in the United States, the EMA in the European Union and other regulatory authorities internationally, the commercial success of Rocket's product candidates will depend, in part, on the acceptance of physicians, patients and health care payors of gene therapy products in general, and Rocket's product candidates in particular, as medically beneficial, cost-effective and safe. Any product that Rocket commercializes may not gain acceptance by physicians, patients, health care payors and others in the medical community. If these products do not achieve an adequate level of acceptance, Rocket may not generate significant product revenue and may not become profitable. The degree of market acceptance of gene therapy products and, in particular, Rocket's product candidates, if approved for commercial sale, will depend on several factors, including:

- the efficacy and safety of such product candidates as demonstrated in preclinical studies and clinical trials;
- the potential and perceived advantages of product candidates over alternative treatments;
- the cost of Rocket's treatment relative to alternative treatments;
- the clinical indications for which the product candidate is approved by the FDA or the European Commission;
- patient awareness of, and willingness to seek, gene therapy;
- the willingness of physicians to prescribe new therapies;
- the willingness of physicians to undergo specialized training with respect to administration of Rocket's product candidates;
- the willingness of the target patient population to try new therapies;
- the prevalence and severity of any side effects;
- product labeling or product insert requirements of the FDA, EMA or other regulatory authorities, including any limitations or warnings contained in a product's approved labeling;
- relative convenience and ease of administration;
- the strength of marketing and distribution support;
- the timing of market introduction of competitive products;
- publicity concerning Rocket's products or competing products and treatments; and
- sufficient third-party payor coverage and reimbursement.

Even if a potential product displays a favorable efficacy and safety profile in preclinical studies and clinical trials, market acceptance of the product will not be fully known until after it is approved and launched. The failure of any of Rocket's product candidates to achieve market acceptance could materially harm Rocket's business, financial condition, results of operations and prospects.

***RTW Investments, LP, Rocket's principal stockholder, may have the ability to significantly influence all matters submitted to stockholders for approval.***

RTW Investments, LP ("RTW"), in the aggregate, beneficially owns approximately 39.18% of Rocket's outstanding shares of common stock. This concentration of voting power gives RTW the power to significantly influence all matters submitted to our stockholders for approval, as well as our management and affairs. For example, RTW could significantly influence the election of directors and approval of any merger, consolidation or sale of all or substantially all of our assets.

**Risks Related to Personnel and Other Risks Related to Rocket's Business**

***Rocket's business could suffer if it loses the services of, or fails to attract, key personnel.***

Rocket is highly dependent upon the efforts of the company's senior management, including Rocket's Chief Executive Officer, Gaurav Shah, MD; Rocket's Chief Medical Officer and Head of Clinical Development, Jonathan Schwartz, MD; and Rocket's Chief Operating Officer and Head of Development, Kinnari Patel. The loss of the services of these individuals and other members of Rocket's senior management could delay or prevent the achievement of research, development, marketing, or product commercialization objectives. Rocket's employment arrangements with the key personnel are "at-will." Rocket does not maintain any "key-man" insurance policies on any of the key employees nor does Rocket intend to obtain such insurance. In addition, due to the specialized scientific nature of Rocket's business, Rocket is highly dependent upon its ability to attract and retain qualified scientific and technical personnel and consultants. In view of the stage of Rocket's organizational development and research and development programs, Rocket has restricted its hiring to research scientists, consultants and a small administrative staff and has made only limited investments in manufacturing, production, sales or regulatory compliance resources. There is intense competition among major pharmaceutical and chemical companies, specialized biotechnology firms and universities and other research institutions for qualified personnel in the areas of Rocket's operations, however, and Rocket may be unsuccessful in attracting and retaining these personnel.

***Rocket may need to expand its organization and may experience difficulties in managing this growth, which could disrupt its operations.***

As of March 1, 2018, Rocket had 20 full-time employees. As Rocket's business activities expand, Rocket may expand its full-time employee base and hire more consultants and contractors. Rocket's management may need to divert a disproportionate amount of its attention away from day-to-day activities and devote a substantial amount of time to managing these growth activities. Rocket may not be able to effectively manage the expansion of its operations, which may result in weaknesses in Rocket's infrastructure, operational setbacks, loss of business opportunities, loss of employees and reduced productivity among remaining employees. Rocket's expected growth could require significant capital expenditures and may divert financial resources from other projects, such as the development of additional product candidates. If Rocket's management is unable to effectively manage Rocket's growth, Rocket's expenses may increase more than expected, Rocket's ability to generate and/or grow revenues could be reduced and Rocket may not be able to implement its business strategy.

***Rocket's employees, principal investigators, consultants and commercial partners may engage in misconduct or other improper activities, including non-compliance with regulatory standards and requirements and insider trading.***

Rocket is exposed to the risk of fraud or other misconduct by its employees, consultants and commercial partners. Misconduct by these parties could include intentional failures to comply with the regulations of the FDA and non-U.S. regulators, provide accurate information to the FDA and non-U.S. regulators, comply with healthcare fraud and abuse laws and regulations in the United States and abroad, report financial information or data accurately or disclose unauthorized activities to Rocket. In particular, sales, marketing and business arrangements in the healthcare industry are subject to extensive laws and regulations intended to prevent fraud, misconduct, kickbacks, self-dealing and other abusive practices. These laws and regulations may restrict or prohibit a wide range of pricing, discounting, marketing and promotion, sales commission, customer incentive programs and other business arrangements. Such misconduct could also involve the improper use of information obtained in the course of clinical studies, which could result in regulatory sanctions and cause serious harm to Rocket's reputation or could cause regulatory agencies not to approve Rocket's product candidates. Rocket has a code of business ethics and conduct applicable to all employees, but it is not always possible to identify and deter employee or third-party misconduct, and the precautions Rocket takes to detect and prevent this activity may not be effective in controlling unknown or unmanaged risks or losses or in protecting Rocket 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 Rocket, and Rocket is not successful in defending the company or asserting its rights, those actions could have a significant impact on Rocket's business, including the imposition of significant fines or other sanctions.

***Rocket's internal computer systems, or those of its third-party collaborators or other contractors, may fail or suffer security breaches, which could result in a material disruption of Rocket's development programs.***

Rocket's internal computer systems and those of its current and any future collaborators and other consultants are vulnerable to damage from computer viruses, unauthorized access, natural disasters, terrorism, war and telecommunication and electrical failures. While Rocket has not experienced any such material system failure, accident or security breach to date, if such an event were to occur and cause interruptions in Rocket's operations, it could result in a material disruption of Rocket's development programs and its business operations, whether due to a loss of its trade secrets or other proprietary information or other similar disruptions. For example, the loss of clinical trial data from completed or future clinical trials could result in delays in Rocket's regulatory approval efforts and significantly increase Rocket's costs to recover or reproduce the data. To the extent that any disruption or security breach were to result in a loss of, or damage to, Rocket's data or applications, or inappropriate disclosure of confidential or proprietary information, Rocket could incur liability, its competitive position could be harmed and the further development and commercialization of Rocket's product candidates could be delayed.

***Rocket may be subject to claims that its employees, consultants or independent contractors have wrongfully used or disclosed confidential information of third parties or that Rocket's employees have wrongfully used or disclosed alleged trade secrets of their former employers.***

Rocket employs individuals who were previously employed at universities or other biotechnology or pharmaceutical companies, including its competitors or potential competitors. Although Rocket endeavors to ensure that its employees, consultants and independent contractors do not use the proprietary information or know-how of others in their work for Rocket, Rocket may be subject to claims that Rocket or its employees, consultants or independent contractors have inadvertently or otherwise used or disclosed intellectual property, including trade secrets or other proprietary information, of any of Rocket's employee's former employer or other third parties. Litigation may be necessary to defend against these claims. If Rocket fails in defending any such claims, in addition to paying monetary damages, Rocket may lose valuable intellectual property rights or personnel, which could adversely impact Rocket's business. Even if Rocket is successful in defending against such claims, litigation could result in substantial costs and be a distraction to management and other employees.

***Given Rocket's commercial relationships outside of the United States, in particular in the European Union, a variety of risks associated with international operations could harm its business.***

Rocket engages in various commercial relationships outside the United States and Rocket may commercialize its product candidates outside of the United States. In many foreign countries, it is common for others to engage in business practices that are prohibited by U.S. laws and regulations applicable to Rocket, including the Foreign Corrupt Practices Act. Although Rocket may implement policies and procedures specifically designed to comply with these laws and policies, there can be no assurance that Rocket's employees, contractors and agents will comply with these laws and policies. If Rocket is unable to successfully manage the challenges of international expansion and operations, Rocket's business and operating results could be harmed.

Rocket may be, and expect that it will be to the extent Rocket commercializes its product candidates outside the United States, subject to various risks associate with operating internationally, including:

- different regulatory requirements for approval of drugs and biologics in foreign countries;
- reduced protection for intellectual property rights;
- unexpected changes in tariffs, trade barriers and 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 currency fluctuations, which could result in increased operating expenses and reduced revenues, and other obligations incident to doing business in another country;
- workforce uncertainty in countries where labor unrest is more common than in the United States;
- shortages resulting from any events affecting raw material supply or manufacturing capabilities abroad;
- business interruptions resulting from geopolitical actions, including war and terrorism or natural disasters including earthquakes, typhoons, floods and fires, or from economic or political instability; and
- greater difficulty with enforcing Rocket's contracts in jurisdictions outside of the United States.

These and related risks could materially harm Rocket's business, financial condition, results of operations and prospects.

**Risks Related to Rocket's Intellectual Property**

***Rocket's rights to intellectual property for the development and commercialization of its product candidates are subject to the terms and conditions of licenses granted to Rocket by others.***

Rocket is heavily reliant upon licenses to certain patent rights and proprietary technology from third parties that are important or necessary to the development of its technology and products, including technology related to Rocket's manufacturing process and Rocket's gene therapy product candidates. These and other licenses may not provide exclusive rights to use such intellectual property and technology in all relevant fields of use and in all territories in which Rocket may wish to license its platform or develop or commercialize its technology and products in the future. As a result, Rocket may not be able to prevent competitors from developing and commercializing competitive products in territories not included in all of its licenses.

Licenses to additional third-party technology that may be required for Rocket's licensing or development programs may not be available in the future or may not be available on commercially reasonable terms, or at all, which could materially harm Rocket's business and financial condition.

In some circumstances, Rocket may not have the right to control the preparation, filing and prosecution of patent applications, or to maintain or enforce the patents, covering technology that Rocket's license from third parties. If Rocket's licensors fail to maintain such patents, or lose rights to those patents or patent applications, the rights Rocket has licensed may be reduced or eliminated and Rocket's right to develop and commercialize any of its products that are the subject of such licensed rights could be impacted. In addition to the foregoing, the risks associated with patent rights that Rocket licenses from third parties will also apply to patent rights Rocket may own in the future.

Furthermore, the research resulting in certain of Rocket's licensed patent rights and technology was funded by the U.S. government. As a result, the government may have certain rights, or march-in rights, to such patent rights and technology. When new technologies are developed with government funding, the government generally obtains certain rights in any resulting patents, including a non-exclusive license authorizing the government to use the invention for non-commercial purposes. These rights may permit the government to disclose Rocket's confidential information to third parties and to exercise march-in rights to use or allow third parties to use Rocket's licensed technology. The government can exercise its march-in rights if it determines that action is necessary because Rocket fails to achieve practical application of the government-funded technology, because action is necessary to alleviate health or safety needs, to meet requirements of federal regulations or to give preference to U.S. industry. In addition, Rocket's rights in such inventions may be subject to certain requirements to manufacture products embodying such inventions in the U.S. Any exercise by the government of such rights could harm Rocket's competitive position, business, financial condition, results of operations and prospects.

***If Rocket is unable to obtain and maintain patent protection for is products and related technology, or if the scope of the patent protection obtained is not sufficiently broad, Rocket's competitors could develop and commercialize products and technology similar or identical to Rocket's, and Rocket's ability to successfully commercialize its products may be harmed.***

Rocket's success depends, in large part, on its ability to obtain and maintain patent protection in the U.S. and other countries with respect to its product candidates and its manufacturing technology. Rocket's licensors have sought and Rocket may intend to seek to protect its proprietary position by filing patent applications in the U.S. and abroad related to many of its novel technologies and product candidates that are important to its business.

The patent prosecution process is expensive, time-consuming and complex, and Rocket may not be able to file, prosecute, maintain, enforce or license all necessary or desirable patent applications at a reasonable cost or in a timely manner. In addition, certain patents in the field of gene therapy that may have otherwise potentially provided patent protection for certain of Rocket's product candidates have expired or will soon expire. In some cases, the work of certain academic researchers in the gene therapy field has entered the public domain, which Rocket believes precludes its ability to obtain patent protection for certain inventions relating to such work. It is also possible that Rocket will fail to identify patentable aspects of its research and development output before it is too late to obtain patent protection.

Rocket is party to intellectual property license agreements with several entities, each of which is important to its business, and Rocket expects to enter into additional license agreements in the future. Rocket's patent portfolio consists solely of patent applications in-licensed pursuant to those license agreements, and those agreements impose, and Rocket expects that future license agreements will impose, various diligence, development and commercialization timelines, milestone obligations, payments and other obligations on Rocket. If Rocket or its licensees fail to comply with Rocket's obligations under these agreements, or Rocket is subject to a bankruptcy, the licensor may have the right to terminate the license, in which event Rocket could lose certain rights provided by the licenses, including that Rocket may not be able to market products covered by the license. In addition, the patent rights we have in-

licensed from Hutch relate only to Hutch's "Prodigy" platform, a portable platform for hematopoietic stem/progenitor cell gene therapy, and not to RP-L101, Rocket's LVV-based program targeting FA that is in-licensed from Hutch.

The patent position of biotechnology and pharmaceutical companies generally is highly uncertain, involves complex legal and factual questions and has, in recent years, been the subject of much litigation. As a result, the issuance, scope, validity, enforceability and commercial value of Rocket's patent rights are highly uncertain. Pending and future patent applications may not result in patents being issued which protect Rocket's technology or product candidates or which effectively prevent others from commercializing competitive technologies and product candidates. Changes in either the patent laws or interpretation of the patent laws in the U.S. and other countries may diminish the value of Rocket's patent rights or narrow the scope of Rocket's patent protection.

While we believe our intellectual property allows us to pursue our current development programs, several companies and academic institutions are pursuing alternate approaches to gene therapy and have built intellectual property around these approaches and methods. For example, Institute Pasteur controls a patent family related to vector elements for lentiviral-based gene therapy. These patents relate to an element that improves nuclear localization. While these patents expire from 2019 to 2023, if our products were to launch before these dates, we may need to secure a license. In addition, Rocket may not be aware of all third-party intellectual property rights potentially relating to its technology and product candidates. Publications of discoveries in the scientific literature often lag the actual discoveries, and patent applications in the U.S. and other jurisdictions are typically not published until 18 months after filing or, in some cases, not at all. Therefore, Rocket cannot be certain that Rocket was the first to make the inventions claimed in any owned or any licensed patents or pending patent applications, or that Rocket was the first to file for patent protection of such inventions.

Even if the patent applications Rocket licenses or may own in the future do issue as patents, they may not issue in a form that will provide Rocket with any meaningful protection, prevent competitors or other third parties from competing with Rocket or otherwise provide Rocket with any competitive advantage. Rocket's competitors or other third parties may avail themselves of safe harbor under the Drug Price Competition and Patent Term Restoration Act of 1984 (Hatch-Waxman Amendments) to conduct research and clinical trials and may be able to circumvent Rocket's patent rights by developing similar or alternative technologies or products in a non-infringing manner.

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

***If Rocket breaches its license agreements, it could have a material adverse effect on Rocket's commercialization efforts for its product candidates.***

If Rocket breaches any of the agreements under which Rocket licenses intellectual property relating to the use, development and commercialization rights to its product candidates or technology from third parties, Rocket could lose license rights that are important to its business. Licensing of intellectual property is of critical importance to Rocket's business and involves complex legal, business and scientific issues. Disputes may arise between Rocket and its licensors regarding intellectual property subject to a license agreement, including:

- the scope of rights granted under the license agreement;
- whether and the extent to which Rocket technology and processes infringe on intellectual property of the licensor that is not subject to the licensing agreement;
- Rocket's right to sublicense patent and other intellectual property rights to third parties under collaborative development relationships;
- Rocket's diligence obligations with respect to the use of the licensed technology in relation to its development and commercialization of is product candidates, and what activities satisfy those diligence obligations;
- the ownership of inventions and know-how resulting from the joint creation or use of intellectual property by Rocket's licensors and Rocket and its partners; and

- whether and the extent to which inventors are able to contest to the assignment of their rights to Rocket's licensors.

If disputes over intellectual property that Rocket has in-licensed prevent or impair Rocket's ability to maintain its current licensing arrangements on acceptable terms, Rocket may be unable to successfully develop and commercialize the affected product candidates. In addition, if disputes arise as to ownership of licensed intellectual property, Rocket's ability to pursue or enforce the licensed patent rights may be jeopardized. If Rocket or its licensors fail to adequately protect this intellectual property, Rocket's ability to commercialize its products could suffer.

***Rocket may incur substantial costs as a result of litigation or other proceedings relating to patent and other intellectual property rights and Rocket may be unable to protect its rights to, or use, its technology.***

If Rocket chooses to engage in legal action to prevent a third-party from using the inventions claimed in its patents or patents which Rocket licenses, that third-party has the right to ask the court to rule that these patents are invalid and/or should not be enforced against that third-party. These lawsuits are expensive and would consume time and other resources even if Rocket were successful in stopping the infringement of these patents. In addition, there is a risk that the court will decide that these patents are not valid and that Rocket does not have the right to stop the other party from using the inventions. There is also the risk that, even if the validity of these patents is upheld, the court will refuse to stop the other party on the ground that such other party's activities do not infringe Rocket's rights to these patents.

Furthermore, a third-party may claim that Rocket is using inventions covered by the third-party's patent rights and may go to court to stop Rocket from engaging in its normal operations and activities, including making or selling its product candidates. These lawsuits are costly and could affect Rocket's results of operations and divert the attention of managerial and technical personnel. There is a risk that a court would decide that Rocket is infringing the third-party's patents and would order Rocket to stop the activities covered by the patents. In addition, there is a risk that a court will order Rocket to pay the other party damages for having violated the other party's patents. The biotechnology industry has produced a proliferation of patents, and it is not always clear to industry participants which patents cover various types of products or methods of use. The coverage of patents is subject to interpretation by the courts, and the interpretation is not always uniform. If Rocket is sued for patent infringement, Rocket would need to demonstrate that its products or methods of use either do not infringe the patent claims of the relevant patent and/or that the patent claims are invalid. Proving invalidity, in particular, is difficult since it requires a showing of clear and convincing evidence to overcome the presumption of validity enjoyed by issued patents. Rocket's competitors have filed, and may in the future file, patent applications covering technology similar to Rocket's. Any such patent application may have priority over Rocket's in-licensed patent applications and could further require Rocket to obtain rights to issued patents covering such technologies. If another party has filed a U.S. patent application on inventions similar to Rocket's, Rocket may have to participate in an interference proceeding declared by the U.S. Patent and Trademark Office, to determine priority of invention in the U.S. The costs of these proceedings could be substantial, and it is possible that such efforts would be unsuccessful, resulting in a loss of Rocket's United States patent position with respect to such inventions.

Some of Rocket's competitors may be able to sustain the costs of complex patent litigation more effectively than Rocket can because they have substantially greater resources. In addition, any uncertainties resulting from the initiation and continuation of any litigation could have a material adverse effect on Rocket's ability to raise the funds necessary to continue its operations.

***If Rocket is unable to protect the confidentiality of its trade secrets, its business and competitive position may be harmed.***

In addition to the protection afforded by patents, Rocket relies upon unpatented trade secret protection, unpatented know-how and continuing technological innovation to develop and maintain its competitive position. Rocket seeks to protect its proprietary technology and processes, in part, by entering into confidentiality agreements with its contractors, collaborators, employees and consultants. Nonetheless, Rocket may not be able to prevent the unauthorized disclosure or use of its technical know-how or other trade secrets by the parties to these agreements, however, despite the existence generally of confidentiality agreements and other contractual restrictions. Monitoring unauthorized uses and disclosures is difficult and Rocket does not know whether the steps Rocket has taken to protect its proprietary technologies will be effective. If any of the contractors, collaborators, employees and consultants who are parties to these agreements breaches or violates the terms of any of these agreements, Rocket may not have adequate remedies for any such breach or violation. As a result, Rocket could lose its trade secrets. Enforcing a claim that a third-party illegally obtained and is using its trade secrets, like patent litigation, is expensive and time consuming and the outcome is unpredictable. In addition, courts outside the United States are sometimes less willing or unwilling to protect trade secrets.

Rocket's trade secrets could otherwise become known or be independently discovered by Rocket's competitors. Competitors could purchase Rocket's product candidates and attempt to replicate some or all of the competitive advantages Rocket derives from its development efforts, willfully infringe Rocket's intellectual property rights, design around Rocket's protected technology or develop

their own competitive technologies that fall outside of Rocket's intellectual property rights. If any of Rocket's trade secrets were to be lawfully obtained or independently developed by a competitor, Rocket would have no right to prevent them, or those to whom they communicate it, from using that technology or information to compete with Rocket. If Rocket's trade secrets are not adequately protected or sufficient to provide an advantage over Rocket's competitors, Rocket's competitive position could be adversely affected, as could Rocket's business. Additionally, if the steps taken to maintain Rocket's trade secrets are deemed inadequate, Rocket may have insufficient recourse against third parties for misappropriating Rocket's trade secrets.

***If Rocket is unable to obtain or protect intellectual property rights related to its product candidates, Rocket may not be able to compete effectively in its markets.***

Rocket relies upon a combination of patents, trade secret protection and confidentiality agreements to protect the intellectual property related to its product candidates. The strength of patents in the biotechnology and pharmaceutical field involves complex legal and scientific questions and can be uncertain. The patent applications that Rocket owns or in-licenses may fail to result in issued patents with claims that cover its product candidates in the United States or in other foreign countries. There is no assurance that all of the potentially relevant prior art relating to patents and patent applications owned or in-licensed by Rocket has been found, which can invalidate a patent or prevent a patent from issuing from a pending patent application. Even if patents do successfully issue and even if such patents cover Rocket's product candidates, third parties may challenge their validity, enforceability or scope, which may result in such patents being narrowed or invalidated. Furthermore, even if they are unchallenged, patents and patent applications owned or in-licensed by Rocket may not adequately protect Rocket's intellectual property, provide exclusivity for Rocket's product candidates or prevent others from designing around Rocket's claims. Any of these outcomes could impair Rocket's ability to prevent competition from third parties, which may have an adverse impact on Rocket's business.

If the patent applications Rocket holds or has in-licensed with respect to its programs or product candidates fail to issue, if their breadth or strength of protection is threatened, or if they fail to provide meaningful exclusivity for Rocket's product candidates, it could dissuade companies from collaborating with it to develop product candidates, and threaten Rocket's ability to commercialize, future products. In addition to Rocket's existing patent application filings, Rocket expects to continue to file additional patent applications covering Rocket's product candidates. Further, Rocket intends to pursue additional activities to protect the patents, trade secrets and other intellectual property covering its product candidates. Rocket cannot offer any assurances about which, if any, patents will issue, the breadth of any such patent or whether any issued patents will be found invalid and unenforceable or will be threatened by third parties. Any successful opposition to these patents or any other patents owned by or licensed to us could deprive Rocket of rights necessary for the successful commercialization of any product candidates that Rocket may develop. Further, if Rocket or the relevant licensor encounters delays in regulatory approvals, the period of time during which Rocket could market a product candidate under patent protection could be reduced. Since patent applications in the United States and most other countries are confidential for a period of time after filing, and some remain so until issued, Rocket cannot be certain that Rocket or the relevant licensor was the first to file any patent application related to a product candidate. Furthermore, if third parties have filed such patent applications, an interference proceeding in the United States can be initiated by a third-party to determine who was the first to invent any of the subject matter covered by the patent claims of Rocket's applications. In addition, patents have a limited lifespan. In the United States, the natural expiration of a patent is generally 20 years after it is filed. Various extensions may be available however the life of a patent, and the protection it affords, is limited. Even if patents covering Rocket's product candidates are obtained, once the patent life has expired for a product, Rocket may be open to competition from generic medications.

In addition to the protection afforded by patents, Rocket relies on trade secret protection and confidentiality agreements to protect proprietary know-how that is not patentable or that Rocket elects not to patent, processes for which patents are difficult to enforce and any other elements of Rocket's product candidate discovery and development processes that involve proprietary know-how, information or technology that is not covered by patents. However, trade secrets can be difficult to protect. Rocket seeks to protect its proprietary technology and processes, in part, by entering into confidentiality agreements with its employees, consultants, scientific advisors and contractors. Rocket also seeks to preserve the integrity and confidentiality of its data and trade secrets by maintaining physical security of its premises and physical and electronic security of its information technology systems. While Rocket has confidence in these individuals, organizations and systems, agreements or security measures may be breached, and Rocket may not have adequate remedies for any breach. In addition, Rocket's trade secrets may otherwise become known or be independently discovered by competitors.

Although Rocket expects all of its employees and consultants to assign their inventions to Rocket, and all of Rocket's employees, consultants, advisors and any third parties who have access to its proprietary know-how, information or technology to enter into confidentiality agreements, Rocket cannot provide any assurances that all such agreements have been duly executed or that its trade secrets and other confidential proprietary information will not be disclosed or that competitors will not otherwise gain access to its trade secrets or independently develop substantially equivalent information and techniques. Misappropriation or unauthorized disclosure of Rocket's trade secrets could impair its competitive position and may have a material adverse effect on its business. Additionally, if the steps taken to maintain Rocket's trade secrets are deemed inadequate, Rocket may have insufficient recourse

against third parties for misappropriating its trade secret. In addition, others may independently discover Rocket's trade secrets and proprietary information. For example, the FDA, as part of its Transparency Initiative, is currently considering whether to make additional information publicly available on a routine basis, including information that Rocket may consider to be trade secrets or other proprietary information, and it is not clear at the present time how the FDA's disclosure policies may change in the future, if at all.

Further, 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, Rocket may encounter significant problems in protecting and defending its intellectual property, both in the United States and abroad. If Rocket is unable to prevent material disclosure of the non-patented intellectual property related to its technologies to third parties, and there is no guarantee that Rocket will have any such enforceable trade secret protection, it may not be able to establish or maintain a competitive advantage in its market, which could materially adversely affect its business, results of operations and financial condition.

***Third-party claims of intellectual property infringement may prevent or delay Rocket's development and commercialization efforts.***

Rocket's commercial success depends in part on its avoiding infringement of the patents and proprietary rights of third parties. There is a substantial amount of litigation, both within and outside the United States, involving patent and other intellectual property rights in the biotechnology and pharmaceutical industries, including patent infringement lawsuits, interferences, oppositions, ex parte reexaminations, post-grant review, and *inter partes* review proceedings before the U.S. Patent and Trademark Office, or U.S. PTO, and corresponding foreign patent offices. Numerous U.S. and foreign issued patents and pending patent applications, which are owned by third parties, exist in the fields in which Rocket is pursuing development candidates. As the biotechnology and pharmaceutical industries expand and more patents are issued, the risk increases that Rocket's product candidates may be subject to claims of infringement of the patent rights of third parties.

Third parties may assert that Rocket is employing their proprietary technology without authorization. There may be third-party patents or patent applications with claims to materials, formulations, methods of manufacture or methods for treatment related to the use or manufacture of Rocket's product candidates. Because patent applications can take many years to issue, there may be currently pending patent applications which may later result in issued patents that Rocket's product candidates may infringe. In addition, third parties may obtain patents in the future and claim that use of Rocket's technologies infringes upon these patents. If any third-party patents were held by a court of competent jurisdiction to cover the manufacturing process of any of Rocket's product candidates, any molecules formed during the manufacturing process or any final product itself, the holders of any such patents may be able to block Rocket's ability to commercialize such product candidate unless Rocket obtained a license under the applicable patents, or until such patents expire. Similarly, if any third-party patents were held by a court of competent jurisdiction to cover aspects of Rocket's formulations, processes for manufacture or methods of use, including combination therapy, the holders of any such patents may be able to block Rocket's ability to develop and commercialize the applicable product candidate unless Rocket obtained a license or until such patent expires. In either case, such a license may not be available on commercially reasonable terms or at all.

Parties making claims against Rocket may obtain injunctive or other equitable relief, which could effectively block Rocket's ability to further develop and commercialize one or more of its product candidates. Defense of these claims, regardless of their merit, would involve substantial litigation expense and would be a substantial diversion of employee resources from Rocket's business. In the event of a successful claim of infringement against Rocket, Rocket may have to pay substantial damages, including treble damages and attorneys' fees for willful infringement, pay royalties, redesign Rocket's infringing products or obtain one or more licenses from third parties, which may be impossible or require substantial time and monetary expenditure.

***Rocket may not be successful in obtaining or maintaining necessary rights to gene therapy product components and processes for its development pipeline through acquisitions and in-licenses.***

Presently Rocket has rights to the intellectual property, through licenses from third parties and under patents that Rocket owns, to develop its gene therapy product candidates. Because Rocket's programs may involve additional product candidates that may require the use of proprietary rights held by third parties, the growth of Rocket's business will likely depend in part on its ability to acquire, in-license or use these proprietary rights. In addition, Rocket's product candidates may require specific formulations to work effectively and efficiently and these rights may be held by others. Rocket may be unable to acquire or in-license any compositions, methods of use, processes or other third-party intellectual property rights from third parties that Rocket identifies. The licensing and acquisition of third-party intellectual property rights is a competitive area, and a number of more established companies are also pursuing strategies to license or acquire third-party intellectual property rights that Rocket may consider attractive. These established companies may have a competitive advantage over Rocket due to their size, cash resources and greater clinical development and commercialization capabilities.

For example, Rocket sometimes collaborates with U.S. and foreign academic institutions to accelerate its preclinical research or development under written agreements with these institutions. Typically, these institutions provide Rocket with an option to negotiate a license to any of the institution's rights in technology resulting from the collaboration. Regardless of such right of first negotiation for intellectual property, Rocket may be unable to negotiate a license within the specified time frame or under terms that are acceptable to it. If Rocket is unable to do so, the institution may offer the intellectual property rights to other parties, potentially blocking Rocket's ability to pursue its program.

In addition, companies that perceive Rocket to be a competitor may be unwilling to assign or license rights to it. Rocket also may be unable to license or acquire third-party intellectual property rights on terms that would allow it to make an appropriate return on its investment. If Rocket is unable to successfully obtain rights to required third-party intellectual property rights, Rocket's business, financial condition and prospects for growth could suffer.

***If Rocket fails to comply with its obligations in the agreements under which Rocket licenses intellectual property rights from third parties or otherwise experiences disruptions to Rocket's business relationships with its licensors, Rocket could lose license rights that are important to its business.***

Rocket is a party to a number of intellectual property license agreements that are important to its business and expect to enter into additional license agreements in the future. Rocket's existing license agreements impose, and Rocket expects that future license agreements will impose, various diligence, milestone payment, royalty and other obligations on Rocket. If Rocket fails to comply with its obligations under these agreements, or Rocket is subject to a bankruptcy, the licensor may have the right to terminate the license, in which event Rocket would not be able to market products covered by the license.

Rocket may need to obtain licenses from third parties to advance its research or allow commercialization of its product candidates, and it has done so from time to time. Rocket may fail to obtain any of these licenses at a reasonable cost or on reasonable terms, if at all. In that event, Rocket may be required to expend significant time and resources to develop or license replacement technology. If Rocket is unable to do so, it may be unable to develop or commercialize the affected product candidates, which could harm its business significantly. Rocket cannot provide any assurances that third-party patents do not exist which might be enforced against its current product candidates or future products, resulting in either an injunction prohibiting its sales, or, with respect to its sales, an obligation on Rocket's part to pay royalties and/or other forms of compensation to third parties.

In many cases, patent prosecution of Rocket's licensed technology is controlled solely by the licensor. If Rocket's licensors fail to obtain and maintain patent or other protection for the proprietary intellectual property Rocket licenses from them, Rocket could lose its rights to the intellectual property or its exclusivity with respect to those rights, and its competitors could market competing products using the intellectual property. In certain cases, Rocket controls the prosecution of patents resulting from licensed technology. In the event Rocket breaches any of its obligations related to such prosecution, Rocket may incur significant liability to its licensing partners. Licensing of intellectual property is of critical importance to Rocket's business and involves complex legal, business and scientific issues and is complicated by the rapid pace of scientific discovery in Rocket's industry. Disputes may arise regarding intellectual property subject to a licensing agreement, including:

- the scope of rights granted under the license agreement and other interpretation-related issues;
- the extent to which Rocket's technology and processes infringe on intellectual property of the licensor that is not subject to the licensing agreement;
- the sublicensing of patent and other rights under Rocket's collaborative development relationships;
- Rocket's diligence obligations under the license agreement and what activities satisfy those diligence obligations;
- the ownership of inventions and know-how resulting from the joint creation or use of intellectual property by Rocket's licensors and Rocket and Rocket's partners; and
- the priority of invention of patented technology.

If disputes over intellectual property that Rocket has licensed prevent or impair Rocket's ability to maintain its current licensing arrangements on acceptable terms, Rocket may be unable to successfully develop and commercialize the affected product candidates.

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

Competitors may infringe Rocket's patents or the patents of Rocket's licensors. To counter infringement or unauthorized use, Rocket may be required to file infringement claims, which can be expensive and time-consuming. In addition, in an infringement

proceeding, a court may decide that a patent of Rocket's or Rocket's licensors is not valid, is unenforceable and/or is not infringed, or may refuse to stop the other party from using the technology at issue on the grounds that Rocket's patents do not cover the technology in question. An adverse result in any litigation or defense proceedings could put one or more of Rocket's patents at risk of being invalidated or interpreted narrowly and could put Rocket's patent applications at risk of not issuing.

Interference proceedings provoked by third parties or brought by Rocket may be necessary to determine the priority of inventions with respect to Rocket's patents or patent applications or those of Rocket's licensors. An unfavorable outcome could require Rocket to cease using the related technology or to attempt to license rights to it from the prevailing party. Rocket's business could be harmed if the prevailing party does not offer it a license on commercially reasonable terms. Rocket's defense of litigation or interference proceedings may fail and, even if successful, may result in substantial costs and distract Rocket's management and other employees. Rocket may not be able to prevent, alone or with its licensors, misappropriation of its intellectual property rights, particularly in countries where the laws may not protect those rights as fully as in the United States.

Furthermore, because of the substantial amount of discovery required in connection with intellectual property litigation, there is a risk that some of Rocket's confidential information could be compromised by disclosure during this type of litigation. There could also 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 material adverse effect on the price of Rocket's common stock.

***Patent reform legislation could increase the uncertainties and costs surrounding the prosecution of Rocket's patent applications and the enforcement or defense of Rocket's issued patents.***

On September 16, 2011, the Leahy-Smith America Invents Act, or the Leahy-Smith Act, was signed into law. The Leahy-Smith Act includes a number of significant changes to U.S. patent law, including provisions that affect the way patent applications will be prosecuted and may also affect patent litigation. The U.S. PTO is currently developing regulations and procedures to govern administration of the Leahy-Smith Act, and many of the substantive changes to patent law associated with the Leahy-Smith Act, and in particular, the first to file provisions, were enacted March 16, 2013. However, it is not clear what, if any, impact the Leahy-Smith Act will have on the operation of Rocket's business. However, the Leahy-Smith Act and its implementation could increase the uncertainties and costs surrounding the prosecution of Rocket's patent applications and the enforcement or defense of Rocket's issued patents, all of which could have a material adverse effect on Rocket's business and financial condition.

***Rocket may be subject to claims that its employees, consultants or independent contractors have wrongfully used or disclosed confidential information of third parties or that its employees have wrongfully used or disclosed alleged trade secrets of their former employers.***

Rocket employs individuals who were previously employed at universities or other biotechnology or pharmaceutical companies, including Rocket's competitors or potential competitors. Although Rocket tries to ensure that its employees, consultants and independent contractors do not use the proprietary information or know-how of others in their work for Rocket, Rocket may be subject to claims that Rocket or its employees, consultants or independent contractors have inadvertently or otherwise used or disclosed intellectual property, including trade secrets or other proprietary information, of any of its employee's former employer or other third parties. Litigation may be necessary to defend against these claims. If Rocket fails in defending any such claims, in addition to paying monetary damages, Rocket may lose valuable intellectual property rights or personnel, which could adversely impact Rocket's business. Even if Rocket is successful in defending against such claims, litigation could result in substantial costs and be a distraction to management and other employees.

***Rocket may be subject to claims challenging the inventorship or ownership of its patents and other intellectual property.***

Rocket may also be subject to claims that former employees, collaborators or other third parties have an ownership interest in its patents or other intellectual property. Rocket has had in the past, and it may also have to in the future, ownership disputes arising, for example, from conflicting obligations of consultants or others who are involved in developing Rocket's product candidates. Litigation may be necessary to defend against these and other claims challenging inventorship or ownership. If Rocket fails in defending any such claims, in addition to paying monetary damages, it 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 Rocket's business. Even if Rocket is successful in defending against such claims, litigation could result in substantial costs and be a distraction to management and other employees.

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

Periodic maintenance fees, renewal fees, annuity fees and various other governmental fees on patents and/or applications will be due to be paid to the U.S. PTO and various governmental patent agencies outside of the United States in several stages over the lifetime of the patents and/or applications. Rocket and, to its knowledge, its licensors have systems in place to remind them to pay these fees, and Rocket and, to its knowledge, its licensors employ outside firms and rely on their respective outside counsel to pay these fees due to non-U.S. patent agencies. The U.S. PTO and various non-U.S. governmental patent agencies require compliance with a number of procedural, documentary, fee payment and other similar provisions during the patent application process. Rocket and, to its knowledge, its licensors employ reputable law firms and other professionals to help them comply, and in many cases, an inadvertent lapse can be cured by payment of a late fee or by other means in accordance with the applicable rules. However, there are situations in which non-compliance 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. In such an event, Rocket's competitors might be able to enter the market and this circumstance would have a material adverse effect on Rocket's business.

***Issued patents covering Rocket's product candidates could be found invalid or unenforceable if challenged in court.***

If Rocket or one of Rocket's licensing partners initiated legal proceedings against a third-party to enforce a patent covering one of Rocket's product candidates, the defendant could counterclaim that the patent covering Rocket's product candidate is invalid and/or unenforceable. In patent litigation in the United States, defendant counterclaims alleging invalidity and/or unenforceability are commonplace. Grounds for a validity challenge could be an alleged failure to meet any of several statutory requirements, including patent eligible subject matter, lack of novelty, obviousness or non-enablement. Grounds for an unenforceability assertion could be an allegation that someone connected with prosecution of the patent withheld relevant information from the U.S. PTO, or made a misleading statement, during prosecution. 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, post grant review, and equivalent proceedings in foreign jurisdictions (e.g., opposition proceedings). Such proceedings could result in revocation or amendment to Rocket's or its licensing partners' patents in such a way that they no longer cover Rocket's product candidates. The outcome following legal assertions of invalidity and unenforceability is unpredictable. With respect to the validity question, for example, Rocket cannot be certain that there is no invalidating prior art, of which Rocket and the patent examiner were unaware during prosecution. If a defendant were to prevail on a legal assertion of invalidity and/or unenforceability, Rocket would lose at least part, and perhaps all, of the patent protection on its product candidates. Such a loss of patent protection would have a material adverse impact on Rocket's business.

***Changes in U.S. patent law could diminish the value of patents in general, thereby impairing Rocket's ability to protect its products.***

As is the case with other biotechnology companies, Rocket's success is heavily dependent on intellectual property, particularly patents. Obtaining and enforcing patents in the biotechnology industry involve both technological and legal complexity, and therefore obtaining and enforcing biotechnology patents is 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 Rocket's 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 U.S. PTO, the laws and regulations governing patents could change in unpredictable ways that would weaken Rocket's ability to obtain new patents or to enforce its existing patents and patents that it might obtain in the future.

***Rocket may not be able to protect its intellectual property rights throughout the world.***

Filing, prosecuting and defending patents on product candidates in all countries throughout the world would be prohibitively expensive, and Rocket's intellectual property rights in some countries outside the United States can be less extensive than those in the United States. In addition, the laws of some foreign countries do not protect intellectual property rights to the same extent as federal and state laws in the United States. Consequently, Rocket may not be able to prevent third parties from practicing its inventions in all countries outside the United States, or from selling or importing products made using Rocket's inventions in and into the United States or other jurisdictions. Competitors may use Rocket's technologies in jurisdictions where it has not obtained patent protection to develop their own products and further, may export otherwise infringing products to territories where Rocket has patent protection, but enforcement is not as strong as that in the United States. These products may compete with Rocket's products and its patents or other intellectual property rights may not be effective or sufficient to prevent them from competing.

Many companies have encountered significant problems in protecting and defending intellectual property rights in foreign jurisdictions. The legal systems of certain countries, particularly certain developing countries, do not favor the enforcement of patents, trade secrets and other intellectual property protection, particularly those relating to biotechnology products, which could make it difficult for Rocket to stop the infringement of its patents or marketing of competing products in violation of its proprietary rights generally. Proceedings to enforce Rocket's patent rights in foreign jurisdictions could result in substantial costs and divert its efforts

and attention from other aspects of its business, could put its patents at risk of being invalidated or interpreted narrowly and its patent applications at risk of not issuing and could provoke third parties to assert claims against it. Rocket may not prevail in any lawsuits that it initiates and the damages or other remedies awarded, if any, may not be commercially meaningful. Accordingly, Rocket's efforts to enforce its intellectual property rights around the world may be inadequate to obtain a significant commercial advantage from the intellectual property that Rocket develops or licenses.

## Item 2. Properties

*Corporate Headquarters*

Our corporate headquarters are located in New York, New York, and consist of approximately 4,400 square feet of leased office and laboratory space under a lease that expires in July 2021.

*Facility in Lexington, Massachusetts*

We currently lease approximately 15,000 square feet of office space in Lexington, Massachusetts under a lease that expires in February 2023.

## Item 3. Legal Proceedings

On January 6, 2017, a purported stockholder of Inotek filed a putative class action in the U.S. District Court for the District of Massachusetts, captioned Whitehead v. Inotek Pharmaceuticals Corporation, et al., No. 1:17-cv-10025. An amended complaint was filed on July 10, 2017, and a second amended complaint was filed on September 5, 2017. The second amended complaint alleges violations of Sections 10(b) and 20(a) of the Securities Exchange Act of 1934 and SEC Rule 10b-5 against Inotek, David Southwell, and Rudolf Baumgartner based on allegedly false and misleading statements and omissions regarding its phase 2 and phase 3 clinical trials of *trabodenoson*. The lawsuit seeks, among other things, unspecified compensatory damages for purchasers of Inotek's common stock between July 23, 2015 and July 10, 2017, as well as interest and attorneys' fees and costs. The defendants filed a motion to dismiss the second amended complaint on October 6, 2017, the plaintiffs opposed the motion on December 5, 2017, and the defendants filed a reply on January 16, 2018. The Company continues to vigorously defend itself against this claim.

From time to time, we may be subject to other various legal proceedings and claims that arise in the ordinary course of our business activities. Although the results of litigation and claims cannot be predicted with certainty, we do not believe we are party to any other claim or litigation the outcome of which, if determined adversely to us, would individually or in the aggregate be reasonably expected to have a material adverse effect on our business. Regardless of the outcome, litigation can have an adverse impact on us because of defense and settlement costs, diversion of management resources and other factors.

## Item 4. Mine Safety Disclosures

Not applicable.

## PART II

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

**Market Information**

On January 4, 2018, Inotek and Private Rocket completed the Reverse Merger. Immediately prior to the Reverse Merger, Inotek completed a 1-for-4 reverse stock split. Following the Reverse Merger, we changed the name of the combined company to "Rocket Pharmaceuticals, Inc." and changed the symbol under which our stock trades on Nasdaq to "RCKT." Our common stock originally began trading on the Nasdaq Global Select Market on February 18, 2015 under the symbol "ITEK". Prior to that time, there was no public market for our common stock. The following table shows the high and low sale prices per share of our common stock as reported on the Nasdaq Global Select Market for the period indicated, adjusted for the 1-for-4 reverse stock split:

| 2016 | High | Low |
|---|---|---|
| First Quarter | $ 46.36 | $ 24.36 |
| Second Quarter | $ 42.56 | $ 26.92 |
| Third Quarter | $ 39.04 | $ 26.56 |
| Fourth Quarter | $ 37.92 | $ 24.00 |

| 2017 | High | Low |
|---|---|---|
| First Quarter | $ 8.60 | $ 6.10 |
| Second Quarter | $ 8.80 | $ 6.60 |
| Third Quarter | $ 7.30 | $ 3.60 |
| Fourth Quarter | $ 12.12 | $ 7.76 |

On March 1, 2018, the closing price for our common stock as reported on the Nasdaq Global Market was $16.78.

**Stockholders**

As of March 1, 2018, there were 50 stockholders of record, which excludes stockholders whose shares were held in nominee or street name by brokers.

**Dividend Policy**

We have never declared or paid any cash dividends on our capital stock. We currently intend to retain all available funds and any future earnings, if any, to fund the development and expansion of our business and we do not anticipate paying any cash dividends in the foreseeable future. Any future determination to pay cash dividends will be made at the discretion of our board of directors. In addition, the terms of our outstanding indebtedness restrict our ability to pay cash dividends, and any future indebtedness that we may incur could preclude us from paying cash dividends. Investors should not purchase our common stock with the expectation of receiving cash dividends.

**Securities Authorized for Issuance Under Equity Compensation Plans**

The following sets for the aggregate information of Inotek's equity compensation plans in effect as of December 31, 2017. Inotek's equity plans consist of the Amended and Restated 2014 Stock Option and Incentive Plan (the "2014 Plan"), the 2004 Stock Option and Incentive Plan (the "2004 Plan"), and the 2014 Employee Stock Purchase Plan ("ESPP").

| Plan Category | Number of securities to be issued upon exercise of outstanding options, warrants and rights (a) | Weighted-average exercise price of outstanding options, warrants and rights (b) | Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a)) (c) |
|---|---|---|---|
| Equity compensation plans approved by security holders (1) (2) | 795,239 | $ 21.40 | 269,073 |
| Equity compensation plans not approved by security holders | — | — | — |
| Total | 795,239 | $ 21.40 | 269,073 |

(1) No additional awards will be made under the 2004 Plan.
(2) Includes 271,719 restricted stock units ("RSUs") issued and outstanding pursuant to the 2014 Plan. There is no exercise price associated with these RSUs and therefore the weighted average price of outstanding options, warrants and rights reflect only the weighted average exercise price of the 523,520 options outstanding at December 31, 2017, issued pursuant to the 2004 Plan and 2014 Plan.

**Recent Sales of Unregistered Securities**

None.

**Issuer Purchases of Equity Securities**

There were no repurchases of shares of our common stock made during the year ended December 31, 2017.

## Item 6. Selected Financial Data

The following selected consolidated financial data should be read in conjunction with Item 7, "Management's Discussion and Analysis of Financial Condition and Results of Operations" and the consolidated financial statements and the notes thereto included elsewhere in this report. The selected consolidated financial data in this section are not intended to replace our consolidated financial statements and the related notes. Our historical results are not necessarily indicative of our future results.

The financial information included in this Selected Financial Data is that of Inotek prior to the Reverse Merger, because the Reverse Merger was consummated after the period covered by the financial statements included in this Annual Report on Form 10-K. Accordingly, the historical financial information included in this Annual Report on Form 10-K, unless otherwise indicated or as the context otherwise requires, is that of Inotek and its subsidiaries prior to the Reverse Merger.

| | For the Years Ended December 31, | | | | |
|---|---|---|---|---|---|
| **(in thousands, except share and per share data)** | **2017** | **2016** | **2015** | **2014** | **2013** |
| **Consolidated Statements of Operations Data:** | | | | | |
| Operating expenses: | | | | | |
| Research and development | $ (14,193) | $ (31,985) | $ (12,554) | $ (5,592) | $ (5,330) |
| General and administrative | (12,544) | (9,894) | (7,842) | (2,112) | (1,324) |
| Loss from operations | (26,737) | (41,879) | (20,396) | (7,704) | (6,654) |
| Interest expense | (3,579) | (1,418) | (1,230) | (980) | (884) |
| Other income | — | — | — | — | 3 |
| Interest income | 819 | 443 | 89 | — | — |
| Loss on extinguishment of debt | — | — | (4,399) | — | — |
| Change in fair value of warrant liabilities | — | — | 267 | (845) | (81) |
| Change in fair value of Convertible Bridge Notes redemption rights derivative | — | — | 480 | (2) | — |
| Change in fair value of 2020 Convertible Notes derivative liability | — | — | (42,793) | — | — |
| Net loss | $ (29,497) | $ (42,854) | $ (67,982) | $ (9,531) | $ (7,616) |
| Net loss per common share—basic and diluted | $ (4.36) | $ (6.41) | $ (14.88) | $ (54.08) | $ (40.20) |
| Weighted-average common shares outstanding—basic and diluted | 6,765,451 | 6,683,794 | 4,577,833 | 255,022 | 254,545 |

| (in thousands) | December 31, 2017 | 2016 | 2015 | 2014 | 2013 |
|---|---|---|---|---|---|
| **Consolidated Balance Sheet Data:** | | | | | |
| Cash and cash equivalents | $ 78,720 | $ 29,798 | $ 80,042 | $ 3,618 | $ 12,793 |
| Short-term investments | 21,294 | 96,675 | 31,238 | — | — |
| Total assets | 101,778 | 129,647 | 113,321 | 5,520 | 12,863 |
| Convertible notes payable | 49,541 | 48,960 | — | 1,541 | — |
| Notes payable | — | — | — | 5,613 | 6,805 |
| Total liabilities | 54,014 | 56,479 | 4,508 | 10,278 | 10,525 |
| Accumulated deficit | (268,374) | (238,877) | (196,023) | (128,041) | (118,510) |
| Total stockholders' equity (deficit) | 47,764 | 73,168 | 108,813 | (51,559) | (38,895) |

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

*The following discussion and analysis of our financial condition and results of operations should be read in conjunction with our "Selected Financial Data" and our consolidated financial statements, related notes and other financial information included elsewhere in this Annual Report on Form 10-K. This discussion contains forward-looking statements that involve risks and uncertainties such as our plans, objectives, expectations and intentions. Our actual results could differ materially from those discussed in these forward looking statements. Factors that could cause or contribute to such differences include, but are not limited to, those identified below and those discussed in "Risk Factors" included elsewhere in this Annual Report on Form 10-K.*

*Unless otherwise indicated, references to the terms the "combined company," "Rocket," the "Company," "we," "our" and "us" refer to Rocket Pharmaceuticals, Inc. (formerly known as Inotek Pharmaceuticals Corporation) and its subsidiaries after the reverse merger described herein. The term "Private Rocket" refers to privately-held Rocket Pharmaceuticals, Ltd. prior to its merger with Rome Merger Sub, a wholly owned subsidiary of Inotek Pharmaceuticals Corporation. The term "Inotek" refers to Inotek Pharmaceuticals Corporation and its subsidiaries prior to the reverse merger.*

*The financial information included in this Management's Discussion and Analysis of Financial Condition and Results of Operations is that of Inotek prior to the reverse merger because the reverse merger was consummated after the period covered by the financial statements included in this Annual Report on Form 10-K. Accordingly, the historical financial information included in this Annual Report on Form 10-K, unless otherwise indicated or as the context otherwise requires, is that of Inotek and its subsidiaries prior to the reverse merger.*

### Introduction

We are a multi-platform biotechnology company focused on the development of first-in-class gene therapies for rare and devastating pediatric diseases. We have two LVV programs currently undergoing clinical trials targeting Fanconi Anemia ("FA"), a genetic defect in the bone marrow that reduces production of blood cells, and three additional LVV programs targeting other rare genetic diseases, two of which we expect to file a rolling IMPD for in the next 12 months. In addition, we have an AAV program for which we expect to file an IND application in the next 12 months, which will permit the commencement of human clinical studies shortly thereafter. We have full global commercialization and development rights to all of our product candidates under royalty-bearing license agreements, with the exception of the CRISPR/Cas9 development program for which we currently have development rights.

Our two leading LVV and AAV technology platforms are each being designed in collaboration with leading academic and industry partners. Through our gene therapy platforms, we aim to restore normal cellular function by modifying the defective genes that cause each of the targeted disorders.

### Recent Developments

On January 4, 2018, Inotek and Private Rocket completed a business combination in accordance with the terms of the Agreement and Plan of Merger and Reorganization (the "Merger Agreement"), dated as of September 12, 2017, by and among Inotek, Rome Merger Sub, a wholly owned subsidiary of Inotek ("Merger Sub"), and Private Rocket, pursuant to which Merger Sub merged with and into Private Rocket, with Private Rocket surviving as a wholly owned subsidiary of Inotek. This transaction is referred to as the "Reverse Merger."

Immediately prior to the Reverse Merger, on January 4, 2018, Inotek effected a 1-for-4 reverse stock split on its issued and outstanding common stock. Upon the closing of the Reverse Merger, each outstanding share of Private Rocket's common stock converted into approximately 76.185 shares of Inotek's common stock. In addition, each outstanding option to purchase Private Rocket's stock options prior to the effective time of the Reverse Merger was converted into an option to purchase Inotek's common stock. No fractional shares of Inotek's common stock were issued in connection with the Reverse Merger. Instead, Private Rocket's stockholders received cash in lieu of any fractional shares of Rocket's common stock such stockholders would have otherwise been entitled to receive in accordance with the Merger Agreement. Immediately following the Reverse Merger, the combined company changed its name from "Inotek Pharmaceuticals Corporation" to "Rocket Pharmaceuticals, Inc." The Reverse Merger will be accounted for as a reverse merger under the acquisition method of accounting. After reviewing the relative voting rights, the composition of the board of directors and the composition of senior management of the combined company after the Reverse Merger, it was determined that Private Rocket will be treated as the accounting acquirer and Inotek will be treated as the "acquired" company for financial reporting purposes under the acquisition method of accounting. (Also see Notes 1 and 12 in the accompanying notes to consolidated financial statements.)

### Inotek Overview

Prior to the Reverse Merger, Inotek was a clinical-stage biopharmaceutical company focused on the discovery, development and commercialization of therapies for ocular diseases, including glaucoma. After failing to meet the primary endpoints in its first pivotal

Phase 3 trial of *trabodenoson* monotherapy ("MATrX-1") and its Phase 2 trial of *trabodenoson* in a fixed-dose combination therapy with *latanoprost* ("FDC"), Inotek voluntarily discontinued its development of *trabodenoson* in 2017.

In September 2017, in order to reduce operating expenses and conserve cash resources, Inotek entered into separation agreements with ten of its employees. Pursuant to the separation agreements, Inotek agreed to provide severance payments and continued medical, dental and vision coverage pursuant to the Consolidated Omnibus Budget Reconciliation Act of 1986 ("COBRA") (of the employer's portion of the premium cost) for up to six months, primarily depending on duration of each individual employee's service. Inotek recorded a charge to operations for an aggregate of $748 in 2017 for these terminations, of which $711 and $37 was reflected in research and development and general and administrative expenses, respectively (see Note 8 in the accompanying notes to the consolidated financial statements).

In addition, for each of the ten terminated employees, Inotek accelerated the vesting of all unvested Restricted Stock Units and stock options held by the employee and recorded an incremental charge of $158 in 2017, of which $142 and $16 was reflected in research and development and general and administrative expenses, respectively (see Note 8 in the accompanying notes to the consolidated financial statements).

Historically, Inotek devoted substantially all of its resources to research and development efforts relating to its product candidates, including conducting clinical trials, providing general and administrative support for these operations and protecting its intellectual property. Inotek did not have any products approved for sale and did not generate any revenue from product sales or other sources. From Inotek's inception through December 31, 2017, it funded its operations primarily through the sales of equity and debt securities. In February 2015, Inotek completed an initial public offering ("IPO") of its common stock and a concurrent offering of convertible senior notes, raising an aggregate of $55.5 million in net proceeds. In August 2015, Inotek completed a follow-on offering of its common stock, raising an aggregate of $74.0 million in net proceeds. In August 2016, Inotek completed a second offering of convertible senior notes, raising an aggregate of $48.7 million in net proceeds.

Inotek incurred net losses in each year since its inception. As of December 31, 2017, Inotek had an accumulated deficit of $268.4 million and cash and cash equivalents and short-term investments aggregating $100.0 million.

**Financial Overview**

***Research and Development Expenses***

Prior to the suspension of further research and development activities, Inotek's research and development expenses consisted primarily of the costs associated with its research and development activities, conducting preclinical studies and clinical trials and activities related to regulatory filings. Inotek's research and development expenses consisted of:

- direct clinical and non-clinical expenses which include expenses incurred under agreements with contract research organizations ("CROs"), contract manufacturing organizations, clinical sites and costs associated with preclinical activities and development activities and costs associated with regulatory activities;
- employee and consultant-related expenses, including compensation, benefits, travel and stock-based compensation expense for research and development personnel as well as consultants that conduct and support clinical trials and preclinical studies; and
- facilities and other expenses, which include direct and allocated expenses for rent and maintenance of facilities, insurance and other supplies used in research and development activities.

Inotek recognized research and development costs as incurred and recorded costs for some development activities, such as clinical trials, based on an evaluation of the progress to completion of specific tasks using data such as subject enrollment, clinical site activations or other information provided by its vendors.

The following table summarizes Inotek's research and development expenses by type of activity for the twelve months ended December 31, 2017 and 2016 :

| (in thousands) | For the Years Ended December 31, 2017 | 2016 |
|---|---|---|
| *Trabodenoson*—direct clinical and non-clinical | $ 8,269 | $ 22,598 |
| Personnel and other expenses: | | |
| Employee and consultant-related expenses | 4,777 | 7,763 |
| Target validation expenses | 614 | 802 |
| Facility expenses | 418 | 533 |
| Other expenses | 115 | 289 |
| Total personnel and other expenses | 5,924 | 9,387 |
| Total research and development expenses | $ 14,193 | $ 31,985 |

Inotek does not track *trabodenoson*-related expenses by product candidate. All expenses related to *trabodenoson* as a monotherapy also benefited the FDC product candidate *trabodenoson* with *latanoprost*. Inotek has expended approximately $83 million for external development costs related to *trabodenoson* from inception through December 31, 2017. No further *trabodenoson*-related development expenses are expected due to Inotek's decision to voluntarily discontinue further research and development of *trabodenoson*.

***Private Rocket Research and Development Expenses***

Private Rocket's research and development costs include salaries and staff costs, licensing costs, regulatory and scientific consulting fees, as well as contract research, and share-based compensation expense. Private Rocket does not currently have any commercial biopharmaceutical products and does not expect to have any for several years, if at all. Accordingly, research and development costs are expensed as incurred. While certain of Private Rocket's research and development costs may have future benefits, the policy of expensing all research and development expenditures is predicated on the fact that the Company has no history of successful commercialization of product candidates to base any estimate of the number of future periods that would be benefited.

The process of conducting the necessary clinical research to obtain regulatory approval is costly and time consuming and the successful development of our product candidates is highly uncertain. Our future research and development expenses will depend on the clinical success of our product candidates, as well as ongoing assessments of the commercial potential of such product candidates. In addition, we cannot forecast with any degree of certainty 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. We expect our research and development expenses to increase in future periods for the foreseeable future as we seek to complete development of our product candidates.

The successful development and commercialization of our product candidates is highly uncertain. This is due to the numerous risks and uncertainties associated with product development and commercialization, including the uncertainty of:

- the scope, progress, outcome and costs of our clinical trials and other research and development activities;
- the efficacy and potential advantages of our product candidates compared to alternative treatments, including any standard of care;
- the market acceptance of our product candidates;
- obtaining, maintaining, defending and enforcing patent claims and other intellectual property rights;
- significant and changing government regulation; and
- the timing, receipt and terms of any marketing approvals.

A change in the outcome of any of these variables with respect to the development of our product candidates that we may develop could mean a significant change in the costs and timing associated with the development of our product candidates. For example, if the FDA or another regulatory authority were to require us to conduct clinical trials or other testing beyond those that we currently contemplate for the completion of clinical development of any of our product candidates that we may develop or if we experience significant delays in enrollment in any of our clinical trials, we could be required to expend significant additional financial resources and time on the completion of clinical development of that product candidate.

***General and Administrative Expenses***

General and administrative expenses consisted of salaries and related benefit costs, including stock-based compensation for administrative personnel. Other significant general and administrative expenses include professional fees for legal, patents, consulting, investor and public relations, auditing and tax services as well as other direct and allocated expenses for rent and maintenance of facilities, insurance and other supplies used in general and administrative activities. In 2017, included in general and administrative expenses were approximately $2.3 million of costs related to the Reverse Merger.

***Private Rocket General and Administrative Expenses***

Private Rocket's general and administrative expenses consist of salaries and related benefit costs, including stock-based compensation for administrative personnel. In addition, other significant general and administrative expenses include professional fees for legal, patents, consulting, investor and public relations, auditing and tax services as well as other direct and allocated expenses for rent and maintenance of facilities, insurance and other supplies used in general and administrative activities. We anticipate that our general and administrative expenses will increase in future periods to support increases in our research and development activities and as a result of increased headcount, increased stock-based compensation charges, expanded infrastructure, increased costs for insurance, and increased legal, compliance, accounting and investor and public relations expenses associated with being a public company.

***Interest Expense***

Interest expense related to Inotek's 2021 Convertible Notes, which are due in August 2021.

***Interest Income***

Interest income related to interest earned from invested funds.

**Results of Operations**

***Comparison of the Years Ended December 31, 2017 and 2016***

The following table summarizes Inotek's results of operations for the years ended December 31, 2017 and 2016:

| (in thousands) | For the Years Ended December 31, 2017 | 2016 | Increase (Decrease) |
|---|---|---|---|
| Operating expenses: | | | |
| Research and development | $ (14,193) | $ (31,985) | $ (17,792) |
| General and administrative | (12,544) | (9,894) | 2,650 |
| Loss from operations | (26,737) | (41,879) | (15,142) |
| Interest expense | (3,579) | (1,418) | 2,161 |
| Interest income | 819 | 443 | (376) |
| Net loss | $ (29,497) | $ (42,854) | $ (13,357) |

*Loss from operations*

Loss from operations decreased $15.1 million to $26.7 million for the year ended December 31, 2017, as compared to $41.9 million for the year ended December 31, 2016, and related primarily to the $17.8 million decrease in research and development expenses primarily due to reduced development activities partially offset by the $2.6 million increase in general and administration expenses primarily resulting from costs related to the Reverse Merger.

*Research and development expenses*

Research and development expenses decreased $17.8 million to $14.2 million for the year ended December 31, 2017, as compared to $32.0 million for the year ended December 31, 2016. Clinical trial expenses decreased $9.9 million primarily due to the completion of Inotek's MATrX-1 trial in early 2017. As a result of the failure of the MATrX-1 and the Phase 2 FDC clinical trials with *trabodenoson* to meet their primary endpoints, Inotek ceased preclinical activities resulting in a $5.1 million decrease in preclinical expenses and eliminated consultants resulting in a $1.0 million decrease in consulting fees. Additionally, employee-related expenses decreased $1.9 million due to the reduction of headcount.

*General and administrative expenses*

General and administrative expenses increased $2.6 million to $12.5 million for the year ended December 31, 2017, as compared to $9.9 million for the year ended December 31, 2016. This increase primarily reflects $2.3 million of expenses related to the Reverse Merger. Increased stock-based compensation of $1.2 million, primarily due to option modifications in 2017, and increased legal costs of $0.7 million, primarily related to our D&O suit defense costs, were offset primarily by decreased consulting costs of $0.8 million, decreased employee-related costs due to reduced headcount and recruiting expenses of $0.6 million and reduced outside services of $0.3 million primarily related to reduced investor relations and business development activities.

*Interest expense*

Interest expense increased $2.2 million to $3.6 million for the year ended December 31, 2017, as compared to $1.4 million for the year ended December 31, 2016. Interest expense consists of coupon interest and amortization of debt issuance costs related to Inotek's 2021 Convertible Notes which were issued in August 2016 and which are due in August 2021. The twelve months ended December 31, 2017 reflect a full year of interest expense, whereas the twelve months ended December 31, 2016 reflect a partial year of interest expense.

*Interest income*

Interest income increased $0.4 million to $0.8 million for the year ended December 31, 2017, as compared to $0.4 million for the year ended December 31, 2016. As average invested balances remained essentially the same in 2017 and 2016, this increase primarily reflects higher interest rates.

**Liquidity and Capital Resources**

Inotek has incurred net losses and negative cash flows from its operations each year since inception. Inotek incurred net losses of $29.5 million and $42.9 million for the years ended December 31, 2017 and 2016, respectively. Inotek's operating activities used $26.1 million and $37.3 million during the years ended December 31, 2017 and 2016, respectively. Since Inotek's inception through December 31, 2017, Inotek funded its operations primarily through the sale of its equity and debt securities. As of December 31, 2017, Inotek had $100.0 million of cash and cash equivalents and short-term investments.

The following table summarizes Inotek's sources and uses of cash for each of the periods presented:

| | For the Years Ended December 31, | |
|---|---|---|
| **(in thousands)** | **2017** | **2016** |
| Cash used in operating activities | $ (26,112) | $ (37,266) |
| Cash provided by (used in) investing activities | 75,015 | (66,059) |
| Cash provided by financing activities | 19 | 53,081 |
| Net increase (decrease) in cash and equivalents | $ 48,922 | $ (50,244) |

***Net cash used in operating activities***

Net cash used in operating activities was $26.1 million for the year ended December 31, 2017, and principally resulted from Inotek's net loss of $29.5 million and a $2.0 million net decrease in operating assets and liabilities, partially offset by $4.0 million in noncash stock-based compensation.

Net cash used in operating activities was $37.3 million for the year ended December 31, 2016, and principally resulted from Inotek's net loss of $42.9 million, partially offset by $2.9 million in noncash stock-based compensation and a $2.1 million net increase in operating assets and liabilities.

***Net cash provided by (used in) investing activities***

Net cash provided by investing activities was $75.0 million for the year ended December 31, 2017, and related primarily to $102.3 million of proceeds from the maturity of short-term investments, partially offset by the purchase of $27.2 million of short-term investments.

Net cash used in investing activities was $66.1 million for the year ended December 31, 2016, and related primarily to the purchase of $122.3 million of short-term investments, $56.7 million of proceeds from the maturity of short-term investments, and $0.5 million of purchases of property and equipment.

***Net cash provided by financing activities***

Net cash provided by financing activities was $53.1 million for the year ended December 31, 2016, and primarily reflects net proceeds of $48.7 million from the issuance of Inotek's 2021 Convertible Notes and net proceeds of $4.0 million from the issuance of common stock pursuant to Inotek's ATM.

**Private Rocket's Liquidity and Capital Resources**

Private Rocket has not generated any revenue and has incurred losses since inception. Operations of the Company are subject to certain risks and uncertainties, including, among others, uncertainty of drug candidate development, technological uncertainty, uncertainty regarding patents and proprietary rights, having no commercial manufacturing experience, marketing or sales capability or experience, dependency on key personnel, compliance with government regulations and the need to obtain additional financing. Drug candidates currently under development will require significant additional research and development efforts, including extensive preclinical and clinical testing and regulatory approval, prior to commercialization. These efforts require significant amounts of additional capital, adequate personnel infrastructure and extensive compliance-reporting capabilities.

The Company's drug candidates are in the development stage. There can be no assurance that the Company's research and development will be successfully completed, that adequate protection for the Company's intellectual property will be obtained, that any products developed will obtain necessary government approval or that any approved products will be commercially viable. Even if the Company's product development efforts are successful, it is uncertain when, if ever, the Company will generate significant revenue from product sales. The Company operates in an environment of rapid change in technology and substantial competition from pharmaceutical and biotechnology companies.

Private Rocket has experienced negative cash flows and had an accumulated deficit of $31.3 million and $11.7 million as of December 31, 2017 and 2016, respectively. As of December 31, 2017 and 2016, Private Rocket had $18.1 million and $9.5 million of cash on hand, respectively. On January 26, 2018, the combined company closed a public offering of common stock and received net proceeds of approximately $78.8 million (See Note 12 in the accompanying notes to the consolidated financial statements). Rocket expects that cash on hand as of December 31, 2017 plus the net proceeds of $78.8 million received from the public offering will be sufficient to fund its operating expenses and capital expenditure requirements through at least March 2019. The future viability of the combined company is dependent on its ability to generate cash from operating activities or to raise additional capital to finance its operations. The combined company's failure to raise capital as and when needed could have a negative impact on its financial condition and ability to pursue its business strategies.

***Operating Capital Requirements***

To date, we have not generated any revenue from product sales. We do not know when, or if, we will generate any revenue from product sales. We do not expect to generate significant revenue from product sales unless and until we obtain regulatory approval of and commercialize one of our current or future product candidates. We anticipate that we will continue to generate losses for the foreseeable future and we expect the losses to increase as we continue the development of, and seek regulatory approvals for, our product candidates and begin to commercialize any approved products. In addition, subject to obtaining regulatory approval of any of our product candidates, we expect to incur significant commercialization expenses for product sales, marketing and manufacturing. Accordingly, we anticipate that we will need substantial additional funding in connection with our continuing operations.

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

**Contractual Obligations and Commitments**

The following summarizes Inotek's significant contractual obligations as of December 31, 2017:

| (in thousands) | Total | Less than 1 year | 1 to 3 years | 3 to 5 years | More than 5 years |
|---|---|---|---|---|---|
| Operating facilities lease (1) | $ 2,220 | $ 411 | $ 850 | $ 885 | $ 74 |
| 2021 Convertible Notes (2) | 63,960 | 2,990 | 5,980 | 54,990 | - |
| Total | $ 66,180 | $ 3,401 | $ 6,830 | $ 55,875 | $ 74 |

(1) In May 2015, Inotek entered into a lease agreement in Lexington, Massachusetts. Inotek occupied this space in September 2015 and the lease term commenced in the same month. In February 2016, Inotek amended this lease by leasing an additional 3,888 square feet which it then occupied in July 2016, and the lease term commenced in the same month.

(2) Amounts represent principal and interest on Inotek's 2021 Convertible Notes.

Inotek entered into contracts in the normal course of business with CROs and contract manufacturers to assist in the performance of its research and development activities and other services and products for operating purposes. These contracts generally provide for termination on notice, and therefore are cancelable contracts and are not included in the table of contractual obligations and commitments.

**Off-Balance Sheet Arrangements**

Inotek did not have during the periods presented, and does not currently have, any off-balance sheet arrangements, as defined under SEC rules.

**JOBS Act**

Under Section 107(b) of the Jumpstart Our Business Startups Act of 2012 (the "JOBS Act"), an "emerging growth company" can delay the adoption of new or revised accounting standards until such time as those standards would apply to private companies. We have irrevocably elected not to avail ourselves of this exemption and, as a result, we will adopt new or revised accounting standards at the same time as other public companies that are not emerging growth companies. There are other exemptions and reduced reporting requirements provided by the JOBS Act that we are currently evaluating. For example, as an emerging growth company, we are exempt from Sections 14A(a) and (b) of the Exchange Act which would otherwise require us to (i) submit certain executive compensation matters to stockholder advisory votes, such as "say-on-pay," "say-on-frequency" and "golden parachutes" and (ii) disclose certain executive compensation related items such as the correlation between executive compensation and performance and comparisons of our Chief Executive Officer's compensation to our median employee compensation. We also intend to rely on an exemption from the rule requiring us to provide an auditor's attestation report on our internal controls over financial reporting pursuant to Section 404(b) of the Sarbanes-Oxley Act and the rule requiring us to comply with any requirement that may be adopted by the Public Company Accounting Oversight Board ("PCAOB") regarding mandatory audit firm rotation or a supplement to the auditor's report providing additional information about the audit and the consolidated financial statements as the auditor discussion and analysis. We will continue to remain an "emerging growth company" until the earliest of the following: December 31, 2020; the last day of the fiscal year in which our total annual gross revenue is equal to or more than $1.07 billion; the date on which we have issued more than $1 billion in nonconvertible debt during the previous three years; or the date on which we are deemed to be a large accelerated filer under the rules of the SEC.

**Critical Accounting Policies and Estimates**

***Accrued Research and Development Expenses***

As part of the process of preparing our consolidated financial statements, we are required to estimate our accrued research and development expenses. 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 costs incurred for the services when we have not yet been invoiced or otherwise notified of the actual costs. The majority of our service providers invoice us in arrears for services performed, on a pre-determined schedule or when contractual milestones are met; however, some require advanced payments. We make estimates of our accrued expenses as of each balance sheet date in our consolidated financial statements based on facts and circumstances known to us at that time. Examples of estimated accrued research and development expenses include fees paid to:

- CROs in connection with performing research and development services on our behalf;
- investigative sites or other providers in connection with clinical trials;

- vendors in connection with non-clinical development activities; and
- vendors related to product manufacturing, development and distribution of clinical supplies.

We base our expenses related to clinical trials on our estimates of the services received and efforts expended pursuant to contracts with multiple CROs that conduct and manage non-clinical studies and clinical trials 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 clinical expense. Payments under some of these contracts depend on factors such as the successful enrollment of patients and the completion of clinical trial milestones. In accruing service fees, we estimate the time period over which services will be performed, enrollment of patients, number of sites activated and 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 accordingly. Although we do not expect our estimates to be materially different from amounts actually incurred, our understanding of the status and timing of services performed relative to the actual status and timing of services performed may vary and may result in us reporting expenses that are too high or too low in any particular period.

***Fair Value Measurements***

We are required to disclose information on all assets and liabilities reported at fair value that enables an assessment of the inputs used in determining the reported fair values. Accounting Standard Codification ("ASC") Topic 820, *Fair Value Measurements and Disclosures*, establishes a hierarchy of inputs used when available. Observable inputs are inputs that market participants would use in pricing the asset or liability based on market data obtained from sources independent of our company. Unobservable inputs are inputs that reflect our assumptions about the inputs that market participants would use in pricing the asset or liability and are developed based on the best information available in the circumstances. The fair value hierarchy applies only to the valuation inputs used in determining the reported fair value of the investments and is not a measure of the investment credit quality. The three levels of the fair value hierarchy are described below:

- Level 1—Valuations based on unadjusted quoted prices in active markets for identical assets or liabilities that we have the ability to access at the measurement date;
- Level 2—Valuations based on quoted prices for similar assets or liabilities in markets that are not active or for which all significant inputs are observable, either directly or indirectly;
- Level 3—Valuations that require inputs that reflect our own assumptions that are both significant to the fair value measurement and unobservable.

To the extent that valuation is based on models or inputs that are less observable or unobservable in the market, the determination of fair value requires more judgment. Accordingly, the degree of judgment exercised by us in determining fair value is greatest for instruments categorized in Level 3. A financial instrument's level within the fair value hierarchy is based on the lowest level of any input that is significant to the fair value measurement.

Inotek's material financial instruments at December 31, 2017 and 2016, consisted of cash and cash equivalents, short-term investments, accounts payable and the 2021 Notes. The fair value of Inotek's cash and cash equivalents and accounts payable approximate their respective carrying values due to the short-term nature of these instruments and amounts. Inotek has determined that its United States Treasury securities are categorized as Level 1 assets under the fair value hierarchy, as these assets are valued using quoted market prices in active markets without any valuation adjustments, its certificates of deposit are categorized as Level 2 assets, as there are no quoted market prices in active markets, and its agency bonds are characterized as Level 2 assets, as these assets are not always valued daily using quoted market prices in active markets. Inotek estimates the fair value of the 2021 Notes using quoted market prices obtained from third-party pricing services, which is classified as a Level 2 input due to limited market trading.

***Stock-Based Compensation***

We measure the cost of employee services received in exchange for an award of equity instruments based on the grant date fair value of the award. That cost is recognized on a straight-line basis over the period during which the employee is required to provide service in exchange for the award. The fair value of options on the date of grant is calculated using the Black-Scholes option pricing model based on key assumptions such as stock price, expected volatility and expected term. The fair value of restricted stock awards is based on the intrinsic value of such awards on the date of grant. Compensation cost for stock purchase rights under our employee stock purchase plan is measured and recognized on the date that we become obligated to issue shares of our common stock and is based on the difference between the fair value of our common stock and the purchase price on such date. Our estimates of these assumptions are primarily based on third-party valuations, historical data, peer company data and judgment regarding future trends and factors.

**Recent Accounting Pronouncements**

In May 2014, the FASB issued Accounting Standards Update ("ASU") 2014-09, *Revenue from Contracts with Customers*. The standard, including subsequently issued amendments, will replace most existing revenue recognition guidance in accounting principles generally accepted in the United States ("GAAP") when it becomes effective and permits the use of either the retrospective or cumulative effect transition method. The standard will require an entity to recognize the amount of revenue to which it expects to be entitled for the transfer of promised goods or services to customers. The standard will be effective for annual and interim periods beginning after December 15, 2017. The Company does not currently generate revenue or have any arrangements that are subject to this guidance.

In February 2016, the FASB issued ASU 2016-02, *Leases* (Topic 842), which supersedes the current leasing guidance and upon adoption, will require lessees to recognize right-of-use assets and lease liabilities on the balance sheet for all leases with terms longer than 12 months. The new standard is effective for the annual period beginning after December 15, 2018 and can be early adopted by applying a modified retrospective approach for leases existing at, and entered into after, the beginning of the earliest comparable period presented in the financial statements. The Company is currently evaluating the impact of this accounting standard update on its consolidated financial statements.

In March 2016, the FASB issued ASU 2016-09, *Improvements to Employee Share-Based Payment Accounting*, which amends FASB ASC Topic 718, Compensation – Stock Compensation ("ASC 718") and includes provisions intended to simplify various aspects related to how share-based payments are accounted for and presented in the financial statements. The new standard is effective for Inotek for the annual period beginning after December 15, 2016, and for annual and interim periods thereafter, with early adoption permitted. Inotek adopted this standard on January 1, 2017. The update revises requirements in the following areas: minimum statutory withholding, accounting for income taxes, and forfeitures. Prior to adoption, Inotek applied a 0% forfeiture rate to share-based compensation, resulting in no cumulative effect adjustment to the opening period. Upon adoption of ASU 2016-09, Inotek's accounting policy is to recognize forfeitures as they occur. The update also requires Inotek to recognize the income tax effect of awards in the income statement when the awards vest or are settled. Finally, the update allows Inotek to repurchase more of an employee's shares than it can today for tax withholding purposes without triggering a liability. The income tax related items had no effect on the current period presentation and Inotek maintains a full valuation allowance against its deferred tax assets.

In May 2017, the FASB issued ASU 2017-09, *Scope of Modification Accounting*, which clarifies the scope under which modification accounting should be applied to a share-based payment award under ASC 718. The standard will be effective for annual reporting periods and interim periods within those annual periods, beginning after December 15, 2017, and early adoption is permitted for interim or annual period beginning after January 1, 2017. The Company is currently evaluating the impact of this accounting standard update on its consolidated financial statements.

**Item 7A. Quantitative and Qualitative Disclosures about Market Risks**

As of December 31, 2017, Inotek had market risk exposure related to interest rate fluctuations. Inotek had cash and cash equivalents of $78.7 million at December 31, 2017, consisting primarily of funds in money market accounts. Inotek also had $21.3 million in short-term investments consisting of certificates of deposit and United States Treasury securities. Historically, the primary objective of Inotek's investment activities was to preserve principal and liquidity while maximizing income without significantly increasing risk. Due to the short-term nature of its investment portfolio, we do not believe a sudden change in market interest rates would have a material effect on the fair market value of our portfolio. As of December 31, 2017, Private Rocket had cash of $18.1 million.

Our 2021 Convertible Notes bear interest at a fixed rate and therefore a change in interest rates would not impact the amount of interest we would have paid on this indebtedness.

**Item 8. Financial Statements and Supplementary Data**

The financial statements required to be filed pursuant to this Item 8 are appended to this report. An index of those financial statements is found in Item 15.

**Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure**

None.

**Item 9A. Controls and Procedures**

***Evaluation of Disclosure Controls and Procedures***

Our management, with the participation of our principal executive officer and our principal financial officer, evaluated, as of the end of the period covered by this Annual Report on Form 10-K, the effectiveness of our disclosure controls and procedures. Based on that evaluation of our disclosure controls and procedures as of December 31, 2017, our principal executive officer and principal financial officer concluded that our disclosure controls and procedures as of such date are effective at the reasonable assurance level. The term "disclosure controls and procedures," as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act, means controls and other procedures of a company that are designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act are recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by us in the reports we file or submit under the Exchange Act is accumulated and communicated to our management, including our principal executive officer and principal financial and accounting officer, as appropriate to allow timely decisions regarding required disclosure. Management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving their objectives and our management necessarily applies its judgment in evaluating the cost-benefit relationship of possible controls and procedures.

***Management's Annual Report on Internal Control Over Financial Reporting***

Our management is responsible for establishing and maintaining adequate internal control over our financial reporting. Internal control over financial reporting is defined in Rules 13a-15(f) and 15d-15(f) promulgated under the Exchange Act as a process designed by, or under the supervision of, our principal executive and principal financial and accounting officers and effected by our board of directors, management and other personnel to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with GAAP. Our internal control over financial reporting includes those policies and procedures that:

- pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect our transactions and dispositions of our assets;
- provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with GAAP, and that our receipts and expenditures are being made only in accordance with authorizations of our management and directors; and
- provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of our assets that could have a material effect on our financial statements.

Our management assessed the effectiveness of our internal control over financial reporting as of December 31, 2017. In making this assessment, management used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in its 2013 *Internal Control — Integrated Framework.* Based on this assessment, our management has concluded that, as of December 31, 2017, our internal control over financial reporting is effective based on those criteria.

This annual report on Form 10-K does not include an attestation report of our independent registered public accounting firm regarding internal control over financial reporting. Management's report was not subject to attestation by our independent registered public accounting firm pursuant to an exemption under Section 989G of the Dodd-Frank Wall Street Reform and Consumer Protection Act made available to us under the JOBS Act.

***Inherent Limitations of Internal Controls***

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Therefore, even those systems determined to be effective can provide only reasonable assurance with respect to financial statement preparation and presentation. Projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions or that the degree of compliance with the policies or procedures may deteriorate.

***Changes in Internal Control over Financial Reporting***

There were no changes in our internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act) during the period covered by this report that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

**Item 9B. Other Information**

Not applicable.

## PART III. — OTHER INFORMATION

### Item 10. Directors, Executive Officers and Corporate Governance

Information with respect to this item will be set forth in the Proxy Statement for the 2018 Annual Meeting of Stockholders ("Proxy Statement") or an amendment to this Annual Report on Form 10-K ("Form 10-K/A") under the headings "Election of Directors," "Executive Officers," "Section 16(a) Beneficial Ownership Reporting Compliance" and "Corporate Governance" and is incorporated herein by reference. The Proxy Statement or Form 10-K/A will be filed with the SEC within 120 days after the end of the fiscal year covered by this Annual Report.

We have adopted a Code of Business Conduct and Ethics that applies to all of our directors, officers and employees, including our principal executive, principal financial and principal accounting officers or persons performing similar functions. Our Code of Business Conduct and Ethics is posted on our website located at www.rocketpharma.com. We intend to disclose any future amendments to certain provisions of the Code of Business Conduct and Ethics, and any waivers of the Code of Business Conduct and Ethics granted to executive officers and directors, on our website within four business days following the date of amendment or waiver.

### Item 11. Executive Compensation

Information with respect to this item will be set forth in the Proxy Statement or Form 10-K/A under the headings "Executive Compensation" and "Director Compensation" and is incorporated herein by reference. The Proxy Statement or Form 10-K/A will be filed with the SEC within 120 days after the end of the fiscal year covered by this Annual Report.

### Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters

Information with respect to this item will be set forth in the Proxy Statement or Form 10-K/A and is incorporated herein by reference. The Proxy Statement or Form 10-K/A will be filed with the SEC within 120 days after the end of the fiscal year covered by this Annual Report.

### Item 13. Certain Relationships and Related Party Transactions, and Director Independence

Information with respect to this item will be set forth in the Proxy Statement or Form 10-K/A under the headings "Certain Relationships and Related Party Transactions" and "Corporate Governance" and is incorporated herein by reference. The Proxy Statement or Form 10-K/A will be filed with the SEC within 120 days after the end of the fiscal year covered by this Annual Report.

### Item 14. Principal Accountant Fees and Services

Information with respect to this item will be set forth in the Proxy Statement or Form 10-K/A under the heading "Ratification of the Selection of Independent Registered Public Accounting Firm" and is incorporated herein by reference. The Proxy Statement or Form 10-K/A will be filed with the SEC within 120 days after the end of the fiscal year covered by this Annual Report.

## PART IV

**Item 15. Exhibits, Financial Statements and Schedules**

(a) The following documents are filed as part of this report:

(1) Financial Statements:



(2) Financial Statement Schedules:

All financial statement schedules have been omitted because they are not applicable, not required or the information required is shown in the financial statements or the notes thereto.

(3) Exhibits:

**Exhibit Index**

| Exhibit Number | Description of Exhibit |
|---|---|
| 2.1 | Agreement and Plan of Merger and Reorganization, dated as of September 12, 2017, by and among Inotek Pharmaceuticals Corporation, Rocket Pharmaceuticals, Ltd. and Rome Merger Sub (11) |
| 3.1 | Seventh Amended and Restated Certificate of Incorporation of Rocket Pharmaceuticals, Inc., effective as of February 23, 2015 (1) |
| 3.2 | Certificate of Amendment (Reverse Stock Split) to the Seventh Amended and Restated Certificate of Incorporation of the Registrant, effective as of January 4, 2018 (2) |
| 3.3 | Certificate of Amendment (Name Change) to the Seventh Amended and Restated Certificate of Incorporation of the Registrant, effective January 4, 2018 (2) |
| 3.4 | Amended and Restated By-Laws of Rocket Pharmaceuticals, Inc., effective as of January 4, 2018 (3) |
| 4.1 | Form of Common Stock Certificate of Rocket Pharmaceuticals, Inc. (2) |
| 4.2 | Base Indenture, dated as of August 5, 2016, by and between Inotek Pharmaceuticals Corporation and Wilmington Trust, National Association (9) |
| 4.3 | First Supplemental Indenture, dated as of August 5, 2016, by and between Inotek Pharmaceuticals Corporation and Wilmington Trust, National Association (9) |
| 4.4 | Form of 5.75% Convertible Senior Note due 2021 (9) |
| 10.1 | 2004 Stock Option and Incentive Plan (4) |
| 10.2* | Amended and Restated 2014 Stock Option and Incentive Plan and forms of agreements thereunder |
| 10.3* | Rocket Pharmaceuticals, Ltd. 2015 Share Option Plan |
| 10.4 | Letter Agreement, dated as of July 28, 2014, by and between the Registrant and David P. Southwell (4) |
| 10.5 | Letter Agreement, dated as of May 2, 2007, by and between the Registrant and Dr. Rudolf A. Baumgartner, M.D., as amended and currently in effect (4) |
| 10.6 | Letter Agreement, dated as of August 23, 2007, by and between the Registrant and Dr. William K. McVicar, Ph.D., as amended and currently in effect (4) |

| Exhibit Number | Description of Exhibit |
|---|---|
| 10.7 | Transition Agreement, dated as of October 4, 2016, by and between Inotek Pharmaceuticals Corporation and Dr. William K. McVicar, Ph.D. (10) |
| 10.8 | Letter Agreement, dated as of August 28, 2014, by and between Inotek Pharmaceuticals Corporation and Dale Ritter (4) |
| 10.9* | Letter Agreement, dated as of January 4, 2018, by and between Inotek Pharmaceuticals Corporation and Dale Ritter |
| 10.10* | Rocket Pharmaceuticals, Inc. Amended and Restated 2014 Employee Stock Purchase Plan |
| 10.10.1 | Form of Indemnification Agreement, to be entered into between the Registrant and its directors (2) |
| 10.10.2 | Form of Indemnification Agreement, to be entered into between the Registrant and its officers (2) |
| 10.11.1 | Lease, dated as of May 29, 2015, by and between Inotek Pharmaceuticals Corporation and 91 Hartwell Avenue Trust, as amended and currently in effect (5) |
| 10.11.2 | First Amendment to Lease, dated as of February 24, 2016, by and between Inotek Pharmaceuticals Corporation and 91 Hartwell Avenue Trust (6) |
| 10.12* | Lease Agreement, dated as of March 31, 2016, by and between Rocket Pharmaceuticals, Ltd. and ARE-East River Science Park, LLC. |
| 10.13 | Warrant to Purchase Shares of Series Preferred Stock dated as of June 28, 2013, by and between Inotek Pharmaceuticals Corporation and Horizon Technology Finance Corporation (1) |
| 10.14 | Warrant to Purchase Shares of Series Preferred Stock dated as of June 28, 2013, by and between Inotek Pharmaceuticals Corporation and Fortress Credit Co LLC (1) |
| 10.15 | Sales Agreement, dated as of April 4, 2016, by and between Inotek Pharmaceuticals Corporation and Cowen and Company, LLC (7) |
| 21.1* | List of Subsidiaries |
| 23.1* | Consent of RSM US LLP |
| 24.1* | Power of Attorney (included in the signature page) |
| 31.1* | Certification of Principal Executive Officer pursuant to Rule 13a-14(a) or Rule 15d-14(a) of the Securities Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 |
| 31.2* | Certification of Principal Financial Officer pursuant to Rule 13a-14(a) or Rule 15d-14(a) of the Securities Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 |
| 32.1* | Certification of Principal Executive Officer and Principal Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 |
| 101.INS | XBRL Instance Document. |
| 101.SCH | XBRL Taxonomy Extension Schema Document. |
| 101.CAL | XBRL Taxonomy Extension Calculation Document. |
| 101.DEF | XBRL Taxonomy Extension Definition Linkbase Document. |
| 101.LAB | XBRL Taxonomy Extension Labels Linkbase Document. |
| 101.PRE | XBRL Taxonomy Extension Presentation Link Document. |

* Filed herewith.

(1) Filed as an Exhibit to the Company's annual report on Form 10-K (001-36829), filed with the SEC on March 31, 2015, and incorporated herein by reference.

(2) Filed as an Exhibit to the Company's current report on Form 8-K (001-36829), filed with the SEC on January 5, 2018, and incorporated herein by reference.

(3) Filed as an Exhibit to the Company's registration statement on Form 8-A, as amended (001-36829), filed with the SEC on January 11, 2018, and incorporated herein by reference.

(4) Filed as an Exhibit to the Company's registration statement on Form S-1 (333-199859), filed with the SEC on November 5, 2014, as amended, and incorporated herein by reference.

(5) Filed as an Exhibit to the Company's current report on Form 8-K (001-36829), filed with the SEC on June 1, 2015, and incorporated herein by reference.
(6) Filed as an Exhibit to the Company's current report on Form 8-K (001-36829), filed with the SEC on February 26, 2016, and incorporated herein by reference.
(7) Filed as an Exhibit to the Company's registration statement on Form S-3 (333-210585), filed with the SEC on April 4, 2016, as amended, and incorporated herein by reference.
(8) Filed as an Exhibit to the Company's current report on Form 8-K (001-36829), filed with the SEC on August 3, 2016, and incorporated herein by reference.
(9) Filed as an Exhibit to the Company's current report on Form 8-K (001-36829), filed with the SEC on August 5, 2016, and incorporated herein by reference.
(10) Filed as an Exhibit to the Company's quarterly report on Form 10-Q (001-36829), filed with the SEC on November 9, 2016, as amended, and incorporated herein by reference.
(11) Filed as an Exhibit to the Company's current report on Form 8-K (001-36829), filed with the SEC on September 13, 2017, and incorporated herein by reference.

**Item 16. Form 10-K Summary**

None.

## SIGNATURES

Pursuant to the requirements of the Section 13 or 15(d) of the Securities Exchange Act of 1934, Rocket Pharmaceuticals, Inc. (the Registrant) has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of New York, State of New York, on March 7, 2018.

**Rocket Pharmaceuticals, Inc.**

By: /s/ Gaurav Shah, MD
Gaurav Shah, MD
*President, Chief Executive Officer and Director*

## POWER OF ATTORNEY

Each person whose individual signature appears below hereby constitutes and appoints Gaurav Shah, MD and John Militello, and each of them, with full power of substitution and resubstitution and full power to act without the other, as his or her true and lawful attorney-in-fact and agent to act in his or her name, place and stead and to execute in the name and on behalf of each person, individually and in each capacity stated below, and to file any and all amendments to this Annual Report on Form 10-K, and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing, ratifying and confirming all that said attorneys-in-fact and agents or any of them or their or his substitute or substitutes may lawfully do or cause to be done by virtue thereof.

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the Registrant and in the capacities and on the dates indicated.

| Name | Title | Date |
|---|---|---|
| /s/ Gaurav Shah, MD<br>Gaurav Shah, MD | President, Chief Executive Officer and Director<br>*(Principal Executive Officer)* | March 7, 2018 |
| /s/ John Militello<br>John Militello | Controller<br>*(Principal Financial and Accounting Officer)* | March 7, 2018 |
| /s/ Carsten Boess<br>Carsten Boess | Director | March 7, 2018 |
| /s/ Pedro Granadillo<br>Pedro Granadillo | Director | March 7, 2018 |
| /s/ Gotham Makker, MD<br>Gotham Makker, MD | Director | March 7, 2018 |
| /s/ David P. Southwell<br>David P. Southwell | Director | March 7, 2018 |
| /s/ Roderick Wong, MD<br>Roderick Wong, MD | Director | March 7, 2018 |
| /s/ Naveen Yalamanchi, MD<br>Naveen Yalamanchi, MD | Director | March 7, 2018 |

**Inotek Pharmaceuticals Corporation**

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## Report of Independent Registered Public Accounting Firm

To the Stockholders and the Board of Directors of
Rocket Pharmaceuticals, Inc.
(formerly Inotek Pharmaceuticals Corporation)

**Opinion on the Financial Statements**
We have audited the accompanying consolidated balance sheets of Inotek Pharmaceuticals Corporation and its subsidiaries, (the Company) as of December 31, 2017 and 2016, the related consolidated statements of operations, comprehensive loss, changes in stockholders' equity and cash flows for the years then ended, and the related notes to the consolidated financial statements (collectively, 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, 2017 and 2016, and the results of its operations and its cash flows for the years then ended, in conformity with accounting principles generally accepted in the United States of America.

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

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

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

/s/ RSM US LLP

We have served as the Company's auditor since 2014.

Boston, Massachusetts

March 7, 2018

**Inotek Pharmaceuticals Corporation**

**Consolidated Balance Sheets**
**(in thousands, except share and per share amounts)**

| | December 31, 2017 | December 31, 2016 |
|---|---|---|
| **Assets** | | |
| Current assets: | | |
| Cash and cash equivalents | $ 78,720 | $ 29,798 |
| Short-term investments | 21,294 | 96,675 |
| Prepaid expenses and other current assets | 1,033 | 1,876 |
| Total current assets | 101,047 | 128,349 |
| Property and equipment, net | 563 | 1,130 |
| Other assets | 168 | 168 |
| Total assets | $ 101,778 | $ 129,647 |
| **Liabilities and Stockholders' Equity** | | |
| Current liabilities: | | |
| Accounts payable | $ 451 | $ 1,592 |
| Accrued expenses and other current liabilities | 2,373 | 4,246 |
| Accrued interest | 1,246 | 1,204 |
| Total current liabilities | 4,070 | 7,042 |
| 2021 Convertible Notes, net of issuance costs | 49,541 | 48,960 |
| Other long-term liabilities | 403 | 477 |
| Total liabilities | 54,014 | 56,479 |
| Commitments and Contingencies (Note 9) | | |
| Stockholders' equity: | | |
| Preferred Stock, $0.001 par value: 5,000,000 shares authorized and no shares issued or outstanding | — | — |
| Common stock, $0.01 par value: 120,000,000 shares authorized at December 31, 2017 and December 31, 2016; 6,805,686 shares and 6,746,579 shares issued and outstanding at December 31, 2017 and December 31, 2016, respectively | 68 | 67 |
| Additional paid-in capital | 316,086 | 312,032 |
| Accumulated deficit | (268,374) | (238,877) |
| Accumulated other comprehensive loss | (16) | (54) |
| Total stockholders' equity | 47,764 | 73,168 |
| Total liabilities and stockholders' equity | $ 101,778 | $ 129,647 |

*The accompanying notes are an integral part of these consolidated financial statements.*

**Inotek Pharmaceuticals Corporation**

**Consolidated Statements of Operations**
**(in thousands, except share and per share amounts)**

| | For the Years Ended December 31, | |
|---|---|---|
| | 2017 | 2016 |
| Operating expenses: | | |
| Research and development | $ (14,193) | $ (31,985) |
| General and administrative | (12,544) | (9,894) |
| Loss from operations | (26,737) | (41,879) |
| Interest expense | (3,579) | (1,418) |
| Interest income | 819 | 443 |
| Net loss | $ (29,497) | $ (42,854) |
| Net loss per share attributable to common stockholders—basic and diluted | $ (4.36) | $ (6.41) |
| Weighted-average number of shares outstanding—basic and diluted | 6,765,451 | 6,683,794 |

*The accompanying notes are an integral part of these consolidated financial statements.*

**Inotek Pharmaceuticals Corporation**

**Consolidated Statements of Comprehensive Loss**
**(in thousands)**

| | For the Years Ended December 31, | |
|---|---|---|
| | 2017 | 2016 |
| Net loss | $ (29,497) | $ (42,854) |
| Other comprehensive loss: | | |
| Net unrealized gain (loss) on marketable securities | 38 | (43) |
| Total comprehensive loss | $ (29,459) | $ (42,897) |

*The accompanying notes are an integral part of these consolidated financial statements.*

**Inotek Pharmaceuticals Corporation**

**Consolidated Statements of Changes in Stockholders' Equity**
**(in thousands, except share amounts)**

| | Common Stock | | Additional Paid in | Accumulated | Accumulated Other Comprehensive | |
|---|---|---|---|---|---|---|
| | Shares | Par value | Capital | Deficit | Loss | Total |
| **Balances at December 31, 2015** | 6,605,849 | $ 66 | $ 304,781 | $ (196,023) | $ (11) | $ 108,813 |
| Stock-based compensation | — | — | 2,909 | — | — | 2,909 |
| Stock options exercised | 13,577 | — | 191 | — | — | 191 |
| Common stock issued pursuant to employee stock purchase plan | 6,481 | — | 155 | — | — | 155 |
| Issuance of common stock, net of $403 in offering costs | 120,672 | 1 | 3,996 | — | — | 3,997 |
| Unrealized comprehensive loss on marketable securities | — | — | — | — | (43) | (43) |
| Net loss | — | — | — | (42,854) | — | (42,854) |
| **Balances at December 31, 2016** | 6,746,579 | 67 | 312,032 | (238,877) | (54) | 73,168 |
| Stock-based compensation | — | — | 4,036 | — | — | 4,036 |
| Common stock issued pursuant to employee stock purchase plan | 5,971 | — | 35 | — | — | 35 |
| Issuance of common stock pursuant to settlement of restricted stock units | 56,406 | 1 | (1) | — | — | — |
| Shares surrendered by employees to pay taxes related to settlement of restricted stock | (3,270) | — | (16) | — | — | (16) |
| Unrealized comprehensive gain on marketable securities | — | — | — | — | 38 | 38 |
| Net loss | — | — | — | (29,497) | — | (29,497) |
| **Balances at December 31, 2017** | 6,805,686 | $ 68 | $ 316,086 | $ (268,374) | $ (16) | $ 47,764 |

*The accompanying notes are an integral part of these consolidated financial statements.*

**Inotek Pharmaceuticals Corporation**

**Consolidated Statements of Cash Flows**
**(in thousands)**

| | For the Years Ended December 31, | |
|---|---|---|
| | **2017** | **2016** |
| Cash flows from operating activities: | | |
| Net loss | $ (29,497) | $ (42,854) |
| Adjustments to reconcile net loss to cash used in operating activities: | | |
| Noncash interest expense | 581 | 222 |
| Noncash rent | (59) | (60) |
| Noncash asset impairment charge | 437 | — |
| Amortization of premium on marketable securities | 217 | 225 |
| Depreciation | 200 | 169 |
| Stock-based compensation | 4,036 | 2,909 |
| Changes in operating assets and liabilities: | | |
| Prepaid expenses and other assets | 960 | (948) |
| Accounts payable | (1,141) | (41) |
| Accrued expenses and other liabilities | (1,846) | 3,112 |
| Net cash used in operating activities | (26,112) | (37,266) |
| Cash flows from investing activities: | | |
| Purchases of short-term investments | (27,204) | (122,277) |
| Proceeds from the maturities of short-term investments | 102,289 | 56,705 |
| Purchase of property and equipment | (70) | (487) |
| Net cash provided by (used in) investing activities | 75,015 | (66,059) |
| Cash flows from financing activities: | | |
| Proceeds from issuance of 2021 Convertible Notes | — | 52,000 |
| Payments of 2021 Convertible Notes issuance costs | — | (3,262) |
| Net proceeds from issuance of common stock | — | 3,997 |
| Proceeds from the issuance of common stock pursuant to stock option plans | — | 191 |
| Proceeds from the issuance of common stock pursuant to employee stock purchase plan | 35 | 155 |
| Payments made for taxes of employees who surrendered shares related to settlement of restricted stock | (16) | — |
| Net cash provided by financing activities: | 19 | 53,081 |
| Net change in cash and cash equivalents | 48,922 | (50,244) |
| Cash and cash equivalents, beginning of period | 29,798 | 80,042 |
| Cash and cash equivalents, end of period | $ 78,720 | $ 29,798 |
| Supplemental disclosure of cash flow information: | | |
| Cash paid for interest | $ 2,957 | $ — |
| Cash paid for income taxes | $ — | $ — |
| Supplemental disclosure of noncash investing and financing activities: | | |
| Net unrealized gain (loss) on marketable securities | $ 38 | $ (43) |

*The accompanying notes are an integral part of these consolidated financial statements.*

## 1. Organization and Operations

On January 4, 2018, Rome Merger Sub ("Merger Sub"), a wholly owned subsidiary of Inotek Pharmaceuticals Corporation ("Inotek"), completed its merger with and into Rocket Pharmaceuticals, Ltd., a privately held, multi-platform biotechnology company focused on the development of first-in-class gene therapies for rare and devastating pediatric diseases ("Private Rocket"), with Private Rocket surviving as a wholly owned subsidiary of Inotek. This transaction is referred to as the "Reverse Merger." The Reverse Merger was effected pursuant to an Agreement and Plan of Merger and Reorganization (the "Merger Agreement"), dated as of September 12, 2017, by and among Inotek, Private Rocket and Rome Merger Sub. Immediately prior to the Reverse Merger, on January 4, 2018, Inotek effected a 1-for-4 reverse stock split on its issued and outstanding common stock. The accompanying consolidated financial statements and notes to the consolidated financial statements give retroactive effect to the reverse stock split for all periods presented.

Upon the closing of the Reverse Merger, each outstanding share of Private Rocket's common stock converted into approximately 76.185 shares of Inotek's common stock. In addition, each outstanding option to purchase Private Rocket's common stock prior to the effective time of the Reverse Merger was converted into an option to purchase Inotek's common stock. No fractional shares of Inotek's common stock were issued in connection with the Reverse Merger. Instead, Private Rocket's stockholders received cash in lieu of any fractional shares of Rocket's common stock such stockholders would have otherwise been entitled to receive in accordance with the Merger Agreement.

Immediately following the Reverse Merger, the combined company changed its name from "Inotek Pharmaceuticals Corporation" to "Rocket Pharmaceuticals, Inc." The combined company following the Reverse Merger may be referred to herein as "the combined company," "Rocket," or "the Company."

The accompanying consolidated financial statements do not give effect to the Reverse Merger. The financial statements have been labeled "Inotek Pharmaceuticals Corporation" for the purposes of this filing, which was the entity name in effect for the historical periods presented. The Reverse Merger will be accounted for as a reverse merger under the acquisition method of accounting. After reviewing the relative voting rights, the composition of the board of directors and the composition of senior management of the combined company after the Reverse Merger, it was determined that Private Rocket will be treated as the accounting acquirer and Inotek will be treated as the "acquired" company for financial reporting purposes under the acquisition method of accounting. See Note 12.

Prior to the Reverse Merger, Inotek was a clinical-stage biopharmaceutical company focused on the discovery, development and commercialization of therapies for ocular diseases, including glaucoma. After failing to meet the primary endpoints in its first pivotal Phase 3 trial of *trabodenoson* monotherapy ("MATrX-1") and its Phase 2 trial of *trabodenoson* in a fixed-dose combination therapy with *latanoprost* ("FDC"), Inotek voluntarily discontinued its development of *trabodenoson* in 2017.

Historically, Inotek devoted substantially all of its resources to research and development efforts relating to its product candidates, including conducting clinical trials, providing general and administrative support for these operations and protecting its intellectual property. Inotek did not have any products approved for sale and did not generate any revenue from product sales or other sources. From Inotek's inception through December 31, 2017, it funded its operations primarily through the sales of equity and debt securities. In February 2015, Inotek completed an initial public offering ("IPO") of its common stock and a concurrent offering of convertible senior notes, raising an aggregate of $55,398 in net proceeds. In August 2015, Inotek completed a follow-on offering of its common stock, raising an aggregate of $73,965 in net proceeds. In August 2016, Inotek completed a second offering of convertible senior notes, raising an aggregate of $48,738 in net proceeds.

Inotek incurred net losses in each year since its inception. As of December 31, 2017, Inotek had an accumulated deficit of $268,374 and cash and cash equivalents and short-term investments aggregating $100,014.

## 2. Significant Accounting Policies

**Basis of Presentation**—The accompanying consolidated financial statements have been prepared in conformity with accounting principles generally accepted in the United States of America ("GAAP"). The consolidated financial statements reflect the operations of Inotek and its wholly owned subsidiaries, Inotek Securities Corporation, Inotek Ltd and Rome Merger Sub. All significant intercompany balances and transactions have been eliminated in consolidation. Certain reclassifications have been made to prior year amounts to conform to the current year presentation.

**Segment Reporting**—Operating segments are defined as components of an enterprise 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. Inotek views its operations and manages its business in one operating segment.

**Use of Estimates**—The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of expenses during the reporting period. Actual results could differ from these estimates. Significant items subject to such estimates and assumptions include the valuation of stock options used for the calculation of stock-based compensation and the calculation of accruals related to research and clinical development.

**Comprehensive loss**—Comprehensive loss is defined as the change in equity of a business enterprise during a period from transactions, and other events and circumstances from non-owner sources, and currently consists of net loss and changes in unrealized gains and losses on short-term investments. Accumulated other comprehensive loss consists entirely of unrealized gains and losses from short-term investments as of December 31, 2017 and 2016.

**Cash and Cash Equivalents**—Cash and cash equivalents consist of bank deposits, certificates of deposit and money market accounts. Cash equivalents are carried at cost which approximates fair value due to their short-term nature and which Inotek believes do not have a material exposure to credit risk. Inotek considers all highly liquid investments with maturities of three months or less from the date of purchase to be cash equivalents.

Inotek maintains its cash and cash equivalent balances in the form of money market, savings or operating accounts with financial institutions that management believes are creditworthy. Inotek's cash and cash equivalent accounts, at times, may exceed federally insured limits. Inotek has not experienced any losses in such accounts. Inotek believes it is not exposed to any significant credit risk on cash and cash equivalents.

**Short-term investments**—Short-term investments consist of investments in certificates of deposit, agency bonds and United States Treasury securities. Management determines the appropriate classification of these securities at the time they are acquired and evaluates the appropriateness of such classifications at each balance sheet date. Inotek classifies its short-term investments as available-for-sale pursuant to Financial Accounting Standards Board ("FASB") Accounting Standard Codification ("ASC") 320, *Investments—Debt and Equity Securities*. Short-term investments are recorded at fair value, with unrealized gains and losses included as a component of accumulated other comprehensive loss in stockholders' equity and a component of total comprehensive loss in the consolidated statements of comprehensive loss, until realized. Realized gains and losses are included in investment income on a specific-identification basis. There were no realized gains or losses on short-term investments for the twelve months ended December 31, 2017 and 2016. There were $38 of net unrealized gains and $43 of net unrealized losses on short-term investments as of December 31, 2017 and 2016, respectively.

Inotek reviews short-term investments for other-than-temporary impairment whenever the fair value of a short-term investment is less than the amortized cost and evidence indicates that a short-term investment's carrying amount is not recoverable within a reasonable period of time. Other-than-temporary impairments of investments are recognized in the statements of operations if Inotek has experienced a credit loss, has the intent to sell the short-term investment, or if it is more likely than not that Inotek will be required to sell the short-term investment before recovery of the amortized cost basis. Evidence considered in this assessment includes reasons for the impairment, compliance with Inotek's investment policy, the severity and the duration of the impairment and changes in value subsequent to the end of the period.

Short-term investments at December 31, 2017 consist of the following:

| | Cost Basis | Unrealized Gains | Unrealized Losses | Fair Value |
|---|---|---|---|---|
| | (in thousands) | | | |
| Current: | | | | |
| Certificates of deposit | $ 3,667 | $ — | $ — | $ 3,667 |
| United States Treasury securities | 17,643 | — | (16) | 17,627 |
| | $ 21,310 | $ — | $ (16) | $ 21,294 |

Short-term investments at December 31, 2016 consist of the following:

| | Cost Basis | Unrealized Gains | Unrealized Losses | Fair Value |
|---|---|---|---|---|
| | | (in thousands) | | |
| Current: | | | | |
| Certificates of deposit | $ 22,046 | $ — | $ — | $ 22,046 |
| Agency bonds | 5,917 | — | (4) | 5,913 |
| United States Treasury securities | 68,766 | 1 | (51) | 68,716 |
| | $ 96,729 | $ 1 | $ (55) | $ 96,675 |

At December 31, 2017 and 2016, all short-term investments held by Inotek had contractual maturities of less than one year. Inotek evaluated its securities for other-than-temporary impairment and determined that no such impairment existed at December 31, 2017 and 2016.

**Property and Equipment**—Property and equipment are stated at cost. Expenditures for repairs and maintenance are charged to expense as incurred. Upon retirement or sale, the cost of the assets disposed of and the related accumulated depreciation are eliminated from the accounts and any resulting gain or loss is reflected in the consolidated statement of operations. Depreciation and amortization is provided using the straight-line method over the estimated useful lives of the assets, which are as follows:

| Asset Classification | Estimated Useful Life |
|---|---|
| Computer hardware and software | 3 - 5 years |
| Laboratory equipment | 5 years |
| Office equipment | 5 years |
| Leasehold improvements | Shorter of useful life or remaining life of lease |

**Impairment of Long-Lived Assets**—Inotek assesses the recoverability of its long-lived assets, which include property and equipment, whenever significant events or changes in circumstances indicate impairment may have occurred. If indicators of impairment exist, projected future undiscounted cash flows associated with the asset are compared to its carrying amount to determine whether the asset's value is recoverable. Any resulting impairment is recorded as a reduction in the carrying value of the related asset in excess of fair value and charged to operating results (See Note 3).

**Debt Issuance Costs**—Debt issuance costs at December 31, 2017 and 2016 consist of underwriting discounts and offering-related costs incurred by Inotek in connection with the closing of the 2021 Convertible Notes and are included as a direct deduction from the carrying amount of the 2021 Convertible Notes on Inotek's consolidated balance sheets. Inotek amortizes debt issuance costs to interest expense over the life of the 2021 Convertible Notes using the effective interest method. (See Note 5). Amortization of debt issuance costs was $581 and $222 for the twelve months ended December 31, 2017 and 2016, respectively.

**Research and Development Costs**—Research and development costs are charged to expense as incurred and include, but are not limited to:

- employee-related expenses including salaries, benefits, travel and stock-based compensation expense for research and development personnel;
- expenses incurred under agreements with contract research organizations that conduct clinical and preclinical studies, contract manufacturing organizations and consultants;
- costs associated with preclinical and development activities; and
- costs associated with regulatory operations.

Costs for certain development activities, such as clinical studies, are recognized based on an evaluation of the progress to completion of specific tasks using data such as patient enrollment, clinical site activations, and information provided to Inotek by its vendors on their actual costs incurred. Payments for these activities are based on the terms of the individual arrangements, which may differ from the patterns of costs incurred, and are reflected in the financial statements as accrued expenses, or prepaid expenses and other current assets, if the related services have not been provided.

**Stock-Based Compensation** —Inotek measures the cost of employee services received in exchange for an award of equity instruments based on the fair value of the award on the grant date. That cost is recognized on a straight-line basis over the period

during which the employee is required to provide service in exchange for the award. The fair value of options on the date of grant is calculated using the Black-Scholes option pricing model based on key assumptions such as stock price, expected volatility and expected term. Inotek's estimates of these assumptions are primarily based on the trading price of Inotek's stock, historical data, peer company data and judgment regarding future trends and factors. The fair value of restricted stock awards is based on the intrinsic value of such awards on the date of grant. Compensation cost for stock purchase rights under the employee stock purchase plan is measured and recognized on the date Inotek becomes obligated to issue shares of our common stock and is based on the difference between the fair value of Inotek's common stock and the purchase price on such date.

**Fair Value Measurements**—Inotek is required to disclose information on all assets and liabilities reported at fair value that enables an assessment of the inputs used in determining the reported fair values. FASB ASC 820, *Fair Value Measurements and Disclosures* ("ASC 820"), establishes a hierarchy of inputs used when available. Observable inputs are inputs that market participants would use in pricing the asset or liability based on market data obtained from sources independent of Inotek. Unobservable inputs are inputs that reflect Inotek's assumptions about the inputs that market participants would use in pricing the asset or liability, and are developed based on the best information available in the circumstances. The fair value hierarchy applies only to the valuation inputs used in determining the reported fair value of the investments and is not a measure of the investment credit quality. The three levels of the fair value hierarchy are described below:

Level 1—Valuations based on unadjusted quoted prices in active markets for identical assets or liabilities that Inotek has the ability to access at the measurement date.

Level 2—Valuations based on quoted prices for similar assets or liabilities in markets that are not active or for which all significant inputs are observable, either directly or indirectly.

Level 3—Valuations that require inputs that reflect Inotek's own assumptions that are both significant to the fair value measurement and unobservable.

To the extent that valuation is based on models or inputs that are less observable or unobservable in the market, the determination of fair value requires more judgment. Accordingly, the degree of judgment exercised by Inotek in determining fair value is greatest for instruments categorized in Level 3. A financial instrument's level within the fair value hierarchy is based on the lowest level of any input that is significant to the fair value measurement.

Inotek's material financial instruments at December 31, 2017 and 2016, consisted of cash and cash equivalents, short-term investments, accounts payable and the 2021 Notes. The fair value of Inotek's cash and cash equivalents and accounts payable approximate their respective carrying values due to the short-term nature of these instruments and amounts. Inotek estimates the fair value of the 2021 Notes using quoted market prices obtained from third-party pricing services, which is classified as a Level 2 input due to limited market trading. As of December 31, 2017 and 2016, the fair value of the 2021 Notes was approximately $38,610 and $55,640, respectively, which differed from the 2021 Notes' carrying value at each such date. Inotek's assets and liabilities measured at fair value on a recurring basis include its short-term investments. There were no material liability-classified warrants, derivatives or derivative liabilities outstanding in 2017 or 2016.

**Income taxes**—Inotek uses the asset and liability method for accounting for income taxes. Under this method, deferred tax assets and liabilities are recognized for the estimated future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective income tax bases. Deferred tax assets and liabilities are measured using enacted rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. A valuation allowance is recorded if it is more likely than not that a deferred tax asset will not be realized. Inotek has provided a full valuation allowance on its deferred tax assets.

Inotek recognizes the financial statement benefit of a tax position only after determining that the relevant tax authority would more likely than not sustain the position following an audit. For tax positions meeting the more-likely-than-not threshold, the amount recognized in the consolidated financial statements is the largest benefit that has a greater than 50 percent likelihood of being realized upon ultimate settlement with the relevant tax authority.

Inotek recognizes interest and penalties related to uncertain tax positions in income tax expense. As of December 31, 2017 and 2016, Inotek had no accrued interest or penalties related to uncertain tax positions and no amounts have been recognized in Inotek's statements of operations.

**Net loss per share**—Inotek calculates net loss per share in accordance with FASB ASC 260, *Earnings per Share*. Basic earnings (loss) per share ("EPS") is calculated by dividing the net income or loss applicable to common stockholders by the weighted average number of common shares outstanding for the period, without consideration of unissued common stock equivalents. The net loss applicable to common stockholders is determined by the reported net loss for the period and deducting dividends accrued and

accretion of preferred stock. Diluted EPS is calculated by adjusting the weighted average common shares outstanding for the dilutive effect of common stock options, warrants, and convertible preferred stock and accrued but unpaid convertible preferred stock dividends. In periods where a net loss is recorded, no effect is given to potentially dilutive securities, as their effect would be anti-dilutive.

The following table sets forth the computation of basic and diluted EPS attributable to Inotek's common stockholders:

| | For the Years Ended December 31, | |
|---|---|---|
| | 2017 | 2016 |
| | (in thousands, except share and per share amounts) | |
| Numerator: | | |
| Net loss applicable to common stockholders | $ (29,497) | $ (42,854) |
| Denominator: | | |
| Weighted average common shares outstanding—basic and diluted | 6,765,451 | 6,683,794 |
| Net loss per share applicable to common stockholders—basic and diluted | $ (4.36) | $ (6.41) |

The following common stock equivalents were excluded from the calculation of diluted net loss per share for the periods indicated as including them would have an anti-dilutive effect:

| | For the Years Ended December 31, | |
|---|---|---|
| | 2017 | 2016 |
| Shares issuable upon conversion of the 2021 Convertible Notes | 1,620,947 | 1,620,947 |
| Warrants for common stock | 14,102 | 14,102 |
| Stock options | 523,520 | 668,864 |
| Restricted Stock Units | 271,719 | 117,500 |
| Total | 2,430,288 | 2,421,413 |

**Subsequent Events**—Inotek considers events or transactions that occur after the balance sheet date but prior to the issuance of the financial statements to provide additional evidence relative to certain estimates or to identify matters that require additional disclosure. Inotek has completed an evaluation of all subsequent events through the date the financial statements were issued. See Note 12.

**Recent Accounting Pronouncements**—In May 2014, the FASB issued Accounting Standards Update ("ASU") 2014-09, *Revenue from Contracts with Customers*. The standard, including subsequently issued amendments, will replace most existing revenue recognition guidance in U.S. GAAP when it becomes effective and permits the use of either the retrospective or cumulative effect transition method. The standard will require an entity to recognize the amount of revenue to which it expects to be entitled for the transfer of promised goods or services to customers. The standard will be effective for annual and interim periods beginning after December 15, 2017. Inotek does not currently generate revenue or have any arrangements that are subject to this guidance.

In February 2016, the FASB issued ASU 2016-02, *Leases (Topic 842)*, which supersedes the current leasing guidance and upon adoption, will require lessees to recognize right-of-use assets and lease liabilities on the balance sheet for all leases with terms longer than 12 months. The new standard is effective for Inotek for the annual period beginning after December 15, 2018, and can be early adopted by applying a modified retrospective approach for leases existing at, and entered into after, the beginning of the earliest comparable period presented in the financial statements. Inotek is currently evaluating the impact of this accounting standard update on its consolidated financial statements.

In March 2016, the FASB issued ASU 2016-09, *Improvements to Employee Share-Based Payment Accounting*, which amends FASB ASC Topic 718, Compensation – Stock Compensation ("ASC 718"), and includes provisions intended to simplify various aspects related to how share-based payments are accounted for and presented in the financial statements. The new standard is effective for Inotek for the annual period beginning after December 15, 2016, and for annual and interim periods thereafter, with early adoption permitted. Inotek adopted this standard on January 1, 2017. The update revises requirements in the following areas: minimum statutory withholding, accounting for income taxes, and forfeitures. Prior to adoption, Inotek applied a 0% forfeiture rate to share-based compensation, resulting in no cumulative effect adjustment to the opening period. Upon adoption of ASU 2016-09, Inotek's accounting policy is to recognize forfeitures as they occur. The update also requires Inotek to recognize the income tax effect of

awards in the income statement when the awards vest or are settled. Finally, the update allows Inotek to repurchase more of an employee's shares than it can today for tax withholding purposes without triggering a liability. The income tax related items had no effect on the current period presentation and Inotek maintains a full valuation allowance against its deferred tax assets.

In May 2017, the FASB issued ASU 2017-09, *Scope of Modification Accounting*, which clarifies the scope under which modification accounting should be applied to a share-based payment award under ASC 718. The standard will be effective for annual reporting periods and interim periods within those annual periods, beginning after December 15, 2017, and early adoption is permitted for interim or annual period beginning after January 1, 2017. Inotek is currently evaluating the impact of this accounting standard update on its consolidated financial statements.

**3. Property and Equipment**

At December 31, 2017 and 2016, Inotek's property and equipment consisted of the following:

| | December 31, | |
|---|---|---|
| | 2017 | 2016 |
| | (in thousands) | |
| Office equipment | $ 357 | $ 407 |
| Computer hardware and software | 96 | 263 |
| Laboratory equipment | — | 446 |
| Leasehold improvements | 445 | 445 |
| Total | 898 | 1,561 |
| Less: accumulated depreciation | (335) | (431) |
| Property and equipment, net | $ 563 | $ 1,130 |

During the years ended December 31, 2017 and 2016, Inotek recognized $200 and $169 of depreciation expense, respectively, and wrote off $217 of fully depreciated net assets in the year ended December 31, 2017.

In 2017, Inotek voluntarily discontinued its development of *trabodenoson* and classified its equipment used in the production of *trabodenoson* as held for sale. Inotek performed an impairment assessment of this equipment by comparing the equipment's carrying value to its estimated fair value, which was based on prices obtained for similar assets. The analysis resulted in an impairment of Inotek's laboratory equipment of $437 which was charged to research and development expenses in 2017.

**4. Accrued Expenses and Other Current Liabilities**

At December 31, 2017 and 2016, Inotek's accrued expenses and other current liabilities consisted of the following:

| | December 31, | |
|---|---|---|
| | 2017 | 2016 |
| | (in thousands) | |
| Compensation and benefits | $ 793 | $ 1,627 |
| Professional fees | 528 | 311 |
| Government payable | 506 | 478 |
| Severance and benefits | 270 | 544 |
| Research and development | 151 | 1,148 |
| Other | 125 | 138 |
| Total | $ 2,373 | $ 4,246 |

**5. Debt**

***2021 Convertible Notes***

On August 5, 2016, Inotek issued an aggregate of $50,000 of the 2021 Convertible Notes. On August 30, 2016, Inotek issued an additional $2,000 of 2021 Convertible Notes pursuant to the exercise of the underwriters' overallotment option. The 2021 Convertible Notes have a maturity date of August 1, 2021 ("Maturity Date"), are unsecured and accrue interest at a rate of 5.75% per annum, payable semi-annually on February 1 and August 1 of each year, beginning February 1, 2017. In connection with the issuance of the

2021 Convertible Notes, the Company incurred $3,262 of debt issuance costs which were recorded as a discount on the 2021 Convertible Notes.

Each holder of a 2021 Convertible Note (the "Holder") has the option until the close of business on the second business day immediately preceding the Maturity Date to convert all, or any portion, of the 2021 Convertible Notes held by it at a conversion rate of 31.1876 shares of Inotek's common stock per $1 principal amount of 2021 Convertible Notes (the "Conversion Rate"). The Conversion Rate is subject to adjustment from time to time upon the occurrence of certain events, including the issuance of stock dividends and payment of cash dividends. In addition, in certain circumstances, the Conversion Rate will be increased in respect of a Holder's conversion of 2021 Convertible Notes in connection with the occurrence of one or more corporate events specified in the indenture (as supplemented, the "Indenture") governing the 2021 Convertible Notes (each such specified corporate event, a "Make-Whole Fundamental Change") that occurs prior to the Maturity Date (a "Make-Whole Fundamental Change Conversion") or in respect of a Holder's voluntary conversion of 2021 Convertible Notes other than in connection with a Make-Whole Fundamental Change (a "Voluntary Conversion"). In connection with a Make-Whole Fundamental Change Conversion or a Voluntary Conversion, Inotek will increase the Conversion Rate for the 2021 Convertible Notes surrendered for conversion by a number of additional shares of Inotek's common stock set forth in the Additional Shares Make-Whole Table in the Indenture, based on the applicable Stock Price (as defined in the Indenture) and Effective Date (as defined in the Indenture) for such conversion. The additional shares potentially issuable in connection with a Make-Whole Fundamental Change Conversion or a Voluntary Conversion range from 0 to 6.2375 per $1 principal amount of 2021 Convertible Notes, subject to adjustment. If the Stock Price applicable to any conversion is greater than $160.00 per share, the Conversion Rate will not be increased. If the Stock Price applicable to any conversion is less than $26.72 per share, the Conversion Rate in connection with a Make-Whole Fundamental Change Conversion will not be increased but it will be increased by 6.2375 shares in connection with a Voluntary Conversion. Upon conversion, Holders of the 2021 Convertible Notes will receive shares of Inotek's common stock and cash in lieu of fractional shares.

Upon the occurrence of a Fundamental Change, the occurrence of certain change of control transactions or delisting events (as defined in the Indenture), each Holder may require Inotek to repurchase for cash all or any portion of the 2021 Convertible Notes held by such Holder at a repurchase price equal to 100% of the principal amount thereof, plus accrued and unpaid interest thereon.

Inotek, at its option, may redeem for cash all or any portion of the 2021 Convertible Notes if the last reported sale price of a share of Inotek's common stock is equal to or greater than 200% of the conversion price for the 2021 Convertible Notes then in effect for at least 20 trading days (whether or not consecutive) during any 30 consecutive trading day period (including the last trading day of such period) ending within the five trading days immediately preceding the date on which Inotek provides notice of redemption, at a redemption price equal to 100% of the principal amount of the 2021 Convertible Notes to be redeemed, plus accrued and unpaid interest to, but excluding, the redemption date.

If an Event of Default (as defined in the Indenture), other than certain events of bankruptcy, insolvency or reorganization involving Inotek, occurs and is continuing, the trustee under the Indenture (the "Trustee") or the Holders of at least 25% in principal amount of the outstanding 2021 Convertible Notes may declare 100% of the principal of and accrued and unpaid interest, if any, on all of the 2021 Convertible Notes to be due and payable immediately. Upon the occurrence of an Event of Default relating to bankruptcy, insolvency or reorganization involving Inotek, 100% of the principal of and accrued and unpaid interest, if any, on all of the 2021 Convertible Notes would become due and payable automatically.

Notwithstanding the foregoing, the Indenture provides that, to the extent Inotek elects, the sole remedy for an Event of Default relating to certain failures by Inotek to comply with certain reporting covenants in the Indenture, will (i) for the first 90 days after the occurrence of such an Event of Default, consist exclusively of the right to receive additional interest on the 2021 Convertible Notes at a rate equal to 0.25% per annum of the principal amount of the 2021 Convertible Notes outstanding for each day during such 90-day period on which such an Event of Default is continuing and (ii) for the period from, and including, the 91st day after the occurrence of such an Event of Default to, and including, the 180th day after the occurrence of such an Event of Default, consist exclusively of the right to receive additional interest on the 2021 Convertible Notes at a rate equal to 0.50% per annum of the principal amount of the 2021 Convertible Notes outstanding for each day during such additional 90-day period on which such an Event of Default is continuing (such additional interest, "Additional Interest"). After 180 days, if such Event of Default is not cured or waived, the 2021 Convertible Notes would be subject to acceleration in accordance with the Indenture.

The 2021 Convertible Notes are considered a hybrid financial instrument consisting of a fixed interest rate "host" and various embedded features that required evaluation as potential embedded derivatives under FASB ASC 815, *Derivatives and Hedging* ("ASC 815"). Based on the nature of the host instrument and the embedded features, management concluded that none of the conversion, put and redemption features required bifurcation and separate accounting from the host instrument. Inotek determined that the Additional Interest was an embedded derivative that contains non-credit related events of default. As a result, the Additional Interest feature required bifurcation and separate accounting under ASC 815. Based on the amount of Additional Interest that would be owed and the

likelihood of occurrence, Inotek estimated the fair value of the Additional Interest feature to be insignificant upon issuance and as of December 31, 2017 and 2016.

The issuance costs which were recorded as a discount on the debt are being amortized to interest expense over the life of the 2021 Convertible Notes using the effective interest method. As of December 31, 2017, the stated interest rate was 5.75%, and the effective interest rate was 7.3%. For the year ended December 31, 2017, interest expense related to the 2021 Convertible Notes, was $3,579, including $581 related to amortization of the debt discount. For the year ended December 31, 2016, interest expense related to the 2021 Convertible Notes, was $1,418, including $222 related to amortization of the debt discount.

The table below summarizes the carrying value of the 2021 Convertible Notes as of December 31, 2017 and 2016:

| | (in thousands) |
|---|---|
| Gross proceeds | $ 52,000 |
| Initial value of issuance costs recorded as debt discount | (3,262) |
| Amortization of debt discount | 222 |
| Carrying value as of December 31, 2016 | 48,960 |
| Amortization of debt discount | 581 |
| Carrying value as of December 31, 2017 | $ 49,541 |

**6. Income Taxes**

No provision for federal or state income taxes was recorded during the years ended December 31, 2017 and 2016, as Inotek incurred operating losses for each of these years.

Net loss by jurisdiction consists of the following:

| | For the Years Ended December 31, | |
|---|---|---|
| | 2017 | 2016 |
| | (in thousands) | |
| Domestic | $ 28,281 | $ 41,821 |
| Foreign | 1,216 | 1,033 |
| Total | $ 29,497 | $ 42,854 |

A reconciliation between the effective tax rates and statutory rates for the years ended December 31, 2017 and 2016 is as follows:

| | For the Years Ended December 31, | |
|---|---|---|
| | 2017 | 2016 |
| Computed at statutory rate | 34.00 % | 34.00 % |
| State income taxes | 4.34 | 4.76 |
| Tax credits | 1.76 | 3.38 |
| Other | (6.04) | (1.74) |
| Federal rate change | (79.56) | — |
| Valuation allowance | 45.50 | (40.40) |
| | — % | — % |

The tax effect of significant temporary differences representing deferred tax assets and liabilities as of December 31, 2017 and 2016 is as follows:

| | December 31, | |
|---|---|---|
| | 2017 | 2016 |
| | (in thousands) | |
| Net operating loss (“NOL”) and credit carryforwards | $ 37,252 | $ 43,765 |
| Capitalized research and development costs | 16,115 | 22,775 |
| Other | 1,722 | 1,963 |
| Valuation allowance | (55,089) | (68,503) |
| | $ — | $ — |

On December 22, 2017, the Tax Cuts and Jobs Act ("TCJA") was enacted and significantly revised the U.S. income tax law. The TCJA includes changes which reduce the corporate income tax rate from 35% to 21% for years beginning after December 31, 2017, and establish a territorial-style system for taxing foreign-source income of domestic multinational companies.

GAAP requires re-measurement of US deferred tax assets and liabilities to reflect the impact of a tax rate reduction in the period that includes enactment date. As a result, Inotek has revalued its deferred taxes assets and liabilities to 21% in the December 31, 2017 financial statements and the impact was offset by Inotek's valuation allowance. Inotek has reflected the associated impact in the reconciliation of its effective tax rate above.

On December 22, 2017, Staff Accounting Bulletin No. 118 ("SAB 118") was issued and allows a company to recognize provisional amounts when it does not have the necessary information available, prepared or analyzed, including computations, in reasonable detail to complete its accounting for the change in tax law. SAB 118 provides for a measurement of up to one year from the date of enactment. Inotek has not yet fully completed its analysis of the TCJA, however based on the total unrepatriated accumulated foreign earnings, Inotek does not believe any additional income taxes are due as any income, if determined, will be fully offset by Inotek's NOL carryforwards.

As required by ASC 740, *Income Taxes*, management of Inotek has evaluated the positive and negative evidence bearing upon the realizability of its deferred tax assets, which are comprised principally of NOL carryforwards and capitalized research and development costs. As a result of the fact that Inotek has incurred tax losses from inception, management has determined that it is more likely than not that Inotek will not recognize the benefits of federal and state net deferred tax assets and, as a result, a full valuation allowance has been established against its net deferred tax assets as of December 31, 2017 and 2016. Inotek has offset certain deferred tax liabilities with deferred tax assets that are expected to generate offsetting deductions within the same period. During the years ended December 31, 2017 and 2016, the valuation allowance decreased by $13,414 and increased by $17,312, respectively. Realization of deferred tax assets is dependent upon the generation of future taxable income.

As of December 31, 2017, Inotek had federal NOL carryforwards for income tax purposes of $127,132 that expire at various dates through 2037, and state NOL carryforwards of $83,428 that expire at various dates through 2037, available to reduce future federal and state income taxes, if any. As of December 31, 2017, Inotek had federal research and development tax credits of $5,171, and state research and development tax credits of $819. If substantial changes in Inotek's ownership should occur, as defined in Section 382 of the Internal Revenue Code of 1986, as amended, (the "Code"), there could be annual limitations on the amount of loss carryforwards which can be realized in future periods. Inotek has determined that it has experienced prior ownership changes occurring in 2005, 2007 and 2015. The pre-change NOL carryforwards, although subject to an annual limitation, as well as any post-change NOL carryforwards, can be utilized in future years, provided that sufficient income is generated and no future ownership changes occur that may limit Inotek's NOL carryforwards.

As of December 31, 2017 and 2016, Inotek's total unrecognized tax benefits totaled $535 and $488, respectively, which if recognized would affect the effective tax rate prior to the adjustment for Inotek's valuation allowance. Inotek files income tax returns in the U.S. federal and Massachusetts tax jurisdictions. Starting in tax year 2016, Inotek filed tax returns in the New Jersey tax jurisdiction. Tax years 2014 through 2017 remain open to examination by the tax jurisdictions in which Inotek is subject to tax. Since Inotek is in a loss carryforward position, the Internal Revenue Service ("IRS") and state taxing authorities are permitted to audit the earlier tax years and propose adjustments up to the amount of the NOL carryforwards generated. Inotek is not currently under examination by the IRS or any other jurisdiction for any tax years.

The change in unrecognized tax benefits for each of the years ended December 31, 2017 and 2016 is as follows:

| | For the Years Ended December 31, | |
|---|---|---|
| | 2017 | 2016 |
| | (in thousands) | |
| Balance at January 1, | $ 488 | $ 333 |
| Additions for prior year tax positions | (4) | 6 |
| Additions for current year tax positions | 51 | 149 |
| | $ 535 | $ 488 |

The Reverse Merger is expected to result in a substantial reduction to Inotek's NOL carryforwards and unrecognized tax benefits.

## 7. Equity

### Authorized Shares

As of December 31, 2017, Inotek's authorized capital stock consisted of 120,000,000 shares of common stock, par value $0.01 per share, and 5,000,000 shares of undesignated preferred stock, par value $0.001 per share.

### Reverse Stock Split

On January 4, 2018, in connection with the Reverse Merger, Inotek effected a 1-for-4 reverse stock split on its issued and outstanding common stock. Inotek's historical share and per share information has been retroactively adjusted in the financial statements presented to give effect to this reverse stock split.

### Common Stock

All preferences, voting powers, relative, participating, optional, or other specific rights and privileges, limitations, or restrictions of the common stock are expressly subject to those that may be fixed with respect to any shares of preferred stock. Common stockholders are entitled to one vote per share, and to receive dividends, when and if declared by the Board. There were 6,805,686 and 6,746,579 shares of common stock outstanding at December 31, 2017 and 2016, respectively.

### Preferred Stock

As of December 31, 2017 and 2016, there were no shares of preferred stock issued and outstanding.

## 8. Stock Plans

Inotek maintains three equity compensation plans: the Amended and Restated 2014 Stock Option and Incentive Plan (the "2014 Plan"), the 2004 Stock Option and Incentive Plan (the "2004 Plan"), and the 2014 Employee Stock Purchase Plan ("ESPP").

### Amended and Restated 2014 Stock Option and Incentive Plan

In August 2014, Inotek's board of directors adopted the 2014 Plan for the issuance of incentive and non-qualified stock options, restricted stock, and other equity awards, all for common stock, as determined by the board of directors to employees, officers, directors, consultants, and advisors of Inotek and its subsidiaries. Pursuant to the provisions of the 2014 Plan and approval by the board of directors, on January 1, 2018 an additional 272,227 shares were added to the 2014 Plan representing 4% of total common shares issued and outstanding at December 31, 2017. There were 207,579 shares available for issuance under the 2014 Plan as of December 31, 2017. The 2014 Plan expires in August 2024.

In December 2016, the board granted to certain executive officers an aggregate of 117,500 restricted stock units ("RSUs") pursuant to the 2014 Plan. Each restricted stock unit represents a contingent right to receive one share of Inotek's common stock. Vesting for these RSUs was based equally on the achievement of two performance-based conditions, subject to continued service through such achievement dates. The intrinsic fair value of these RSUs as of the date of grant was $3,055 and no stock-based compensation expense was recorded in 2016 as Inotek determined that the vesting conditions were not probable of occurring. In January 2017, these RSUs were modified such that instead of vesting based on the achievement of certain performance-based conditions, they would vest in equal annual installments over four years from the December 2016 date of grant, subject to continued service through such dates. This change in vesting criteria was accounted for as a modification under ASC 718 whereby Inotek is recognizing the $717 fair value of the grants as of the date of modification over the vesting term.

In September 2017, Inotek accelerated the vesting of all unvested RSUs and stock options held by the ten terminated employees and recorded an incremental charge related to these modifications of $158, of which $142 and $16 was reflected in research and development and general and administrative expenses, respectively. Inotek also modified the employment agreements with certain of its remaining employees such that in the event of a change in control, if the employee experiences a qualifying termination by Inotek any time prior to or within 12 months of the change in control, all such employee's outstanding stock options and RSUs will vest in full and the stock options will become exercisable. Inotek determined that the original awards were expected to vest under their original terms both prior to and after the modification. A comparison of the fair value of the outstanding stock awards immediately before and after the modification resulted in no incremental expense.

In October 2017, Inotek extended the exercise period for stock options held by each of its then remaining employees and directors. This change in expected term criteria was accounted for as a modification under ASC 718 whereby Inotek recorded an

incremental charge of $856, of which $196 and $660 was reflected in research and development and general and administrative expenses, respectively.

The following table summarizes the option activity for each of the years ended December 31, 2017 and 2016 under the 2014 Plan:

| | Number of Shares | Weighted-Average Exercise Price Per Share | Aggregate Intrinsic Value (in thousands) |
|---|---|---|---|
| Outstanding as of December 31, 2015 | 405,190 | $ 19.80 | |
| Granted | 289,125 | $ 31.08 | |
| Exercised | (21,107) | $ 18.84 | |
| Cancelled | (7,000) | $ 27.16 | |
| Outstanding as of December 31, 2016 | 666,208 | $ 24.64 | $ 2,064 |
| Granted | 78,750 | $ 7.20 | |
| Exercised | — | | |
| Cancelled | (223,062) | $ 27.04 | |
| Outstanding as of December 31, 2017 | 521,896 | $ 20.96 | $ 255 |
| Vested and exercisable as of December 31, 2017 | 335,230 | $ 20.36 | $ 128 |
| Weighted-average years remaining on contractual life | 7.80 | | |
| Unrecognized compensation cost related to non-vested stock options | $ 3,459 | | |

The weighted-average fair value of all stock options granted for the years ending December 31, 2017 and 2016 was $5.72 and $20.92, respectively. Intrinsic value at December 31, 2017 and 2016 is based on the closing price of Inotek's common stock of $10.44 and $24.40 per share, respectively. As of December 31, 2017, all options granted are expected to vest.

In 2016, 7,530 shares of the 21,107 total options exercised were surrendered to Inotek pursuant to a net exercise right.

Unrecognized compensation cost related to non-vested stock options at December 31, 2017 includes $462 related to the October 2017 modification to extend the exercise period for certain unvested stock options.

The following table summarizes the RSU activity for each of the years ended December 31, 2017 and 2016 under the 2014 Plan:

| | Number of Shares | Weighted-Average Grant Date Fair Value Per Share |
|---|---|---|
| Outstanding as of December 31, 2015 | - | |
| Granted | 117,500 | $ 26.00 |
| Vested | - | |
| Cancelled | - | |
| Outstanding as of December 31, 2016 | 117,500 | $ 26.00 |
| Granted | 232,750 | $ 6.40 |
| Vested and settled | (56,406) | $ 6.76 |
| Cancelled | (22,125) | $ 6.80 |
| Outstanding as of December 31, 2017 | 271,719 | $ 4.20 |

As noted above, all outstanding RSUs were modified in the year ended December 31, 2017. Therefore, the weighted average grant date fair value per share of outstanding RSUs as of December 31, 2017, reflects the $4.20 per share fair value of the outstanding RSUs as of the date of modification.

Shares issued for RSUs that vested and settled in the year ended December 31, 2017, included 3,270 shares of common stock surrendered by employees for payment of $16 of withholding taxes due, resulting in a net issuance of 53,136 shares. Also, there were

29,375 RSUs that vested but remained unsettled as of December 31, 2017, per the terms of the Restricted Stock Unit Agreements. These RSUs are expected to settle no later than March 15, 2018.

**2004 Stock Option and Incentive Plan**

In July 2004, Inotek's board of directors adopted the 2004 Plan for the issuance of incentive stock options, restricted stock, and other equity awards, all for common stock, as determined by the board of directors to employees, officers, directors, consultants, and advisors of Inotek and its subsidiaries. Only stock options were granted under the 2004 Plan. The 2004 Plan expired in February 2014 but remains effective for all outstanding options.

The following table summarizes stock option activity for each of the years ended December 31, 2017 and 2016 under the 2004 Plan:

| | Number of Shares | Weighted-Average Exercise Price Per Share | Aggregate Intrinsic Value (in thousands) |
|---|---|---|---|
| Outstanding as of December 31, 2015 | 2,729 | $ 162.32 | |
| Exercised | — | $ — | |
| Expired | — | $ — | |
| Cancelled | (73) | $ 162.32 | |
| Outstanding as of December 31, 2016 | 2,656 | $ 162.32 | |
| Exercised | — | $ — | |
| Expired | (570) | $ 162.32 | |
| Cancelled | (462) | $ 162.32 | |
| Outstanding as of December 31, 2017 | 1,624 | $ 162.32 | $ — |
| Vested and exercisable as of December 31, 2017 | 1,624 | $ 162.32 | $ — |
| Weighted-average years remaining on contractual life | 0.66 | | |
| Unrecognized compensation cost related to non-vested stock options | $ — | | |

Inotek recorded no stock compensation expense in the years ended December 31, 2017 and 2016 relating to stock options granted pursuant to the 2004 Plan. At December 31, 2017, all 2004 Plan options were fully vested and there was no unrecognized stock-based compensation expense relating to stock options granted pursuant to the 2004 Plan. Options outstanding as of December 31, 2017 had no intrinsic value, as the option price exceeded the fair value of the underlying shares.

**Employee Stock Purchase Plan**

In November 2014, Inotek's board of directors adopted and the stockholders approved the ESPP. The ESPP provides that the number of shares reserved and available for issuance under the ESPP shall be cumulatively increased each January 1, beginning on January 1, 2016, by the lesser of (i) 600,000 shares of common stock or (ii) the number of shares necessary to set the number of shares of common stock under the ESPP at 1% percent of the outstanding number of shares as of January 1 of the applicable year. However, the board of directors reserves the right to determine that there will be no increase for any year or that any increase will be for a lesser number of shares. As of January 1, 2018, 6,562 shares were added to the ESPP. As of December 31, 2017, there were 61,494 shares available for issuance under the ESPP.

All employees who are whose customary employment is for more than 20 hours a week are eligible to participate in the ESPP. Any employee who owns 5% or more of the voting power or value of Inotek's shares of common stock is not eligible to purchase shares under the ESPP. Each employee who is a participant in the ESPP may purchase shares by authorizing payroll deductions of up to 10% of his or her base compensation during an offering period. Unless the participating employee has previously withdrawn from the offering, his or her accumulated payroll deductions will be used to purchase shares of common stock on the last business day of the offering period at a price equal to 85% of the fair market value of the ordinary shares on the first business day or the last business day of the offering period, whichever is lower, provided that no more than 5,000 shares of common stock may be purchased by any one employee during each offering period. Under applicable tax rules, an employee may purchase no more than $25,000 worth of stock, valued at the start of the purchase period, under the ESPP in any calendar year.

In 2017, 5,971 shares of common stock were purchased pursuant to the ESPP, resulting in proceeds to Inotek of $35. Inotek recorded $6 of stock-based compensation expense pursuant to the ESPP during the year ended December 31, 2017. In 2016, $155 was

withheld and used to purchase 6,481 shares of common stock and Inotek recorded $66 of stock-based compensation expense pursuant to the ESPP.

**Stock-Based Compensation**

Stock-based compensation expense for options, RSUs and the ESPP is reflected in the consolidated statements of operations as follows:

| | December 31, | |
|---|---|---|
| | 2017 | 2016 |
| | (in thousands) | |
| Research and development | $ 1,287 | $ 1,362 |
| General and administrative | 2,749 | 1,547 |
| Total | $ 4,036 | $ 2,909 |

**9. Commitments and Contingencies**

*Operating Leases*

In 2015, Inotek entered into a lease agreement (the "Office Lease") for its headquarters in Lexington, Massachusetts. Inotek occupied this space in September 2015, at which time its rental obligations commenced. Inotek recorded $445 as leasehold improvements for costs incurred to build out the space, and is amortizing those costs to facilities expense over the term of the lease. Rent expense is recognized on a straight-line basis at the average monthly rent over the term of the lease. Deferred rent is included in other current and long-term liabilities on Inotek's consolidated balance sheets.

In 2016, Inotek signed an amendment to the Office Lease, whereby it agreed to rent additional space (the "Lease Amendment"). Inotek occupied the additional space on July 1, 2016. The terms of the Lease Amendment follow the terms of the Office Lease. The lease term is 90 months and Inotek has the right to extend the term for one period of five years.

Rent expense was $337 and $275 for the years ended December 31, 2017 and 2016, respectively. As of December 31, 2017, the remaining aggregate annual commitments pursuant to the Office Lease and the Lease Amendment are as follows:

| Year | (in thousands) |
|---|---|
| 2018 | $ 411 |
| 2019 | 421 |
| 2020 | 430 |
| 2021 | 439 |
| 2022 | 445 |
| Thereafter | 74 |
| Total | $ 2,220 |

*Employee Agreements*

In September 2017, Inotek modified the employment agreements with certain of its remaining employees such that in the event of termination in connection with a change in control ("CIC"), Inotek will provide these employees severance payments at each employee's current monthly salary rate, and continued medical, dental and vision coverage pursuant to COBRA (of the employer's portion of the premium cost) for up to six months primarily depending on duration of each individual employee's service. Inotek also modified the employment agreements with certain of its named executive officers. In the event of a qualifying termination in connection with a CIC, for each of Inotek's Chief Medical Officer and Vice President, Finance, Inotek will pay (i) twelve and six months' severance, respectively, at each person's current monthly salary rate, and (ii) continued medical, dental and vision coverage pursuant to COBRA (of the employer's portion of the premium cost), for twelve and six months, respectively. In the event of a qualifying termination in connection with a CIC, in addition to the severance benefits previously provided to Inotek's Chief Executive Officer (consisting of a lump-sum payment equal to 18 months' base salary), Inotek agreed to provide continued medical, dental and vision coverage pursuant to COBRA (of the employer's portion of the premium cost), for eighteen months. In addition, Inotek committed to paying to all seven remaining employees, if they were employees on the date of a CIC, a retention bonus, with the aggregate of all such retention bonuses equal to approximately $642.

Also, upon a CIC, Inotek would owe Perella Weinberg a fee of $2,000.

All payments described above became due and payable upon the consummation of the Reverse Merger in January 2018.

*Securities Litigation*

On January 6, 2017, a purported stockholder of Inotek filed a putative class action in the U.S. District Court for the District of Massachusetts, captioned *Whitehead v. Inotek Pharmaceuticals Corporation, et al.*, No. 1:17-cv-10025. An amended complaint was filed on July 10, 2017, and a second amended complaint was filed on September 5, 2017. The second amended complaint alleges violations of Sections 10(b) and 20(a) of the Securities Exchange Act of 1934 and SEC Rule 10b-5 against the Company, David Southwell, and Rudolf Baumgartner based on allegedly false and misleading statements and omissions regarding Inotek's phase 2 and phase 3 clinical trials of *trabodenoson*. The lawsuit seeks, among other things, unspecified compensatory damages for purchasers of Inotek's common stock between July 23, 2015 and July 10, 2017, as well as interest and attorneys' fees and costs. The defendants filed a motion to dismiss the second amended complaint on October 6, 2017, the plaintiffs opposed the motion on December 5, 2017, and the defendants filed a reply on January 16, 2018. Inotek continues to vigorously defend itself against this claim.

From time to time, Inotek may be subject to other various legal proceedings and claims that arise in the ordinary course of its business activities. Although the results of litigation and claims cannot be predicted with certainty, Inotek does not believe it is party to any other claim or litigation the outcome of which, if determined adversely to Inotek, would individually or in the aggregate be reasonably expected to have a material adverse effect on its business. Regardless of the outcome, litigation can have an adverse impact on Inotek because of defense and settlement costs, diversion of management resources and other factors.

*Termination of Chief Scientific Officer*

In October 2016, Inotek entered into a Transition Agreement with its former Chief Scientific Officer, William K. McVicar, Ph.D. (the "Transition Agreement"). Pursuant to the terms of the Transition Agreement, Dr. McVicar remained an employee of the Company as a Senior Advisor for a six-month period ending April 4, 2017 (the "Transition Period") and for twelve months thereafter will receive his salary and medical benefits at the same rate in effect as of the date of the Transition Agreement. Inotek recorded a charge in research and development expense of approximately $862 in 2016 related to the Transition Agreement, including approximately $215 related to stock options expected to vest during the Transition Period. Through December 31, 2017, Inotek has made payments of approximately $591 to Dr. McVicar, including $102 related to his 2016 bonus payment which was accrued prior to his termination. As of December 31, 2017, Inotek had $106 in accrued severance related to Dr. McVicar.

*Indemnification Arrangements*

As permitted under Delaware law, Inotek's bylaws provide that Inotek will indemnify any director, officer, employee or agent of Inotek or anyone serving in these capacities. The maximum potential amount of future payments Inotek could be required to pay is unlimited. Inotek has insurance that reduces its monetary exposure and would enable it to recover a portion of any future amounts paid. As a result, Inotek believes that the estimated fair value of these indemnification commitments is minimal.

Throughout the normal course of business, Inotek has agreements with vendors that provide goods and services required by Inotek to run its business. In some instances, vendor agreements include language that requires Inotek to indemnify the vendor from certain damages caused by Inotek's use of the vendor's goods and/or services. Inotek has insurance that would allow it to recover a portion of any future amounts that could arise from these indemnifications. As a result, Inotek believes that the estimated fair value of these indemnification commitments is minimal.

**10. Fair Value of Financial Measurements**

Items measured at fair value on a recurring basis are short term investments. The following table sets forth Inotek's financial instruments that were measured at fair value on a recurring basis by level within the fair value hierarchy:

| | Fair Value Measurements at December 31, 2017 | | | |
|---|---|---|---|---|
| | Total | Level 1 | Level 2 | Level 3 |
| | (in thousands) | | | |
| **Assets:** | | | | |
| Money market mutual funds (included in cash and cash equivalents) | $ 76,949 | $ 76,949 | $ — | $ — |
| | | | | |
| Certificates of deposit | $ 3,667 | $ — | $ 3,667 | $ — |
| United States Treasury securities | 17,627 | 17,627 | — | — |
| Short-term investments | $ 21,294 | $ 17,627 | $ 3,667 | $ — |

| | Fair Value Measurements at December 31, 2016 | | | |
|---|---|---|---|---|
| | Total | Level 1 | Level 2 | Level 3 |
| | (in thousands) | | | |
| **Assets:** | | | | |
| Money market mutual funds (included in cash and cash equivalents) | $ 20,698 | $ 20,698 | $ — | $ — |
| | | | | |
| Certificates of deposit | $ 22,046 | $ — | $ 22,046 | $ — |
| Agency bonds | 5,913 | — | 5,913 | — |
| United States Treasury securities | 68,716 | 68,716 | — | — |
| Short-term investments | $ 96,675 | $ 68,716 | $ 27,959 | $ — |

***Money market mutual funds***

Inotek classifies its money market mutual funds as Level 1 assets under the fair value hierarchy as these assets have been valued using quoted market prices in active markets without any valuation adjustment.

***Short-term investments***

Inotek classifies its United States Treasury securities as Level 1 assets under the fair value hierarchy as these assets have been valued using quoted market prices in active markets without any valuation adjustment. Inotek classifies its certificates of deposit as Level 2 assets under the fair value hierarchy, as there are no quoted market prices in active markets, and its agency bonds as Level 2 assets under the fair value hierarchy, as these assets are not always valued daily using quoted market prices in active markets.

**11. Benefit Plans**

**Retirement Plan**

Inotek sponsors a 401(k) savings plan (the "Savings Plan") for all eligible U.S. employees. Inotek reserves the right to modify, amend, or terminate the Savings Plan. Employees may contribute up to the maximum allowed by the IRS, while Inotek contributes to the plan at the discretion of the board of directors. Inotek's contributions to the plan for the years ended December 31, 2017 and 2016 were $154 and $168, respectively. On January 3, 2018, the Savings Plan was terminated.

**12. Subsequent Events**

*Completion of the Reverse Merger*

On January 4, 2018, Inotek completed the Reverse Merger with Private Rocket merging with Merger Sub. The Reverse Merger was effected pursuant to the Merger Agreement. Private Rocket is a multi-platform biotechnology company focused on the development of first-in-class gene therapies for rare and devastating pediatric diseases. The Reverse Merger will be accounted for as a reverse merger under the acquisition method of accounting. Under the acquisition method of accounting, Private Rocket will be treated as the accounting acquirer and Inotek will be treated as the "acquired" company for financial reporting purposes because, immediately upon completion of the Reverse Merger, Private Rocket stockholders held a majority of the voting interest of the combined company.

Immediately prior to the Reverse Merger, on January 4, 2018, Inotek effected a 1-for-4 reverse stock split on its issued and outstanding common stock. Pursuant to the terms of the Merger Agreement, each outstanding share of Private Rocket common stock converted into approximately 76.185 shares of Inotek's common stock (the "Exchange Ratio"). As a result of the reverse stock split, the per share exercise price of, and the number of shares of common stock underlying, Inotek's stock options and warrants outstanding prior to the reverse stock split were automatically proportionally adjusted based on the 4-to-1 reverse stock split ratio in accordance with the terms of such options and warrants. The reverse stock split did not alter the par value of Inotek's common stock or modify any voting rights or other terms of the common stock.

Also in connection with the completion of the Reverse Merger, Inotek changed its name from "Inotek Pharmaceuticals Corporation" to "Rocket Pharmaceuticals, Inc."

*Offering of Common Stock*

On January 24, 2018, Rocket entered into an underwriting agreement (the "Underwriting Agreement") with Cowen and Company, LLC and Evercore Group L.L.C., as representatives (the "Representatives") of the several underwriters (collectively with the Representatives, the "Underwriters"), pursuant to which the Company agreed to issue and sell up to 6,325,000 shares of common stock (the "Shares"), which includes 825,000 shares that were sold pursuant to an option granted to the Underwriters (the "Offering"). The Shares were offered and sold in the Offering at a public offering price of $13.25 per share and were purchased by the Underwriters from Rocket at a price of $12.455 per share. On January 26, 2018, Rocket received net proceeds from the Offering of $78,778, after deducting underwriting discounts and commissions. All the shares in the offering were sold by Rocket.

**Exhibit 10.2**

**ROCKET PHARMACEUTICALS, INC.**
**AMENDED AND RESTATED 2014 STOCK OPTION AND INCENTIVE PLAN**

SECTION 1. GENERAL PURPOSE OF THE PLAN; DEFINITIONS

The name of the plan is the Rocket Pharmaceuticals, Inc. 2014 Amended and Restated Stock Option and Incentive Plan (the "Plan"). The purpose of the Plan is to encourage and enable the officers, employees, Non-Employee Directors and Consultants of Rocket Pharmaceuticals, Inc. (the "Company") and its Subsidiaries upon whose judgment, initiative and efforts the Company largely depends for the successful conduct of its business to acquire a proprietary interest in the Company. It is anticipated that providing such persons with a direct stake in the Company's welfare will assure a closer identification of their interests with those of the Company and its stockholders, thereby stimulating their efforts on the Company's behalf and strengthening their desire to remain with the Company.

The following terms shall be defined as set forth below:

"Act" means the Securities Act of 1933, as amended, and the rules and regulations thereunder.

"Administrator" means either the Board or the compensation committee of the Board or a similar committee performing the functions of the compensation committee and which is comprised of not less than two Non-Employee Directors who are independent.

"Award" or "Awards," except where referring to a particular category of grant under the Plan, shall include Incentive Stock Options, Non-Qualified Stock Options, Stock Appreciation Rights, Restricted Stock Units, Restricted Stock Awards, Unrestricted Stock Awards, Cash-Based Awards, Performance Share Awards and Dividend Equivalent Rights.

"Award Certificate" means a written or electronic document setting forth the terms and provisions applicable to an Award granted under the Plan. Each Award Certificate is subject to the terms and conditions of the Plan.

"Board" means the Board of Directors of the Company.

"Cash-Based Award" means an Award entitling the recipient to receive a cash-denominated payment.

"Code" means the Internal Revenue Code of 1986, as amended, and any successor Code, and related rules, regulations and interpretations.

"Consultant" means any natural person that provides bona fide services to the Company, and such services are not in connection with the offer or sale of securities in a capital-raising transaction and do not directly or indirectly promote or maintain a market for the Company's securities.

"Covered Employee" means an employee who is a "Covered Employee" within the meaning of Section 162(m) of the Code.

"Dividend Equivalent Right" means an Award entitling the grantee to receive credits based on cash dividends that would have been paid on the shares of Stock specified in the Dividend Equivalent Right (or other award to which it relates) if such shares had been issued to and held by the grantee.

"Effective Date" means the date on which the Plan is approved by stockholders as set forth in Section 21.

"Exchange Act" means the Securities Exchange Act of 1934, as amended, and the rules and regulations thereunder.

"Fair Market Value" of the Stock on any given date means the fair market value of the Stock determined in good faith by the Administrator; provided, however, that if the Stock is admitted to quotation on the National Association of Securities Dealers Automated Quotation System ("NASDAQ"), NASDAQ Global Market or another national securities exchange, the determination shall be made by reference to market quotations. If there are no market quotations for such date, the determination shall be made by reference to the last date preceding such date for which there are market quotations; provided further, however, that if the date for which Fair Market Value is determined is the first day when trading prices for the Stock are reported on a national securities exchange, the Fair Market Value shall be the "Price to the Public" (or equivalent) set forth on the cover page for the final prospectus relating to the Company's Initial Public Offering.

"Incentive Stock Option" means any Stock Option designated and qualified as an "incentive stock option" as defined in Section 422 of the Code.

"Initial Public Offering" means the consummation of the first underwritten, firm commitment public offering pursuant to an effective registration statement under the Act covering the offer and sale by the Company of its equity securities, or such other event as a result of or following which the Stock shall be publicly held.

"Non-Employee Director" means a member of the Board who is not also an employee of the Company or any Subsidiary.

"Non-Qualified Stock Option" means any Stock Option that is not an Incentive Stock Option.

"Option" or "Stock Option" means any option to purchase shares of Stock granted pursuant to Section 5.

"Performance-Based Award" means any Restricted Stock Award, Restricted Stock Units, Performance Share Award or Cash-Based Award granted to a Covered Employee that is intended to qualify as "performance-based compensation" under Section 162(m) of the Code and the regulations promulgated thereunder.

"Performance Criteria" means the criteria that the Administrator selects for purposes of establishing the Performance Goal or Performance Goals for an individual for a Performance Cycle. The Performance Criteria (which shall be applicable to the organizational level specified by the Administrator, including, but not limited to, the Company or a unit, division, group, or Subsidiary of the Company) that will be used to establish Performance Goals are limited to the following: total shareholder return, earnings before interest, taxes, depreciation and amortization, net income (loss) (either before or after interest, taxes, depreciation and/or amortization), changes in the market price of the Stock, economic value-added, funds from operations or similar measure, sales or revenue, developmental, clinical or regulatory milestones, acquisitions or strategic transactions, including licenses, collaborations, joint ventures, or promotion arrangements, operating income (loss), cash flow (including, but not limited to, operating cash flow and free cash flow), return on capital, assets, equity, or investment, return on sales, gross or net profit levels, productivity, expense, margins, operating efficiency, customer satisfaction, working capital, earnings (loss) per share of Stock, sales or market shares and number of customers, any of which may be measured either in absolute terms or as compared to any incremental increase or as compared to results of a peer group. The Committee may appropriately adjust any evaluation performance under a Performance Criterion to exclude any of the following events that occurs during a Performance Cycle: (i) asset write-downs or impairments, (ii) litigation or claim judgments or settlements, (iii) the effect of changes in tax law, accounting principles or other such laws or provisions affecting reporting results, (iv) accruals for reorganizations and restructuring programs, (v) any extraordinary non-recurring items, including those described in the Financial Accounting Standards Board's authoritative guidance and/or in management's discussion and analysis of financial condition of operations appearing the Company's annual report to stockholders for the applicable year, and (vi) any other extraordinary items adjusted from the Company U.S. GAAP results.

"Performance Cycle" means one or more periods of time, which may be of varying and overlapping durations, as the Administrator may select, over which the attainment of one or more Performance Criteria will be measured for the purpose of determining a grantee's right to and the payment of a Restricted Stock Award, Restricted Stock Units, Performance Share Award or Cash-Based Award, the vesting and/or payment of which is subject to the attainment of one or more Performance Goals. Each such period shall not be less than 12 months.

"Performance Goals" means, for a Performance Cycle, the specific goals established in writing by the Administrator for a Performance Cycle based upon the Performance Criteria.

"Performance Share Award" means an Award entitling the recipient to acquire shares of Stock upon the attainment of specified Performance Goals.

"Restricted Shares" means the shares of Stock underlying a Restricted Stock Award that remain subject to a risk of forfeiture or the Company's right of repurchase.

"Restricted Stock Award" means an Award of Restricted Shares subject to such restrictions and conditions as the Administrator may determine at the time of grant.

"Restricted Stock Units" means an Award of stock units subject to such restrictions and conditions as the Administrator may determine at the time of grant.

"Sale Event" shall mean (i) the sale of all or substantially all of the assets of the Company on a consolidated basis to an unrelated person or entity, (ii) a merger, reorganization or consolidation pursuant to which the holders of the Company's outstanding voting power and outstanding stock immediately prior to such transaction do not own a majority of the outstanding voting power and outstanding stock or other equity interests of the resulting or successor entity (or its ultimate parent, if applicable) immediately upon completion of such transaction, (iii) the sale of all of the Stock of the Company to an unrelated person, entity or group thereof acting in concert, or (iv) any other transaction in which the owners of the Company's outstanding voting power immediately prior to such transaction do not own at least a majority of the outstanding voting power of the Company or any successor entity immediately upon completion of the transaction other than as a result of the acquisition of securities directly from the Company.

"Sale Price" means the value as determined by the Administrator of the consideration payable, or otherwise to be received by stockholders, per share of Stock pursuant to a Sale Event.

"Section 409A" means Section 409A of the Code and the regulations and other guidance promulgated thereunder.

"Stock" means the Common Stock, par value $0.01 per share, of the Company, subject to adjustments pursuant to Section 3.

"Stock Appreciation Right" means an Award entitling the recipient to receive shares of Stock having a value equal to the excess of the Fair Market Value of the Stock on the date of exercise over the exercise price of the Stock Appreciation Right multiplied by the number of shares of Stock with respect to which the Stock Appreciation Right shall have been exercised.

"Subsidiary" means any corporation or other entity (other than the Company) in which the Company has at least a 50 percent interest, either directly or indirectly.

"Ten Percent Owner" means an employee who owns or is deemed to own (by reason of the attribution rules of Section 424(d) of the Code) more than 10 percent of the combined voting power of all classes of stock of the Company or any parent or subsidiary corporation.

"Unrestricted Stock Award" means an Award of shares of Stock free of any restrictions.

SECTION 2. ADMINISTRATION OF PLAN; ADMINISTRATOR AUTHORITY TO SELECT GRANTEES AND DETERMINE AWARDS

(a) Administration of Plan. The Plan shall be administered by the Administrator.

(b) Powers of Administrator. The Administrator shall have the power and authority to grant Awards consistent with the terms of the Plan, including the power and authority:

(i) to select the individuals to whom Awards may from time to time be granted;

(ii) to determine the time or times of grant, and the extent, if any, of Incentive Stock Options, Non-Qualified Stock Options, Stock Appreciation Rights, Restricted Stock Awards, Restricted Stock Units, Unrestricted Stock Awards, Cash-Based Awards, Performance Share

Awards and Dividend Equivalent Rights, or any combination of the foregoing, granted to any one or more grantees;

(iii) to determine the number of shares of Stock to be covered by any Award;

(iv) to determine and modify from time to time the terms and conditions, including restrictions, not inconsistent with the terms of the Plan, of any Award, which terms and conditions may differ among individual Awards and grantees, and to approve the forms of Award Certificates;

(v) to accelerate at any time the exercisability or vesting of all or any portion of any Award.

(vi) subject to the provisions of Section 5(c), to extend at any time the period in which Stock Options may be exercised; and

(vii) at any time to adopt, alter and repeal such rules, guidelines and practices for administration of the Plan and for its own acts and proceedings as it shall deem advisable; to interpret the terms and provisions of the Plan and any Award (including related written instruments); to make all determinations it deems advisable for the administration of the Plan; to decide all disputes arising in connection with the Plan; and to otherwise supervise the administration of the Plan.

All decisions and interpretations of the Administrator shall be binding on all persons, including the Company and Plan grantees.

(c) Delegation of Authority to Grant Awards. Subject to applicable law, the Administrator, in its discretion, may delegate to the Chief Executive Officer of the Company all or part of the Administrator's authority and duties with respect to the granting of Awards to individuals who are (i) not subject to the reporting and other provisions of Section 16 of the Exchange Act and (ii) not Covered Employees. Any such delegation by the Administrator shall include a limitation as to the amount of Stock underlying Awards that may be granted during the period of the delegation and shall contain guidelines as to the determination of the exercise price and the vesting criteria. The Administrator may revoke or amend the terms of a delegation at any time but such action shall not invalidate any prior actions of the Administrator's delegate or delegates that were consistent with the terms of the Plan.

(d) Award Certificate. Awards under the Plan shall be evidenced by Award Certificates that set forth the terms, conditions and limitations for each Award which may include, without limitation, the term of an Award and the provisions applicable in the event employment or service terminates.

(e) Indemnification. Neither the Board nor the Administrator, nor any member of either or any delegate thereof, shall be liable for any act, omission, interpretation, construction or determination made in good faith in connection with the Plan, and the members of the Board and the Administrator (and any delegate thereof) shall be entitled in all cases to indemnification and reimbursement by the Company in respect of any claim, loss, damage or expense (including, without limitation, reasonable attorneys' fees) arising or resulting therefrom to the fullest extent

permitted by law and/or under the Company's articles or bylaws or any directors' and officers' liability insurance coverage which may be in effect from time to time and/or any indemnification agreement between such individual and the Company.

(f) Foreign Award Recipients. Notwithstanding any provision of the Plan to the contrary, in order to comply with the laws in other countries in which the Company and its Subsidiaries operate or have employees or other individuals eligible for Awards, the Administrator, in its sole discretion, shall have the power and authority to: (i) determine which Subsidiaries shall be covered by the Plan; (ii) determine which individuals outside the United States are eligible to participate in the Plan; (iii) modify the terms and conditions of any Award granted to individuals outside the United States to comply with applicable foreign laws; (iv) establish subplans and modify exercise procedures and other terms and procedures, to the extent the Administrator determines such actions to be necessary or advisable (and such subplans and/or modifications shall be attached to this Plan as appendices); provided, however, that no such subplans and/or modifications shall increase the share limitations contained in Section 3(a) hereof; and (v) take any action, before or after an Award is made, that the Administrator determines to be necessary or advisable to obtain approval or comply with any local governmental regulatory exemptions or approvals. Notwithstanding the foregoing, the Administrator may not take any actions hereunder, and no Awards shall be granted, that would violate the Exchange Act or any other applicable United States securities law, the Code, or any other applicable United States governing statute or law.

SECTION 3. STOCK ISSUABLE UNDER THE PLAN; MERGERS; SUBSTITUTION

(a) Stock Issuable. The maximum number of shares of Stock reserved and available for issuance under the Plan shall be 2,175,216 shares (the "Initial Limit"), subject to adjustment as provided in Section 3(b), plus on January 1, 2016 and each January 1 thereafter, the number of shares of Stock reserved and available for issuance under the Plan shall be cumulatively increased by 4 percent of the number of shares of Stock issued and outstanding on the immediately preceding December 31 (the "Annual Increase"). Subject to such overall limitation, the maximum aggregate number of shares of Stock that may be issued in the form of Incentive Stock Options shall not exceed the Initial Limit cumulatively increased on January 1, 2016 and on each January 1 thereafter by the lesser of the Annual Increase for such year or 8,000,000 shares of Stock, subject in all cases to adjustment as provided in Section 3(b). The shares of Stock underlying any Awards that are forfeited, canceled, held back upon exercise of an Option or settlement of an Award to cover the exercise price or tax withholding, reacquired by the Company prior to vesting, satisfied without the issuance of Stock or otherwise terminated (other than by exercise) shall be added back to the shares of Stock available for issuance under the Plan. In the event the Company repurchases shares of Stock on the open market, such shares shall not be added to the shares of Stock available for issuance under the Plan. Subject to such overall limitations, shares of Stock may be issued up to such maximum number pursuant to any type or types of Award; provided, however, that Stock Options or Stock Appreciation Rights with respect to no more than 1,000,000 shares of Stock may be granted to any one individual grantee during any one calendar year period. The shares available for issuance under the Plan may be authorized but unissued shares of Stock or shares of Stock reacquired by the Company.

(b) Changes in Stock. Subject to Section 3(c) hereof, if, as a result of any reorganization, recapitalization, reclassification, stock dividend, stock split, reverse stock split or other similar change in the Company's capital stock, the outstanding shares of Stock are increased or decreased or are exchanged for a different number or kind of shares or other securities of the Company, or additional shares or new or different shares or other securities of the Company or other non-cash assets are distributed with respect to such shares of Stock or other securities, or, if, as a result of any merger or consolidation, sale of all or substantially all of the assets of the Company, the outstanding shares of Stock are converted into or exchanged for securities of the Company or any successor entity (or a parent or subsidiary thereof), the Administrator shall make an appropriate or proportionate adjustment in (i) the maximum number of shares reserved for issuance under the Plan, including the maximum number of shares that may be issued in the form of Incentive Stock Options, (ii) the number of Stock Options or Stock Appreciation Rights that can be granted to any one individual grantee and the maximum number of shares that may be granted under a Performance-Based Award, (iii) the number and kind of shares or other securities subject to any then outstanding Awards under the Plan, (iv) the repurchase price, if any, per share subject to each outstanding Restricted Stock Award, and (v) the exercise price for each share subject to any then outstanding Stock Options and Stock Appreciation Rights under the Plan, without changing the aggregate exercise price (i.e., the exercise price multiplied by the number of Stock Options and Stock Appreciation Rights) as to which such Stock Options and Stock Appreciation Rights remain exercisable. The Administrator shall also make equitable or proportionate adjustments in the number of shares subject to outstanding Awards and the exercise price and the terms of outstanding Awards to take into consideration cash dividends paid other than in the ordinary course or any other extraordinary corporate event. The adjustment by the Administrator shall be final, binding and conclusive. No fractional shares of Stock shall be issued under the Plan resulting from any such adjustment, but the Administrator in its discretion may make a cash payment in lieu of fractional shares.

(c) Mergers and Other Transactions. In the case of and subject to the consummation of a Sale Event, the parties thereto may cause the assumption or continuation of Awards theretofore granted by the successor entity, or the substitution of such Awards with new Awards of the successor entity or parent thereof, with appropriate adjustment as to the number and kind of shares and, if appropriate, the per share exercise prices, as such parties shall agree. To the extent the parties to such Sale Event do not provide for the assumption, continuation or substitution of Awards or except as may be otherwise provided in the relevant Award Certificate, upon the effective time of the Sale Event, the Plan and all outstanding Awards granted hereunder shall terminate. In the event of such termination, (i) the Company shall have the option (in its sole discretion) to make or provide for a cash payment to the grantees holding Options and Stock Appreciation Rights, in exchange for the cancellation thereof, in an amount equal to the difference between (A) the Sale Price multiplied by the number of shares of Stock subject to outstanding Options and Stock Appreciation Rights (to the extent then exercisable at prices not in excess of the Sale Price) and (B) the aggregate exercise price of all such outstanding Options and Stock Appreciation Rights; or (ii) each grantee shall be permitted, within a specified period of time prior to the consummation of the Sale Event as determined by the Administrator, to exercise all outstanding Options and Stock Appreciation Rights (to the extent then exercisable) held by such grantee.

(d) Acquisitions by the Company. Stock may be issued under the terms of this Plan in connection with a merger or acquisition as permitted by NASDAQ Listing Rule 5635(c), NYSE Listed Company Manual Section 303A.08, AMEX Company Guide Section 711 or other applicable rule, and such issuance will not reduce the number of shares of Stock available for issuance under the Plan.

SECTION 4. ELIGIBILITY

Grantees under the Plan will be such full or part-time officers and other employees, Non-Employee Directors and Consultants of the Company and its Subsidiaries as are selected from time to time by the Administrator in its sole discretion.

SECTION 5. STOCK OPTIONS

(a) Award of Stock Options. The Administrator may grant Stock Options under the Plan. Any Stock Option granted under the Plan shall be in such form as the Administrator may from time to time approve.

Stock Options granted under the Plan may be either Incentive Stock Options or Non-Qualified Stock Options. Incentive Stock Options may be granted only to employees of the Company or any Subsidiary that is a "subsidiary corporation" within the meaning of Section 424(f) of the Code. To the extent that any Option does not qualify as an Incentive Stock Option, it shall be deemed a Non-Qualified Stock Option.

Stock Options granted pursuant to this Section 5 shall be subject to the following terms and conditions and shall contain such additional terms and conditions, not inconsistent with the terms of the Plan, as the Administrator shall deem desirable. If the Administrator so determines, Stock Options may be granted in lieu of cash compensation at the optionee's election, subject to such terms and conditions as the Administrator may establish.

(b) Exercise Price. The exercise price per share for the Stock covered by a Stock Option granted pursuant to this Section 5 shall be determined by the Administrator at the time of grant but shall not be less than 100 percent of the Fair Market Value on the date of grant. In the case of an Incentive Stock Option that is granted to a Ten Percent Owner, the option price of such Incentive Stock Option shall be not less than 110 percent of the Fair Market Value on the grant date.

(c) Option Term. The term of each Stock Option shall be fixed by the Administrator, but no Stock Option shall be exercisable more than ten years after the date the Stock Option is granted. In the case of an Incentive Stock Option that is granted to a Ten Percent Owner, the term of such Stock Option shall be no more than five years from the date of grant.

(d) Exercisability; Rights of a Stockholder. Stock Options shall become exercisable at such time or times, whether or not in installments, as shall be determined by the Administrator at or after the grant date. The Administrator may at any time accelerate the exercisability of all or any portion of any Stock Option. An optionee shall have the rights of a stockholder only as to shares acquired upon the exercise of a Stock Option and not as to unexercised Stock Options.

(e) Method of Exercise. Stock Options may be exercised in whole or in part, by giving written or electronic notice of exercise to the Company, specifying the number of shares to be purchased. Payment of the purchase price may be made by one or more of the following methods except to the extent otherwise provided in the Option Award Certificate:

(i) In cash, by certified or bank check or other instrument acceptable to the Administrator;

(ii) Through the delivery (or attestation to the ownership following such procedures as the Company may prescribe) of shares of Stock that are not then subject to restrictions under any Company plan. Such surrendered shares shall be valued at Fair Market Value on the exercise date;

(iii) By the optionee delivering to the Company a properly executed exercise notice together with irrevocable instructions to a broker to promptly deliver to the Company cash or a check payable and acceptable to the Company for the purchase price; provided that in the event the optionee chooses to pay the purchase price as so provided, the optionee and the broker shall comply with such procedures and enter into such agreements of indemnity and other agreements as the Company shall prescribe as a condition of such payment procedure; or

(iv) With respect to Stock Options that are not Incentive Stock Options, by a “net exercise” arrangement pursuant to which the Company will reduce the number of shares of Stock issuable upon exercise by the largest whole number of shares with a Fair Market Value that does not exceed the aggregate exercise price.

Payment instruments will be received subject to collection. The transfer to the optionee on the records of the Company or of the transfer agent of the shares of Stock to be purchased pursuant to the exercise of a Stock Option will be contingent upon receipt from the optionee (or a purchaser acting in his stead in accordance with the provisions of the Stock Option) by the Company of the full purchase price for such shares and the fulfillment of any other requirements contained in the Option Award Certificate or applicable provisions of laws (including the satisfaction of any withholding taxes that the Company is obligated to withhold with respect to the optionee). In the event an optionee chooses to pay the purchase price by previously-owned shares of Stock through the attestation method, the number of shares of Stock transferred to the optionee upon the exercise of the Stock Option shall be net of the number of attested shares. In the event that the Company establishes, for itself or using the services of a third party, an automated system for the exercise of Stock Options, such as a system using an internet website or interactive voice response, then the paperless exercise of Stock Options may be permitted through the use of such an automated system.

(f) Annual Limit on Incentive Stock Options. To the extent required for “incentive stock option” treatment under Section 422 of the Code, the aggregate Fair Market Value (determined as of the time of grant) of the shares of Stock with respect to which Incentive Stock Options granted under this Plan and any other plan of the Company or its parent and subsidiary corporations become exercisable for the first time by an optionee during any calendar year shall not exceed $100,000. To the extent that any Stock Option exceeds this limit, it shall constitute a Non-Qualified Stock Option.

SECTION 6. STOCK APPRECIATION RIGHTS

(a) Award of Stock Appreciation Rights. The Administrator may grant Stock Appreciation Rights under the Plan. A Stock Appreciation Right is an Award entitling the recipient to receive shares of Stock having a value equal to the excess of the Fair Market Value of a share of Stock on the date of exercise over the exercise price of the Stock Appreciation Right multiplied by the number of shares of Stock with respect to which the Stock Appreciation Right shall have been exercised.

(b) Exercise Price of Stock Appreciation Rights. The exercise price of a Stock Appreciation Right shall not be less than 100 percent of the Fair Market Value of the Stock on the date of grant.

(c) Grant and Exercise of Stock Appreciation Rights. Stock Appreciation Rights may be granted by the Administrator independently of any Stock Option granted pursuant to Section 5 of the Plan.

(d) Terms and Conditions of Stock Appreciation Rights. Stock Appreciation Rights shall be subject to such terms and conditions as shall be determined from time to time by the Administrator. The term of a Stock Appreciation Right may not exceed ten years.

SECTION 7. RESTRICTED STOCK AWARDS

(a) Nature of Restricted Stock Awards. The Administrator may grant Restricted Stock Awards under the Plan. A Restricted Stock Award is any Award of Restricted Shares subject to such restrictions and conditions as the Administrator may determine at the time of grant. Conditions may be based on continuing employment (or other service relationship) and/or achievement of pre-established performance goals and objectives. The terms and conditions of each such Award Certificate shall be determined by the Administrator, and such terms and conditions may differ among individual Awards and grantees.

(b) Rights as a Stockholder. Upon the grant of the Restricted Stock Award and payment of any applicable purchase price, a grantee shall have the rights of a stockholder with respect to the voting of the Restricted Shares and receipt of dividends; provided that if the lapse of restrictions with respect to the Restricted Stock Award is tied to the attainment of performance goals, any dividends paid by the Company during the performance period shall accrue and shall not be paid to the grantee until and to the extent the performance goals are met with respect to the Restricted Stock Award. Unless the Administrator shall otherwise determine, (i) uncertificated Restricted Shares shall be accompanied by a notation on the records of the Company or the transfer agent to the effect that they are subject to forfeiture until such Restricted Shares are vested as provided in Section 7(d) below, and (ii) certificated Restricted Shares shall remain in the possession of the Company until such Restricted Shares are vested as provided in Section 7(d) below, and the grantee shall be required, as a condition of the grant, to deliver to the Company such instruments of transfer as the Administrator may prescribe.

(c) Restrictions. Restricted Shares may not be sold, assigned, transferred, pledged or otherwise encumbered or disposed of except as specifically provided herein or in the Restricted Stock Award Certificate. Except as may otherwise be provided by the Administrator either in the

Award Certificate or, subject to Section 18 below, in writing after the Award is issued, if a grantee's employment (or other service relationship) with the Company and its Subsidiaries terminates for any reason, any Restricted Shares that have not vested at the time of termination shall automatically and without any requirement of notice to such grantee from or other action by or on behalf of, the Company be deemed to have been reacquired by the Company at its original purchase price (if any) from such grantee or such grantee's legal representative simultaneously with such termination of employment (or other service relationship), and thereafter shall cease to represent any ownership of the Company by the grantee or rights of the grantee as a stockholder. Following such deemed reacquisition of Restricted Shares that are represented by physical certificates, a grantee shall surrender such certificates to the Company upon request without consideration.

(d) Vesting of Restricted Shares. The Administrator at the time of grant shall specify the date or dates and/or the attainment of pre-established performance goals, objectives and other conditions on which the non-transferability of the Restricted Shares and the Company's right of repurchase or forfeiture shall lapse. Subsequent to such date or dates and/or the attainment of such pre-established performance goals, objectives and other conditions, the shares on which all restrictions have lapsed shall no longer be Restricted Shares and shall be deemed "vested."

SECTION 8. RESTRICTED STOCK UNITS

(a) Nature of Restricted Stock Units. The Administrator may grant Restricted Stock Units under the Plan. A Restricted Stock Unit is an Award of stock units that may be settled in shares of Stock upon the satisfaction of such restrictions and conditions at the time of grant. Conditions may be based on continuing employment (or other service relationship) and/or achievement of pre-established performance goals and objectives. The terms and conditions of each such Award Certificate shall be determined by the Administrator, and such terms and conditions may differ among individual Awards and grantees. Except in the case of Restricted Stock Units with a deferred settlement date that complies with Section 409A, at the end of the vesting period, the Restricted Stock Units, to the extent vested, shall be settled in the form of shares of Stock. Restricted Stock Units with deferred settlement dates are subject to Section 409A and shall contain such additional terms and conditions as the Administrator shall determine in its sole discretion in order to comply with the requirements of Section 409A.

(b) Election to Receive Restricted Stock Units in Lieu of Compensation. The Administrator may, in its sole discretion, permit a grantee to elect to receive a portion of future cash compensation otherwise due to such grantee in the form of an award of Restricted Stock Units. Any such election shall be made in writing and shall be delivered to the Company no later than the date specified by the Administrator and in accordance with Section 409A and such other rules and procedures established by the Administrator. Any such future cash compensation that the grantee elects to defer shall be converted to a fixed number of Restricted Stock Units based on the Fair Market Value of Stock on the date the compensation would otherwise have been paid to the grantee if such payment had not been deferred as provided herein. The Administrator shall have the sole right to determine whether and under what circumstances to permit such elections and to impose such limitations and other terms and conditions thereon as the Administrator deems appropriate. Any Restricted Stock Units that are elected to be received in lieu of cash compensation shall be fully vested, unless otherwise provided in the Award Certificate.

(c) Rights as a Stockholder. A grantee shall have the rights as a stockholder only as to shares of Stock acquired by the grantee upon settlement of Restricted Stock Units; provided, however, that the grantee may be credited with Dividend Equivalent Rights with respect to the stock units underlying his Restricted Stock Units, subject to the provisions of Section 11 and such terms and conditions as the Administrator may determine.

(d) Termination. Except as may otherwise be provided by the Administrator either in the Award Certificate or, subject to Section 18 below, in writing after the Award is issued, a grantee's right in all Restricted Stock Units that have not vested shall automatically terminate upon the grantee's termination of employment (or cessation of service relationship) with the Company and its Subsidiaries for any reason.

SECTION 9. UNRESTRICTED STOCK AWARDS

Grant or Sale of Unrestricted Stock. The Administrator may grant (or sell at par value or such higher purchase price determined by the Administrator) an Unrestricted Stock Award under the Plan. An Unrestricted Stock Award is an Award pursuant to which the grantee may receive shares of Stock free of any restrictions under the Plan. Unrestricted Stock Awards may be granted in respect of past services or other valid consideration, or in lieu of cash compensation due to such grantee.

SECTION 10. CASH-BASED AWARDS

Grant of Cash-Based Awards. The Administrator may grant Cash-Based Awards under the Plan. A Cash-Based Award is an Award that entitles the grantee to a payment in cash upon the attainment of specified Performance Goals. The Administrator shall determine the maximum duration of the Cash-Based Award, the amount of cash to which the Cash-Based Award pertains, the conditions upon which the Cash-Based Award shall become vested or payable, and such other provisions as the Administrator shall determine. Each Cash-Based Award shall specify a cash-denominated payment amount, formula or payment ranges as determined by the Administrator. Payment, if any, with respect to a Cash-Based Award shall be made in accordance with the terms of the Award and may be made in cash.

SECTION 11. PERFORMANCE SHARE AWARDS

(a) Nature of Performance Share Awards. The Administrator may grant Performance Share Awards under the Plan. A Performance Share Award is an Award entitling the grantee to receive shares of Stock upon the attainment of performance goals. The Administrator shall determine whether and to whom Performance Share Awards shall be granted, the performance goals, the periods during which performance is to be measured, which may not be less than one year except in the case of a Sale Event, and such other limitations and conditions as the Administrator shall determine.

(b) Rights as a Stockholder. A grantee receiving a Performance Share Award shall have the rights of a stockholder only as to shares of Stock actually received by the grantee under the Plan and not with respect to shares subject to the Award but not actually received by the grantee. A grantee shall be entitled to receive shares of Stock under a Performance Share Award only

upon satisfaction of all conditions specified in the Performance Share Award Certificate (or in a performance plan adopted by the Administrator).

(c) Termination. Except as may otherwise be provided by the Administrator either in the Award agreement or, subject to Section 18 below, in writing after the Award is issued, a grantee's rights in all Performance Share Awards shall automatically terminate upon the grantee's termination of employment (or cessation of service relationship) with the Company and its Subsidiaries for any reason.

SECTION 12. PERFORMANCE-BASED AWARDS TO COVERED EMPLOYEES

(a) Performance-Based Awards. The Administrator may grant one or more Performance-Based Awards in the form of a Restricted Stock Award, Restricted Stock Units, Performance Share Awards or Cash-Based Award payable upon the attainment of Performance Goals that are established by the Administrator and relate to one or more of the Performance Criteria, in each case on a specified date or dates or over any period or periods determined by the Administrator. The Administrator shall define in an objective fashion the manner of calculating the Performance Criteria it selects to use for any Performance Cycle. Depending on the Performance Criteria used to establish such Performance Goals, the Performance Goals may be expressed in terms of overall Company performance or the performance of a division, business unit, or an individual. Each Performance-Based Award shall comply with the provisions set forth below.

(b) Grant of Performance-Based Awards. With respect to each Performance-Based Award granted to a Covered Employee, the Administrator shall select, within the first 90 days of a Performance Cycle (or, if shorter, within the maximum period allowed under Section 162(m) of the Code) the Performance Criteria for such grant, and the Performance Goals with respect to each Performance Criterion (including a threshold level of performance below which no amount will become payable with respect to such Award). Each Performance-Based Award will specify the amount payable, or the formula for determining the amount payable, upon achievement of the various applicable performance targets. The Performance Criteria established by the Administrator may be (but need not be) different for each Performance Cycle and different Performance Goals may be applicable to Performance-Based Awards to different Covered Employees.

(c) Payment of Performance-Based Awards. Following the completion of a Performance Cycle, the Administrator shall meet to review and certify in writing whether, and to what extent, the Performance Goals for the Performance Cycle have been achieved and, if so, to also calculate and certify in writing the amount of the Performance-Based Awards earned for the Performance Cycle. The Administrator shall then determine the actual size of each Covered Employee's Performance-Based Award.

(d) Maximum Award Payable. The maximum Performance-Based Award payable to any one Covered Employee under the Plan for a Performance Cycle is 1,000,000 shares of Stock (subject to adjustment as provided in Section 3(c) hereof) or $1,000,000 in the case of a Performance-Based Award that is a Cash-Based Award.

SECTION 13. DIVIDEND EQUIVALENT RIGHTS

(a) Dividend Equivalent Rights. The Administrator may grant Dividend Equivalent Rights under the Plan. A Dividend Equivalent Right is an Award entitling the grantee to receive credits based on cash dividends that would have been paid on the shares of Stock specified in the Dividend Equivalent Right (or other Award to which it relates) if such shares had been issued to the grantee. A Dividend Equivalent Right may be granted hereunder to any grantee as a component of an award of Restricted Stock Units, Restricted Stock Award or Performance Share Award or as a freestanding award. The terms and conditions of Dividend Equivalent Rights shall be specified in the Award Certificate. Dividend equivalents credited to the holder of a Dividend Equivalent Right may be paid currently or may be deemed to be reinvested in additional shares of Stock, which may thereafter accrue additional equivalents. Any such reinvestment shall be at Fair Market Value on the date of reinvestment or such other price as may then apply under a dividend reinvestment plan sponsored by the Company, if any. Dividend Equivalent Rights may be settled in cash or shares of Stock or a combination thereof, in a single installment or installments. A Dividend Equivalent Right granted as a component of an Award of Restricted Stock Units or Performance Share Award shall provide that such Dividend Equivalent Right shall be settled only upon settlement or payment of, or lapse of restrictions on, such other Award, and that such Dividend Equivalent Right shall expire or be forfeited or annulled under the same conditions as such other Award.

(b) Termination. Except as may otherwise be provided by the Administrator either in the Award Certificate or, subject to Section 18 below, in writing after the Award is issued, a grantee's rights in all Dividend Equivalent Rights shall automatically terminate upon the grantee's termination of employment (or cessation of service relationship) with the Company and its Subsidiaries for any reason.

SECTION 14. TRANSFERABILITY OF AWARDS

(a) Transferability. Except as provided in Section 14(b) below, during a grantee's lifetime, his or her Awards shall be exercisable only by the grantee, or by the grantee's legal representative or guardian in the event of the grantee's incapacity. No Awards shall be sold, assigned, transferred or otherwise encumbered or disposed of by a grantee other than by will or by the laws of descent and distribution or pursuant to a domestic relations order. No Awards shall be subject, in whole or in part, to attachment, execution, or levy of any kind, and any purported transfer in violation hereof shall be null and void.

(b) Administrator Action. Notwithstanding Section 14(a), the Administrator, in its discretion, may provide either in the Award Certificate regarding a given Award or by subsequent written approval that the grantee (who is an employee or director) may transfer his or her Non-Qualified Options to his or her immediate family members, to trusts for the benefit of such family members, or to partnerships in which such family members are the only partners, provided that the transferee agrees in writing with the Company to be bound by all of the terms and conditions of this Plan and the applicable Award. In no event may an Award be transferred by a grantee for value.

(c) Family Member. For purposes of Section 14(b), "family member" shall mean a grantee's child, stepchild, grandchild, parent, stepparent, grandparent, spouse, former spouse, sibling, niece, nephew, mother-in-law, father-in-law, son-in-law, daughter-in-law, brother-in-

law, or sister-in-law, including adoptive relationships, any person sharing the grantee's household (other than a tenant of the grantee), a trust in which these persons (or the grantee) have more than 50 percent of the beneficial interest, a foundation in which these persons (or the grantee) control the management of assets, and any other entity in which these persons (or the grantee) own more than 50 percent of the voting interests.

(d) Designation of Beneficiary. To the extent permitted by the Company, each grantee to whom an Award has been made under the Plan may designate a beneficiary or beneficiaries to exercise any Award or receive any payment under any Award payable on or after the grantee's death. Any such designation shall be on a form provided for that purpose by the Administrator and shall not be effective until received by the Administrator. If no beneficiary has been designated by a deceased grantee, or if the designated beneficiaries have predeceased the grantee, the beneficiary shall be the grantee's estate.

SECTION 15. TAX WITHHOLDING

(a) Payment by Grantee. Each grantee shall, no later than the date as of which the value of an Award or of any Stock or other amounts received thereunder first becomes includable in the gross income of the grantee for Federal income tax purposes, pay to the Company, or make arrangements satisfactory to the Administrator regarding payment of, any Federal, state, or local taxes of any kind required by law to be withheld by the Company with respect to such income. The Company and its Subsidiaries shall, to the extent permitted by law, have the right to deduct any such taxes from any payment of any kind otherwise due to the grantee. The Company's obligation to deliver evidence of book entry (or stock certificates) to any grantee is subject to and conditioned on tax withholding obligations being satisfied by the grantee.

(b) Payment in Stock. Subject to approval by the Administrator, a grantee may elect to have the Company's minimum required tax withholding obligation satisfied, in whole or in part, by authorizing the Company to withhold from shares of Stock to be issued pursuant to any Award a number of shares with an aggregate Fair Market Value (as of the date the withholding is effected) that would satisfy the withholding amount due. The Administrator may also require Awards to be subject to mandatory share withholding up to the required withholding amount. For purposes of share withholding, the Fair Market Value of withheld shares shall be determined in the same manner as the value of Stock includible in income of the Participants.

SECTION 16. SECTION 409A AWARDS

To the extent that any Award is determined to constitute "nonqualified deferred compensation" within the meaning of Section 409A (a "409A Award"), the Award shall be subject to such additional rules and requirements as specified by the Administrator from time to time in order to comply with Section 409A. In this regard, if any amount under a 409A Award is payable upon a "separation from service" (within the meaning of Section 409A) to a grantee who is then considered a "specified employee" (within the meaning of Section 409A), then no such payment shall be made prior to the date that is the earlier of (i) six months and one day after the grantee's separation from service, or (ii) the grantee's death, but only to the extent such delay is necessary to prevent such payment from being subject to interest, penalties and/or additional tax

imposed pursuant to Section 409A. Further, the settlement of any such Award may not be accelerated except to the extent permitted by Section 409A.

SECTION 17. TERMINATION OF EMPLOYMENT, TRANSFER, LEAVE OF ABSENCE, ETC.

(a) Termination of Employment. If the grantee's employer ceases to be a Subsidiary, the grantee shall be deemed to have terminated employment for purposes of the Plan.

(b) For purposes of the Plan, the following events shall not be deemed a termination of employment:

(i) a transfer to the employment of the Company from a Subsidiary or from the Company to a Subsidiary, or from one Subsidiary to another; or

(ii) an approved leave of absence for military service or sickness, or for any other purpose approved by the Company, if the employee's right to re-employment is guaranteed either by a statute or by contract or under the policy pursuant to which the leave of absence was granted or if the Administrator otherwise so provides in writing.

SECTION 18. AMENDMENTS AND TERMINATION

The Board may, at any time, amend or discontinue the Plan and the Administrator may, at any time, amend or cancel any outstanding Award for the purpose of satisfying changes in law or for any other lawful purpose, but no such action shall adversely affect rights under any outstanding Award without the holder's consent. Except as provided in Section 3(c) or 3(d), without prior stockholder approval, in no event may the Administrator exercise its discretion to reduce the exercise price of outstanding Stock Options or Stock Appreciation Rights or effect repricing through cancellation and re-grants or cancellation of Stock Options or Stock Appreciation Rights in exchange for cash. To the extent required under the rules of any securities exchange or market system on which the Stock is listed, to the extent determined by the Administrator to be required by the Code to ensure that Incentive Stock Options granted under the Plan are qualified under Section 422 of the Code, or to ensure that compensation earned under Awards qualifies as performance-based compensation under Section 162(m) of the Code, Plan amendments shall be subject to approval by the Company stockholders entitled to vote at a meeting of stockholders. Nothing in this Section 18 shall limit the Administrator's authority to take any action permitted pursuant to Section 3(c) or 3(d).

SECTION 19. STATUS OF PLAN

With respect to the portion of any Award that has not been exercised and any payments in cash, Stock or other consideration not received by a grantee, a grantee shall have no rights greater than those of a general creditor of the Company unless the Administrator shall otherwise expressly determine in connection with any Award or Awards. In its sole discretion, the Administrator may authorize the creation of trusts or other arrangements to meet the Company's obligations to deliver Stock or make payments with respect to Awards hereunder, provided that the existence of such trusts or other arrangements is consistent with the foregoing sentence.

SECTION 20. GENERAL PROVISIONS

(a) No Distribution. The Administrator may require each person acquiring Stock pursuant to an Award to represent to and agree with the Company in writing that such person is acquiring the shares without a view to distribution thereof.

(b) Delivery of Stock Certificates. Stock certificates to grantees under this Plan shall be deemed delivered for all purposes when the Company or a stock transfer agent of the Company shall have mailed such certificates in the United States mail, addressed to the grantee, at the grantee's last known address on file with the Company. Uncertificated Stock shall be deemed delivered for all purposes when the Company or a Stock transfer agent of the Company shall have given to the grantee by electronic mail (with proof of receipt) or by United States mail, addressed to the grantee, at the grantee's last known address on file with the Company, notice of issuance and recorded the issuance in its records (which may include electronic "book entry" records). Notwithstanding anything herein to the contrary, the Company shall not be required to issue or deliver any certificates evidencing shares of Stock pursuant to the exercise of any Award, unless and until the Administrator has determined, with advice of counsel (to the extent the Administrator deems such advice necessary or advisable), that the issuance and delivery of such certificates is in compliance with all applicable laws, regulations of governmental authorities and, if applicable, the requirements of any exchange on which the shares of Stock are listed, quoted or traded. All Stock certificates delivered pursuant to the Plan shall be subject to any stop-transfer orders and other restrictions as the Administrator deems necessary or advisable to comply with federal, state or foreign jurisdiction, securities or other laws, rules and quotation system on which the Stock is listed, quoted or traded. The Administrator may place legends on any Stock certificate to reference restrictions applicable to the Stock. In addition to the terms and conditions provided herein, the Administrator may require that an individual make such reasonable covenants, agreements, and representations as the Administrator, in its discretion, deems necessary or advisable in order to comply with any such laws, regulations, or requirements. The Administrator shall have the right to require any individual to comply with any timing or other restrictions with respect to the settlement or exercise of any Award, including a window-period limitation, as may be imposed in the discretion of the Administrator.

(c) Stockholder Rights. Until Stock is deemed delivered in accordance with Section 20(b), no right to vote or receive dividends or any other rights of a stockholder will exist with respect to shares of Stock to be issued in connection with an Award, notwithstanding the exercise of a Stock Option or any other action by the grantee with respect to an Award.

(d) Other Compensation Arrangements; No Employment Rights. Nothing contained in this Plan shall prevent the Board from adopting other or additional compensation arrangements, including trusts, and such arrangements may be either generally applicable or applicable only in specific cases. The adoption of this Plan and the grant of Awards do not confer upon any employee any right to continued employment with the Company or any Subsidiary.

(e) Trading Policy Restrictions. Option exercises and other Awards under the Plan shall be subject to the Company's insider trading policies and procedures, as in effect from time to time.

(f) Clawback Policy. Awards under the Plan shall be subject to the Company's clawback policy, as in effect from time to time.

SECTION 21. EFFECTIVE DATE OF PLAN

This Plan shall become effective upon stockholder approval in accordance with applicable state law, the Company's bylaws and articles of incorporation, and applicable stock exchange rules or pursuant to written consent. No grants of Stock Options and other Awards may be made hereunder after the tenth anniversary of the Effective Date and no grants of Incentive Stock Options may be made hereunder after the tenth anniversary of the date the Plan is approved by the Board.

SECTION 22. GOVERNING LAW

This Plan and all Awards and actions taken thereunder shall be governed by, and construed in accordance with, the laws of the State of Delaware applied without regard to conflict of law principles.

DATE APPROVED BY BOARD OF DIRECTORS: November 18, 2014

DATE APPROVED BY STOCKHOLDERS: November 18, 2014

**Exhibit 10.3**

**ROCKET PHARMACEUTICALS LTD.**
**2015 SHARE OPTION PLAN**
**(Effective as of November 1, 2015)**

1. History, Purposes and Effective Date of the Plan. The Plan is established effective as of November 1, 2015 by Rocket Pharmaceuticals, Ltd. (the "Company") to attract and retain the best available personnel for positions of substantial responsibility, to provide additional incentive to Service Providers (as defined herein) and to promote the success of the Company's business. Options granted under the Plan may be Incentive Stock Options or Non-Qualified Stock Options, as determined by the Administrator at the time of grant.

2. Definitions. As used herein, the following definitions shall apply:

(a) "Administrative Committee" means the Board or the Committee responsible for conducting the general administration of the Plan, as applicable, in accordance with Section 4 hereof.

(b) "Applicable Laws" means the requirements relating to the administration of stock option plans under Cayman Islands corporate laws, U.S. federal and state and Cayman Islands securities laws, the Code, any stock exchange or quotation system on which the Ordinary Shares are listed or quoted and the applicable laws of any foreign country or jurisdiction where Options are granted under the Plan.

(c) "Board" means the Board of Directors of the Company.

(d) "Code" means the Internal Revenue Code of 1986, as amended.

(e) "Change in Control" shall mean (i) a merger or consolidation of the Company with any other person or entity (other than a wholly-owned subsidiary of the Company) other than (A) a merger or consolidation which would result in the voting securities of the Company outstanding immediately prior thereto continuing to represent (either by remaining outstanding or by being converted into voting securities of the surviving entity) 50% or more of the combined voting power of voting securities of the Company or such surviving entity outstanding immediately after such merger or consolidation or (B) a merger or consolidation affected to implement a recapitalization of the Company (or similar transaction); (ii) the sale of 50% or more of the voting securities of the Company in a single transaction or a series of related transactions; or (iii) a plan of complete liquidation of the Company or an agreement for the sale or disposition by the Company of all or substantially all of its assets.

(f) "Committee" means the Compensation Committee of the Board or other committee appointed by the Board in accordance with Section 4 hereof; provided that if no Compensation Committee exists and no other committee has been appointed in accordance with Section 4, then the full Board shall serve as the Committee.

(g) "Company" means Rocket Pharmaceuticals, Ltd., a Cayman Islands exempted limited company.

(h) "Director" means a member of the Board.

(i) "Effective Date" shall have the meaning set forth in Section 1.

(j) "Employee" means any person, including an officer or Director, who is an employee (as defined in accordance with Section 3401(c) of the Code) of the Company or any Parent or Subsidiary of the Company. A Service Provider shall not cease to be an Employee in the case of (i) any leave of absence approved by the Company or (ii) transfers between locations of the Company or between the Company, its Parent, any Subsidiary, or any successor. For purposes of Incentive Share Options, no such leave may exceed ninety (90) days, unless reemployment upon expiration of such leave is guaranteed by statute or contract. Neither service as a Director nor payment of a director's fee by the Company shall be sufficient, by itself, to constitute "employment" by the Company.

(k) "Exchange Act" means the Securities Exchange Act of 1934, as amended.

(l) "Fair Market Value" means, as of any date, the value of an Ordinary Share determined as follows:

(i) If the Ordinary Shares are listed on any established stock exchange or a national market system, including, without limitation, the Nasdaq National Market or The Nasdaq SmallCap Market of The Nasdaq Stock Market, its Fair Market Value shall be the closing sales price for an Ordinary Share (or the closing bid, if no sales were reported) as quoted on such exchange or system for the last market trading day prior to the time of determination, as reported in The Wall Street Journal or such other source as the Administrative Committee deems reliable;

(ii) If the Ordinary Shares are regularly quoted by a recognized securities dealer but selling prices are not reported, its Fair Market Value shall be the mean between the high bid and low asked prices for an Ordinary Share on the last market trading day prior to the day of determination; or

(iii) In the absence of an established market for Ordinary Shares, the Fair Market Value thereof shall be determined in good faith by the Board.

(m) "Incentive Stock Option" means an Option intended to qualify as an incentive stock option within the meaning of Section 422 of the Code and which is designated as an Incentive Stock Option by the Administrative Committee.

(n) "Independent Director" means a Director who is not an Employee of the Company.

(o) "Non-Qualified Stock Option" means an Option (or portion thereof) that is not designated as an Incentive Stock Option by the Administrative Committee, or which is designated as an Incentive Stock Option by the Administrative Committee but fails to qualify as an incentive stock option within the meaning of Section 422 of the Code.

(p) "Option" means a stock option granted pursuant to the Plan.

(q) "Option Agreement" means a written agreement between the Company and a Participant evidencing the terms and conditions of an individual Option grant. The Option Agreement is subject to the terms and conditions of the Plan.

(r) "Ordinary Shares" means the ordinary shares of the Company, par value $0.01 per share.

(s) "Parent" means a "parent corporation," whether now or hereafter existing, as defined in Section 424(e) of the Code.

(t) "Participant" means a person who has been granted an Option under the Plan.

(u) "Plan" means the Rocket Pharmaceuticals, Ltd. 2015 Share Option Plan, as amended from time to time.

(v) "Public Trading Date" means the first date upon which Ordinary Shares of the Company are listed (or approved for listing) upon notice of issuance on any exchange or designated (or approved for designation) upon notice of issuance as a national market security on an interdealer quotation system.

(w) "Restricted Stock" means Shares acquired pursuant to the exercise of an unvested Option in accordance with Section 10(h) below.

(x) "Rule 16b-3" means that certain Rule 16b-3 under the Exchange Act, as such Rule may be amended from time to time.

(y) "Section 16(b)" means Section 16(b) of the Exchange Act.

(z) "Securities Act" means the Securities Act of 1933, as amended.

(aa) "Service Provider" means an Employee or Director or any other individual providing services to the Company, any Parent or any Subsidiary, including independent contractors and consultants.

(bb) "Share" means an Ordinary Share of the Company, as adjusted in accordance with Section 12 below.

(cc) "Subsidiary" means a "subsidiary corporation," whether now or hereafter existing, as defined in Section 424(f) of the Code.

3. Shares Subject to the Plan. Subject to the provisions of Section 12 of the Plan, the shares subject to Options shall be Ordinary Shares. Subject to the provisions of Section 12 of the Plan, the maximum aggregate number of Shares which may be issued upon exercise of such Options is 130,000. Shares issued upon exercise of Options may be authorized but unissued, or reacquired Shares. If an Option expires or becomes unexercisable without having been exercised in full, the unpurchased Shares which were subject thereto shall become available for future grant or sale under the Plan (unless the Plan has terminated). Shares which are delivered by the Participant or withheld by the Company upon the exercise of an Option under the Plan, in payment of the exercise price thereof or tax withholding thereon, may again be optioned, granted or awarded hereunder, subject to the limitations of this Section 3. Notwithstanding the provisions of this Section 3, no Shares may again be optioned, granted or awarded if such action would cause an Incentive Stock Option to fail to qualify as an Incentive Stock Option under Code Section 422.

4. Administration of the Plan.

(a) Administrative Committee. The Plan shall be administered by an Administrative Committee appointed by the Board or, in the absence of such appointment, the entire Board will serve as the Administrative Committee. The Administrative Committee shall have the power to delegate to a subcommittee any of the administrative powers the Administrative Committee is authorized to exercise (and references in this Plan to the Administrative Committee shall thereafter be to such subcommittee), subject, however, to such resolutions, not inconsistent with the provisions of the Plan, as may be adopted from time to time by the Board. Notwithstanding the foregoing, however, from and after the Public Trading Date, a Committee of the Board shall administer the Plan (and shall be the Administrative Committee) and such Committee shall consist solely of two or more Independent Directors each of whom is both an "outside director," within the meaning of Section 162(m) of the Code, and a "non-employee director" within the meaning of Rule 16b-3. Within the scope of such authority, the Board or the Committee may (i) delegate to a committee of one or more members of the Board who are not Independent Directors the authority to grant awards under the Plan to eligible persons who are either (A) not then "covered employees," within the meaning of Section 162(m) of the Code and are not expected to be "covered employees" at the time of recognition of income resulting from such award or (B) not persons with respect to whom the Company wishes to comply with Section 162(m) of the Code and/or (ii) delegate to a committee of one or more members of the Board who are not "non-employee directors," within the meaning of Rule 16b-3, the authority to grant awards under the Plan to eligible persons who are not then subject to Section 16 of the Exchange Act. The Board may abolish the Administrative Committee at any time and revest in the Board the administration of the Plan. Appointment of Administrative Committee members shall be effective upon acceptance of appointment. Administrative Committee members may resign at any time by delivering written notice to the Board. Vacancies in the Administrative Committee may only be filled by the Board.

(b) Powers of the Administrative Committee. Subject to the provisions of the Plan (including without limitation Section 4(c)) and the specific duties delegated by the

Board to the Committee, and subject to the approval of any relevant authorities, the Administrative Committee shall have the authority in its discretion to:

(i) Select the Service Providers to whom Options may be granted from time to time hereunder;

(ii) Determine the number of Shares to be covered by each such grant hereunder;

(iii) Approve forms of agreement for use under the Plan;

(iv) Determine the terms and conditions of any Option granted hereunder (such terms and conditions include, but are not limited to, the exercise price, the time or times when Options may vest or be exercised (which may be based on performance criteria), any vesting acceleration or waiver of forfeiture restrictions, and any restriction or limitation regarding any Option or the Ordinary Shares relating thereto, based in each case on such factors as the Administrative Committee, in its sole discretion, shall determine);

(v) Prescribe, amend and rescind rules and regulations relating to the Plan, including rules and regulations relating to sub-plans established for the purpose of qualifying for preferred tax treatment under foreign tax laws;

(vi) Following the Public Trading Date, allow Participants to satisfy withholding tax obligations by electing to have the Company withhold from the Shares to be issued upon exercise of an Option that number of Shares having a Fair Market Value equal to the minimum amount required to be withheld based on the statutory withholding rates for federal and state tax purposes that apply to supplemental taxable income. The Fair Market Value of the Shares to be withheld shall be determined on the date that the amount of tax to be withheld is to be determined. All elections by Participants to have Shares withheld for this purpose shall be made in such form and under such conditions as the Administrative Committee may deem necessary or advisable; and

(vii) Conclusively construe and interpret the terms of the Plan and awards granted pursuant to the Plan and to exercise such powers and perform such acts as the Administrative Committee deems necessary or desirable to promote the best interests of the Company which are not in conflict with the provisions of the Plan.

(c) Effect of Administrative Committees Decision. All decisions, determinations and interpretations of the Administrative Committee shall be final and binding on all persons.

5. Eligibility. Non-Qualified Stock Options may be granted to Service Providers. Incentive Stock Options may be granted only to Employees. If otherwise eligible, a Service Provider who has been granted an Option may be granted additional Options.

6. Limitations.

(a) Each Option shall be designated by the Administrative Committee in the Option Agreement as either an Incentive Stock Option or a Non-Qualified Stock Option. However, notwithstanding such designations, to the extent that the aggregate Fair Market Value of Shares subject to a Participant's Incentive Stock Options and other incentive stock options granted by the Company, any Parent or Subsidiary, which become exercisable for the first time during any calendar year (under all plans of the Company or any Parent or Subsidiary) exceeds $100,000, such excess Options or other options shall be treated as Non-Qualified Stock Options. For purposes of this Section 6(a), Incentive Stock Options shall be taken into account in the order in which they were granted, and the Fair Market Value of the Shares shall be determined as of the time of grant.

(b) Neither the Plan nor any Option shall confer upon a Participant any right with respect to continuing the Participant's employment or service with the Company, nor shall they interfere in any way with the Participant's right or the Company's right to terminate such employment or service relationship at any time, with or without cause.

(c) No Service Provider shall be granted, in any calendar year, Options to purchase more than 100,000 Shares; *provided, however,* that the foregoing limitation shall not apply prior to the Public Trading Date and, following the Public Trading Date, the foregoing limitation shall not apply until the earliest of: (i) the first material modification of the Plan (including any increase in the number of shares reserved for issuance under the Plan in accordance with Section 3); (ii) the issuance of all of the Ordinary Shares reserved for issuance under the Plan; (iii) the expiration of the Plan; (iv) the first meeting of shareholders at which Directors of the Company are to be elected that occurs after the close of the third calendar year following the calendar year in which occurred the first registration of an equity security of the Company under Section 12 of the Exchange Act; or (v) such other date required by Section 162(m) of the Code and the rules and regulations promulgated thereunder. The foregoing limitation shall be adjusted proportionately in connection with any change in the Company's capitalization as described in Section 12. For purposes of this Section 6(c), if an Option is canceled in the same calendar year it was granted (other than in connection with a transaction described in Section 12), the canceled Option will be counted against the limit set forth in this Section 6(c). For this purpose, if the exercise price of an Option is reduced, the transaction shall be treated as a cancellation of the Option and the grant of a new Option.

7. Term of Plan. The Plan shall continue in effect until it is terminated under Section 14 of the Plan; provided, however, that no Options may be issued under the Plan after the tenth (10th) anniversary of the Effective Date.

8. Term of Option. The term of each Option shall be stated in the Option Agreement; *provided, however,* that the term shall be no more than ten (10) years from the date of grant thereof. In the case of an Incentive Stock Option granted to a Participant who, at the time the Option is granted, owns (or is treated as owning under Code Section 424) stock representing more than ten percent (10%) of the voting power of all classes of stock of the

Company or any Parent or Subsidiary, the term of the Option shall be five (5) years from the date of grant or such shorter term as may be provided in the Option Agreement.

9. Option Exercise Price and Consideration.

(a) The per share exercise price for the Shares to be issued upon exercise of an Option shall be such price as is determined by the Administrative Committee; *provided, however,* that in the case of an Incentive Stock Option (i) granted to an Employee who, at the time of grant of such Option, owns (or is treated as owning under Code Section 424) stock representing more than ten percent (10%) of the voting power of all classes of stock of the Company or any Parent or Subsidiary, the per Share exercise price shall be no less than one hundred ten percent (110%) of the Fair Market Value per Share on the date of grant, and (ii) granted to any other Employee, the per Share exercise price shall be no less than one hundred percent (100%) of the Fair Market Value per Share on the date of grant. Notwithstanding the foregoing, Options may be granted in substitution of outstanding options with a per Share exercise price other than as required above pursuant to a merger or other corporate transaction.

(b) The consideration to be paid for the Shares to be issued upon exercise of an Option, including the method of payment, shall be determined by the Administrative Committee (and, in the case of an Incentive Stock Option, shall be determined at the time of grant). Such consideration may consist of (i) cash; (ii) check; (iii) with the consent of the Administrative Committee (and at such time or times as the Administrative Committee may prescribe), other Shares which (A) in the case of Shares acquired from the Company, have been owned by the Participant for more than six (6) months on the date of surrender, and (B) have a Fair Market Value on the date of surrender equal to the aggregate exercise price of the Shares as to which such Option shall be exercised; (iv) after the Public Trading Date and with the consent of the Administrative Committee (A) surrendered Shares then issuable upon exercise of the Option having a Fair Market Value on the date of exercise equal to the aggregate exercise price of the Option or exercised portion thereof, or (B) delivery of a notice that the Participant has placed a market sell order with a broker with respect to Shares then issuable upon exercise of the Options and that the broker has been directed to pay a sufficient portion of the net proceeds of the sale to the Company in satisfaction of the Option exercise price, provided, that payment of such proceeds is then made to the Company upon settlement of such sale; or (v) with the consent of the Administrative Committee, any combination of the foregoing methods of payment.

10. Exercise of Option.

(a) Vesting; Fractional Exercises. Options granted hereunder shall be vested and exercisable according to the terms hereof at such times and under such conditions as determined by the Administrative Committee and set forth in the Option Agreement. An Option may not be exercised for a fraction of a Share.

(b) Deliveries upon Exercise. All or a portion of an exercisable Option shall be deemed exercised upon delivery of all of the following to the Secretary of the Company or his or her office:

(i) A written or electronic notice complying with the applicable rules established by the Administrative Committee stating that the Option, or a portion thereof, is exercised. The notice shall be signed by the Participant or other person then entitled to exercise the Option or such portion of the Option;

(ii) Such representations and documents as the Administrative Committee, in its absolute discretion, deems necessary or advisable to effect compliance with Applicable Laws. The Administrative Committee may, in its absolute discretion, also take whatever additional actions it deems appropriate to effect such compliance, including, without limitation, placing legends on share certificates and issuing stop transfer notices to agents and registrars;

(iii) Upon the exercise of all or a portion of an unvested Option pursuant to Section 10(h), a Restricted Stock purchase agreement in a form determined by the Administrative Committee and signed by the Participant or other person then entitled to exercise the Option or such portion of the Option; and

(iv) In the event that the Option shall be exercised pursuant to Section 10(f) by any person or persons other than the Participant, appropriate proof of the right of such person or persons to exercise the Option.

(c) Conditions to Delivery of Share Certificates. The Company shall not be required to issue or deliver any certificate or certificates for Shares purchased upon the exercise of any Option or portion thereof prior to fulfillment of all of the following conditions:

(i) The admission of such Shares to listing on all stock exchanges on which such class of shares is then listed;

(ii) The completion of any registration or other qualification of such Shares under any applicable law, or under the rulings or regulations of the Securities and Exchange Commission or any other governmental regulatory body which the Administrative Committee shall, in its absolute discretion, deem necessary or advisable;

(iii) The obtaining of any approval or other clearance from any governmental agency which the Administrative Committee shall, in its absolute discretion, determine to be necessary or advisable;

(iv) The lapse of such reasonable period of time following the exercise of the Option as the Administrative Committee may establish from time to time for reasons of administrative convenience; and

(v) The receipt by the Company of full payment for such Shares, including payment of any applicable withholding tax, which in the discretion of the Administrative Committee may be in the form of consideration used by the Participant to pay for such Shares under Section 9(b).

(d) Termination of Relationship as a Service Provider. If a Participant ceases to be a Service Provider other than by reason of the Participant's disability or death, such Participant may exercise his or her Option within such period of time as is specified in the Option Agreement to the extent that the Option is vested on the date of termination (but in no event later than the expiration of the term of the Option as set forth in the Option Agreement). In the absence of a specified time in the Option Agreement, the Option shall remain exercisable for three (3) months following the Participant's termination. If, on the date of termination, the Participant is not vested as to his or her entire Option, the Shares covered by the unvested portion of the Option immediately cease to be issuable under the Option and shall again become available for issuance under the Plan. If, after termination, the Participant does not exercise his or her Option within the time period specified herein, the Option shall terminate, and the Shares covered by such Option shall again become available for issuance under the Plan.

(e) Disability of Participant. If a Participant ceases to be a Service Provider as a result of the Participant's disability, the Participant may exercise his or her Option within such period of time as is specified in the Option Agreement to the extent the Option is vested on the date of termination (but in no event later than the expiration of the term of such Option as set forth in the Option Agreement). In the absence of a specified time in the Option Agreement, the Option shall remain exercisable for twelve (12) months following the Participant's termination. If such disability is not a "disability" as such term is defined in Section 22(e)(3) of the Code, in the case of an Incentive Stock Option, such Incentive Stock Option shall automatically cease to be treated as an Incentive Stock Option and shall be treated for tax purposes as a Non-Qualified Stock Option from and after the day which is three (3) months and one (1) day following such termination. If, on the date of termination, the Participant is not vested as to his or her entire Option, the Shares covered by the unvested portion of the Option shall immediately cease to be issuable under the Option and shall again become available for issuance under the Plan. If, after termination, the Participant does not exercise his or her Option within the time specified herein, the Option shall terminate, and the Shares covered by such Option shall again become available for issuance under the Plan.

(f) Death of Participant. If a Participant dies while a Service Provider, the Option may be exercised within such period of time as is specified in the Option Agreement (but in no event later than the expiration of the term of such Option as set forth in the Notice of Grant), by the Participant's estate or by a person who acquires the right to exercise the Option by bequest or inheritance, but only to the extent that the Option is vested on the date of death. In the absence of a specified time in the Option Agreement, the Option shall remain exercisable for twelve (12) months following the Participant's termination. If, at the time of death, the Participant is not vested as to his or her entire Option, the Shares covered by the unvested portion of the Option shall immediately cease to be issuable under the Option and shall again become available for

issuance under the Plan. The Option may be exercised by the executor or administrator of the Participant's estate or, if none, by the person(s) entitled to exercise the Option under the Participant's will or the laws of descent or distribution. If the Option is not so exercised within the time specified herein, the Option shall terminate, and the Shares covered by such Option shall again become available for issuance under the Plan.

(g) Regulatory Extension. A Participant's Option Agreement may provide that if the exercise of the Option following the termination of the Participant's status as a Service Provider (other than upon the Participant's death or Disability) would be prohibited at any time solely because the issuance of shares would violate the registration requirements under the Securities Act, then the Option shall terminate on the earlier of (i) the expiration of the term of the Option set forth in Section 8 or (ii) the expiration of a period of three (3) months after the termination of the Participant's status as a Service Provider during which the exercise of the Option would not be in violation of such registration requirements.

(h) Early Exercisability. The Administrative Committee may provide in the terms of a Participant's Option Agreement that the Participant may, at any time before the Participant's status as a Service Provider terminates, exercise the Option in whole or in part prior to the full vesting of the Option; *provided, however,* that subject to Section 19, Shares acquired upon exercise of an Option which has not fully vested may be subject to any forfeiture, transfer or other restrictions as the Administrative Committee may determine in its sole discretion.

11. Transferability.

(a) Except as otherwise provided in Section 11(b):

(i) No Option awarded under the Plan may be sold, pledged, assigned or transferred in any manner other than by will or the laws of descent and distribution, unless and until such Option has been exercised, or the shares underlying such Option have been issued, and all restrictions applicable to such shares have lapsed;

(ii) No Option or interest or right therein shall be liable for the debts, contracts or engagements of the Participant or his successors in interest or shall be subject to disposition by transfer, alienation, anticipation, pledge, encumbrance, assignment or any other means whether such disposition be voluntary or involuntary or by operation of law by judgment, levy, attachment, garnishment or any other legal or equitable proceedings (including bankruptcy), and any attempted disposition thereof shall be null and void and of no effect, except to the extent that such disposition is permitted by the preceding sentence; and

(iii) During the lifetime of the Participant, only he may exercise an Option (or any portion thereof) granted to him under the Plan; after the death of the Participant, any exercisable portion of an Option may, prior to the time when such portion becomes unexercisable under the Plan or the applicable Option

Agreement, be exercised by his personal representative or by any person empowered to do so under the deceased Participant's will or under the then applicable laws of descent and distribution.

(b) Notwithstanding Section 11(a), the Administrative Committee, in its sole discretion, may determine to permit a Participant to transfer a Non-Qualified Stock Option to any one or more Permitted Transferees (as defined below), subject to the following terms and conditions: (i) a Non-Qualified Stock Option transferred to a Permitted Transferee shall not be assignable or transferable by the Permitted Transferee other than by will or the laws of descent and distribution; (ii) any Non-Qualified Stock Option which is transferred to a Permitted Transferee shall continue to be subject to all the terms and conditions of the Non-Qualified Stock Option as applicable to the original Participant, other than the ability to further transfer the Non-Qualified Stock Option (including any requirement that the Participant execute a stockholders or similar agreement as a condition to exercising the Non-Qualified Stock Option); and (iii) the Participant and the Permitted Transferee shall execute any and all documents requested by the Administrative Committee, including, without limitation, documents to (A) confirm the status of the transferee as a Permitted Transferee, (B) satisfy any requirements for an exemption for the transfer under applicable federal and state securities laws and (C) evidence the transfer. For purposes of this Section 11(b), "Permitted Transferee" shall mean, with respect to a Participant, any child, stepchild, grandchild, parent, stepparent, grandparent, spouse, former spouse, sibling, niece, nephew, mother-in-law, father-in-law, son-in-law, daughter-in-law, brother-in-law, or sister-in-law, including adoptive relationships, any person sharing the Participant's household (other than a tenant or employee), a trust in which these persons (or the Participant) control the management of assets, and any other entity in which these persons (or the Participant) own more than fifty percent of the voting interests, or any other transferee specifically approved by the Administrative Committee after taking into account any U.S. state or federal and Cayman Islands tax or securities laws applicable to transferable Non-Qualified Stock Options.

12. Adjustments upon Changes in Capitalization, Merger or Asset Sale.

(a) In the event that the Board determines that any dividend or other distribution (whether in the form of cash, Ordinary Shares, other securities, or other property), recapitalization, reclassification, stock split, reverse stock split, reorganization, merger, consolidation, split-up, spin-off, combination, repurchase, liquidation, dissolution, or sale, transfer, exchange or other disposition of all or substantially all of the assets of the Company, or exchange of Ordinary Shares or other securities of the Company, issuance of warrants or other rights to purchase Ordinary Shares or other securities of the Company, or other similar corporate transaction or event (including without limitation any Change in Control), in the Board's sole discretion, affects the Ordinary Shares such that an adjustment is determined by the Board to be appropriate in order to prevent dilution or enlargement of the benefits or potential benefits intended to be made available under the Plan or with respect to any Option, then the Board shall, in such manner as it may deem equitable, adjust any or all of:

(i) The number and kind of Ordinary Shares (or other securities or property) with respect to which Options may be granted or awarded (including, but not limited to, adjustments of the limitations in Section 3 on the maximum number and kind of shares which may be issued and adjustments of the maximum number of Shares that may be purchased by any Participant in any calendar year pursuant to Section 6(c));

(ii) The number and kind of Ordinary Shares (or other securities or property) subject to outstanding Options; and

(iii) The grant or exercise price with respect to any Option.

(b) In the event of any transaction or event described in Section 12(a), the Board, in its sole and absolute discretion, and on such terms and conditions as it deems appropriate, either by the terms of the Option or by action taken prior to the occurrence of such transaction or event and either automatically or upon the Participant's request, is hereby authorized to take any one or more of the following actions whenever the Board determines that such action is appropriate in order to prevent dilution or enlargement of the benefits or potential benefits intended to be made available under the Plan or with respect to any Option granted or issued under the Plan or to facilitate such transaction or event:

(i) To provide for either the purchase of any such Option award for an amount of cash equal to the amount that could have been obtained upon the exercise of such Option or realization of the Participant's rights had such Option been currently exercisable or payable or fully vested or the replacement of such Option with other rights or property selected by the Board in its sole discretion;

(ii) To provide that such Option shall be exercisable as to all shares covered thereby, notwithstanding anything to the contrary in the Plan or the provisions of such Option award;

(iii) To provide that such Option be assumed by the successor or survivor corporation, or a parent or subsidiary thereof, or shall be substituted for by similar options, rights or awards covering the stock of the successor or survivor corporation, or a parent or subsidiary thereof, with appropriate adjustments as to the number and kind of shares and prices;

(iv) To make adjustments in the number and type of Ordinary Shares (or other securities or property) subject to outstanding Options, and/or in the terms and conditions of (including the grant or exercise price), and the criteria included in, Options which may be granted in the future; and

(v) To provide that immediately upon the consummation of such event, such Option shall not be exercisable and shall terminate; provided, that for a specified period of time prior to such event, such Option shall be exercisable as to all Shares covered thereby, and the restrictions imposed under an Option Agreement or Restricted Stock purchase agreement upon some or all Shares may

be terminated, notwithstanding anything to the contrary in the Plan or the provisions of such Option Agreement.

(c) Subject to Section 3, the Board may, in its discretion, include such further provisions and limitations in any Option Agreement or certificate, as it may deem equitable and in the best interests of the Company.

(d) The existence of the Plan, any Option Agreement or Restricted Stock purchase agreement and the Options granted hereunder shall not affect or restrict in any way the right or power of the Company or the shareholders of the Company to make or authorize any adjustment, recapitalization, reorganization or other change in the Company's capital structure or its business, any merger or consolidation of the Company, any issue of shares or of options, warrants or rights to purchase shares or of bonds, debentures, preferred or prior preference shares whose rights are superior to or affect the Ordinary Shares or the rights thereof or which are convertible into or exchangeable for Ordinary Shares, or the dissolution or liquidation of the Company, or any sale or transfer of all or any part of its assets or business, or any other corporate act or proceeding, whether of a similar character or otherwise.

13. Time of Granting Options. The date of grant of an Option shall, for all purposes, be the date on which the Administrative Committee makes the determination granting such Option, or such other date as is determined by the Administrative Committee. Notice of the determination shall be given to each Service Provider to whom an Option is so granted within a reasonable time after the date of such grant.

14. Amendment and Termination of the Plan.

(a) Amendment and Termination. The Board may at any time wholly or partially amend, alter, suspend or terminate the Plan. However, without approval of the Company's shareholders given within twelve (12) months before or after the action by the Board, no action of the Board may, except as provided in Section 12, increase the limits imposed in Section 3 on the maximum number of Shares which may be issued under the Plan or extend the term of the Plan under Section 7.

(b) Shareholder Approval. The Board shall obtain shareholder approval of any Plan amendment (i) to the extent necessary and desirable to comply with Applicable Laws and (ii) except with respect to amendments required by changes in Applicable Laws, in all events prior to the Public Trading Date.

(c) Effect of Amendment or Termination. No amendment, alteration, suspension or termination of the Plan shall impair the rights of any Participant, unless mutually agreed otherwise between the Participant and the Administrative Committee, which agreement must be in writing and signed by the Participant and the Company. Termination of the Plan shall not affect the Administrative Committee's ability to exercise the powers granted to it hereunder with respect to Options granted under the Plan prior to the date of such termination.

15. Shareholder Approval. The Plan will be submitted for the approval of the Company's shareholders within twelve (12) months after the Effective Date. No Options may be granted or awarded prior to such shareholder approval.

16. Inability to Obtain Authority. The inability of the Company to obtain authority from any regulatory body having jurisdiction, which authority is deemed by the Company's counsel to be necessary to the lawful issuance and sale of any Shares hereunder, shall relieve the Company of any liability in respect of the failure to issue or sell such Shares as to which such requisite authority shall not have been obtained.

17. Reservation of Shares. The Company, during the term of this Plan, shall at all times reserve and keep available such number of Shares as shall be sufficient to satisfy the requirements of the Plan.

18. Information to Participants and Purchasers. To the extent required by any Applicable Laws, the Company shall provide to each Participant and to each individual who acquires Shares pursuant to the Plan, not less frequently than annually during the period such Participant or purchaser has one or more Options outstanding, and, in the case of an individual who acquires Shares pursuant to the Plan, during the period such individual owns such Shares, copies of annual financial statements. Notwithstanding the preceding sentence, the Company shall not be required to provide such statements to key employees whose duties in connection with the Company assure their access to equivalent information.

19. Repurchase Provisions. The Administrative Committee in its discretion may provide that the Company may repurchase Shares acquired upon exercise of an Option upon a Participant's termination as a Service Provider; provided, that any such repurchase right shall be set forth in the applicable Option Agreement or Restricted Stock purchase agreement or in another agreement referred to in such agreement.

20. Investment Intent. The Company may require a Plan participant, as a condition of exercising or acquiring shares under any Option, (i) to give written assurances satisfactory to the Company as to the participant's knowledge and experience in financial and business matters and/or to employ a purchaser representative reasonably satisfactory to the Company who is knowledgeable and experienced in financial and business matters and that he or she is capable of evaluating, alone or together with the purchaser representative, the merits and risks of exercising the Option; and (ii) to give written assurances satisfactory to the Company stating that the participant is acquiring the shares subject to the Option for the participant's own account and not with any present intention of selling or otherwise distributing the shares. The foregoing requirements, and any assurances given pursuant to such requirements, shall be inoperative if (A) the issuance of the shares upon the exercise or acquisition of shares under the applicable Option has been registered under a then currently effective registration statement under the Securities Act or (B) as to any particular requirement, a determination is made by counsel for the Company that such requirement need not be met in the circumstances under the then applicable securities laws. The Company may, upon advice of counsel to the Company, place legends on share certificates issued under the Plan as such counsel deems necessary or appropriate in order to comply with applicable securities laws, including, but not limited to, legends restricting the transfer of the shares.

21. Governing Law. The validity and enforceability of this Plan shall be governed by and construed in accordance with the laws of the State of New York without regard to otherwise governing principles of conflicts of law.

22. Stockholders Agreement. As a condition precedent to the award of any Option award under the Plan, or the exercise or delivery of certificates for Shares issued pursuant thereto, the Administrative Committee may require any Participant (or the Participant's successor, as applicable) to enter into or become a party to a Stockholders Agreement,

Subscription Agreement or a Voting Trust Agreement in such form(s) as the Administrative Committee may determine from time to time (the "Stockholders Agreement").

* * * * * * *

I hereby certify that the Plan was duly adopted by the Board of Directors of Rocket Pharmaceuticals, Ltd. November 9, 2015.

Executed on this 9th day of November, 2015.

/s/ Naveen Yalamanchi
Naveen Yalamanchi
President

I hereby certify that the foregoing Plan was approved by the shareholders of Rocket Pharmaceuticals, Ltd. on November 9, 2015.

Executed on this 9th day of November, 2015.

/s/ Naveen Yalamanchi
Naveen Yalamanchi
Secretary

**Exhibit 10.9**

January 4, 2018

Dale Ritter

Dear Dale:

As you know, Inotek Pharmaceuticals Corporation (the "Company") is entering into a business combination with Rocket Pharmaceuticals Ltd. (the "Merger"). Following the Merger, the Company's name will be Rocket Pharmaceuticals, Inc. In recognition of your continuing key role at and services on behalf of the Company, the Company would like to grant you a retention bonus in order to incentivize your continued employment with the Company through March 16, 2018 (the "Retention Date"). Following the Retention Date, your employment with the Company shall terminate, subject to the provisions of your employment agreement with the Company.

Therefore, in order to incentivize your continued employment with the Company through the Retention Date, you will be eligible to receive a cash retention bonus equal to $40,000 (the "Retention Bonus"), less applicable tax withholdings, subject to your continued employment with the Company through the Retention Date and your execution of a release of claims in a form acceptable to the Company at the time of your termination. In order to receive the Retention Bonus, you must remain employed by the Company in good standing as of the Retention Date and assist with such transitional duties related to the Merger as may reasonably be requested, including but not limited to completion of the final audit, closing the books, filing all required documents with the Securities and Exchange Commission, transition of equity and pay plans and other general transition activities required to support the Merger.

Notwithstanding the foregoing, if the Company (or an affiliate) terminates your employment prior to the Retention Date, without Cause (as defined below), then subject to your delivery to the Company of an executed release of claims in a form acceptable to the Company, you will receive the Retention Bonus within 14 days following the effective date of such release.

If your employment is terminated for Cause or you otherwise resign from employment for any reason prior to the Retention Date, you shall not be eligible to receive the Retention Bonus.

For purposes of this letter, "Cause" means:

(i) your failure to substantially perform your duties for the Company or an affiliate;

(ii) your commission at any time of any act or omission that results in, or may reasonably be expected to result in, a conviction, plea of no contest, plea of nolo contendere, or imposition of unadjudicated probation for any felony or crime involving moral turpitude;

(iii) your unlawful use (including being under the influence) or possession of illegal drugs on the Company's or an affiliate's premises or while performing your duties and responsibilities for the Company or an affiliate;

(iv) your commission at any time of any act of fraud, embezzlement, misappropriation, material misconduct, or breach of fiduciary duty against the Company or an affiliate (or any predecessor thereto or successor thereof); or

(v) your breach of any agreement with the Company or an affiliate to which you are a party (including, without limitation, any breach of the noncompetition, nonsolicitation, confidentiality or other restrictive covenant of any such agreement).

Whether or not an event giving rise to "Cause" occurs will be determined by the Company in its sole discretion.

Nothing in this letter changes the "at-will" status of your employment or affects any other Company plan, agreement or arrangement covering you. For avoidance of doubt, you shall continue to be covered by the terms of any severance and/or separation agreements or policies currently applicable to you in accordance with the provisions thereof.

The Company intends that the payments under this letter be exempt from the requirements of Section 409A of the Internal Revenue Code of 1986, as amended, ("Section 409A") as "short term deferrals" under Section l.409A-l(b)(4) of the Treasury Regulations, and the terms of this letter will be construed and administered in a manner that is consistent with such intent. A termination of employment shall occur under this letter only if such termination is a "separation from service" within the meaning of Section 409A.

You hereby agree to keep the terms of this letter confidential, except that you may disclose it to your spouse, attorneys and accountants.

Thank you for all your hard work for the Company. Please indicate your agreement to the terms of this letter by signing below and returning a copy to me at your earliest convenience. This agreement will be effective upon the closing of the Merger.

Sincerely,

/s/ Brian Batchelder
Brian Batchelder
Rocket Pharmaceuticals, Inc.

AGREED AND ACKNOWLEDGED

/s/ Dale Ritter — January 4, 2018
Employee — Date

**Exhibit 10.10**

**ROCKET PHARMACEUTICALS, INC.**

**AMENDED AND RESTATED**

**2014 EMPLOYEE STOCK PURCHASE PLAN**

The purpose of the Rocket Pharmaceuticals, Inc. 2014 Employee Stock Purchase Plan ("the Plan") is to provide eligible employees of Rocket Pharmaceuticals, Inc. (the "Company") and each Designated Subsidiary (as defined in Section 11) with opportunities to purchase shares of the Company's common stock, par value $0.01 per share (the "Common Stock"). The maximum number of shares of Common Stock approved, reserved and available for issuance under the Plan shall be 160,277 shares of Common Stock, plus on January 1, 2016 and each January 1 thereafter, the number of shares of Common Stock approved, reserved and available for issuance under the Plan shall be cumulatively increased by the lesser of (i) 600,000 shares of Common Stock or (ii) such number of shares as is necessary to set the number of unissued shares of Common Stock under the Plan at 1% of the Corporation's outstanding Common Stock as of January 1 of the applicable year. Notwithstanding the foregoing, the Company's Board of Directors (the "Board") may act prior to the first day of any fiscal year to provide that there will be no January 1 increase in the share reserve for such fiscal year or that the increase in the share reserve for such fiscal year will be a lesser number of shares of Common Stock than would otherwise occur pursuant to the preceding sentence. The Plan is intended to constitute an "employee stock purchase plan" within the meaning of Section 423(b) of the Internal Revenue Code of 1986, as amended (the "Code"), and shall be interpreted in accordance with that intent.

1. Administration. The Plan will be administered by the person or persons (the "Administrator") appointed by the Board for such purpose. The Administrator has authority at any time to: (i) adopt, alter and repeal such rules, guidelines and practices for the administration of the Plan and for its own acts and proceedings as it shall deem advisable; (ii) interpret the terms and provisions of the Plan; (iii) make all determinations it deems advisable for the administration of the Plan; (iv) decide all disputes arising in connection with the Plan; and (v) otherwise supervise the administration of the Plan. All interpretations and decisions of the Administrator shall be binding on all persons, including the Company and the Participants. No member of the Board or individual exercising administrative authority with respect to the Plan shall be liable for any action or determination made in good faith with respect to the Plan or any option granted hereunder.

2. Offerings. The Company will make one or more offerings to eligible employees to purchase Common Stock under the Plan ("Offerings"). Unless otherwise determined by the Administrator, the initial Offering will begin on January 1st of the year designated by the Administrator and will end on the following June 30th (the "Initial Offering"). Thereafter, unless otherwise determined by the Administrator, an Offering will begin on the first business day occurring on or after each January 1st and July 1st and will end on the last business day occurring on or before the following June 30th and December 31st, respectively. The Administrator may, in its discretion, designate a different period for any Offering, provided that no Offering shall exceed one year in duration or overlap any other Offering.

3. Eligibility. All individuals classified as employees on the payroll records of the Company and each Designated Subsidiary are eligible to participate in any one or more of the Offerings under the Plan, provided that as of the first day of the applicable Offering (the "Offering Date") they are customarily employed by the Company or a Designated Subsidiary for more than 20 hours a week. Notwithstanding any other provision herein, individuals who are not contemporaneously classified as employees of the Company or a Designated Subsidiary for purposes of the Company's or applicable Designated Subsidiary's payroll system are not considered to be eligible employees of the Company or any Designated Subsidiary and shall not be eligible to participate in the Plan. In the event any such individuals are reclassified as employees of the Company or a Designated Subsidiary for any purpose, including, without limitation, common law or statutory employees, by any action of any third party, including, without limitation, any government agency, or as a result of any private lawsuit, action or administrative proceeding, such individuals shall, notwithstanding such reclassification, remain ineligible for participation. Notwithstanding the foregoing, the exclusive means for individuals who are not contemporaneously classified as employees of the Company or a Designated Subsidiary on the Company's or Designated Subsidiary's payroll system to become

eligible to participate in this Plan is through an amendment to this Plan, duly executed by the Company, which specifically renders such individuals eligible to participate herein.

4. Participation.

(a) Participants in Offerings. An eligible employee who is not a Participant on any Offering Date may participate in such Offering by submitting an enrollment form to his or her appropriate payroll location at least 15 business days before the Offering Date (or by such other deadline as shall be established by the Administrator for the Offering).

(b) Enrollment. The enrollment form will (a) state a whole percentage to be deducted from an eligible employee's Compensation (as defined in Section 11) per pay period, (b) authorize the purchase of Common Stock in each Offering in accordance with the terms of the Plan and (c) specify the exact name or names in which shares of Common Stock purchased for such individual are to be issued pursuant to Section 10. An employee who does not enroll in accordance with these procedures will be deemed to have waived the right to participate. Unless a Participant files a new enrollment form or withdraws from the Plan, such Participant's deductions and purchases will continue at the same percentage of Compensation for future Offerings, provided he or she remains eligible.

(c) Notwithstanding the foregoing, participation in the Plan will neither be permitted nor be denied contrary to the requirements of the Code.

5. Employee Contributions. Each eligible employee may authorize payroll deductions at a minimum of one percent up to a maximum of 10 percent of such employee's Compensation for each pay period. The Company will maintain book accounts showing the amount of payroll deductions made by each Participant for each Offering. No interest will accrue or be paid on payroll deductions.

6. Deduction Changes. Except as may be determined by the Administrator in advance of an Offering, a Participant may elect to increase his or her payroll deduction (subject to the limitations in Section 5) not more than twice during an Offering and may elect to decrease his or her payroll deduction (subject to the limitations in Section 5) as many times as desired during an Offering, in each case by filing a new enrollment form at least 15 business days before the next payroll period for which such election is to be effective (or by such other deadline as shall be established by the Administrator). A Participant may also increase or decrease his or her payroll deduction with respect to the next Offering (subject to the limitations of Section 5) by filing a new enrollment form at least 15 business days before the next Offering Date (or by such other deadline as shall be established by the Administrator for the Offering). The Administrator may, in advance of any Offering, change or establish other rules with respect to a Participant's ability to increase, decrease or terminate his or her payroll deduction during an Offering.

7. Withdrawal. A Participant may withdraw from participation in the Plan by delivering a written notice of withdrawal to his or her appropriate payroll location. The Participant's withdrawal will be effective as of the next business day. Following a Participant's withdrawal, the Company will promptly refund such individual's entire account balance under the Plan to him or her (after payment for any Common Stock purchased before the effective date of withdrawal). Partial withdrawals are not permitted. Such an employee may not begin participation again during the remainder of the Offering, but may enroll in a subsequent Offering in accordance with Section 4.

8. Grant of Options. On each Offering Date, the Company will grant to each eligible employee who is then a Participant in the Plan an option ("Option") to purchase on the last day of such Offering (the "Exercise Date"), at the Option Price hereinafter provided for, the lowest of (a) a number of shares of Common Stock determined by dividing such Participant's accumulated payroll deductions on such Exercise Date by the lower of (i) 85 percent of the Fair Market Value of the Common Stock on the Offering Date, or (ii) 85 percent of the Fair Market Value of the Common Stock on the Exercise Date; (b) 5,000 shares of Common Stock; or (c) such other lesser maximum number of shares as shall have been established by the Administrator in advance of the Offering; provided, however, that such Option shall be subject to the limitations set forth below. Each Participant's Option shall be exercisable only to the extent of such Participant's accumulated payroll deductions on the Exercise Date. The purchase price for each share purchased under each Option (the "Option Price") will be 85 percent of the Fair Market Value of the Common Stock on the Offering Date or the Exercise Date, whichever is less.

Notwithstanding the foregoing, no Participant may be granted an option hereunder if such Participant, immediately after the option was granted, would be treated as owning stock possessing 5 percent or more of the total combined voting power or value of all classes of stock of the Company or any Parent or Subsidiary (as defined in Section 11). For purposes of the preceding sentence, the attribution rules of Section 424(d) of the Code shall apply

in determining the stock ownership of a Participant, and all stock which the Participant has a contractual right to purchase shall be treated as stock owned by the Participant. In addition, no Participant may be granted an Option which permits his or her rights to purchase stock under the Plan, and any other employee stock purchase plan of the Company and its Parents and Subsidiaries, to accrue at a rate which exceeds $25,000 of the fair market value of such stock (determined on the option grant date or dates) for each calendar year in which the Option is outstanding at any time. The purpose of the limitation in the preceding sentence is to comply with Section 423(b)(8) of the Code and shall be applied taking Options into account in the order in which they were granted.

9. Exercise of Option and Purchase of Shares. Each employee who continues to be a Participant in the Plan on the Exercise Date shall be deemed to have exercised his or her Option on such date and shall acquire from the Company such number of whole shares of Common Stock reserved for the purpose of the Plan as his or her accumulated payroll deductions on such date will purchase at the Option Price, subject to any other limitations contained in the Plan. Any amount remaining in a Participant's account at the end of an Offering solely by reason of the inability to purchase a fractional share will be carried forward to the next Offering; any other balance remaining in a Participant's account at the end of an Offering will be refunded to the Participant promptly.

10. Issuance of Certificates. Certificates representing shares of Common Stock purchased under the Plan may be issued only in the name of the employee, in the name of the employee and another person of legal age as joint tenants with rights of survivorship, or in the name of a broker authorized by the employee to be his, her or their, nominee for such purpose.

11. Definitions.

The term "Compensation" means the amount of total cash compensation, prior to salary reduction pursuant to Sections 125, 132(f) or 401(k) of the Code, including base pay, overtime, commissions, and incentive or bonus awards, but excluding allowances and reimbursements for expenses such as relocation allowances or travel expenses, income or gains on the exercise of Company stock options, and similar items.

The term "Designated Subsidiary" means any present or future Subsidiary (as defined below) that has been designated by the Board to participate in the Plan. The Board may so designate any Subsidiary, or revoke any such designation, at any time and from time to time, either before or after the Plan is approved by the stockholders.

The term "Fair Market Value of the Common Stock" on any given date means the fair market value of the Common Stock determined in good faith by the Administrator; provided, however, that if the Common Stock is admitted to quotation on the National Association of Securities Dealers Automated Quotation System ("NASDAQ"), NASDAQ Global Market or another national securities exchange, the determination shall be made by reference to the closing price on such date. If there is no closing price for such date, the determination shall be made by reference to the last date preceding such date for which there is a closing price.

The term "Parent" means a "parent corporation" with respect to the Company, as defined in Section 424(e) of the Code.

The term "Participant" means an individual who is eligible as determined in Section 3 and who has complied with the provisions of Section 4.

The term "Subsidiary" means a "subsidiary corporation" with respect to the Company, as defined in Section 424(f) of the Code.

12. Rights on Termination of Employment. If a Participant's employment terminates for any reason before the Exercise Date for any Offering, no payroll deduction will be taken from any pay due and owing to the Participant and the balance in the Participant's account will be paid to such Participant or, in the case of such Participant's death, to his or her designated beneficiary as if such Participant had withdrawn from the Plan under Section 7. An employee will be deemed to have terminated employment, for this purpose, if the corporation that employs him or her, having been a Designated Subsidiary, ceases to be a Subsidiary, or if the employee is transferred to any corporation other than the Company or a Designated Subsidiary. An employee will not be deemed to have terminated employment for this purpose, if the employee is on an approved leave of absence for military service or sickness or for any other purpose approved by the Company, if the employee's right to reemployment is guaranteed

either by a statute or by contract or under the policy pursuant to which the leave of absence was granted or if the Administrator otherwise provides in writing.

13. Special Rules. Notwithstanding anything herein to the contrary, the Administrator may adopt special rules applicable to the employees of a particular Designated Subsidiary, whenever the Administrator determines that such rules are necessary or appropriate for the implementation of the Plan in a jurisdiction where such Designated Subsidiary has employees; provided that such rules are consistent with the requirements of Section 423(b) of the Code. Any special rules established pursuant to this Section 13 shall, to the extent possible, result in the employees subject to such rules having substantially the same rights as other Participants in the Plan.

14. Optionees Not Stockholders. Neither the granting of an Option to a Participant nor the deductions from his or her pay shall constitute such Participant a holder of the shares of Common Stock covered by an Option under the Plan until such shares have been purchased by and issued to him or her.

15. Rights Not Transferable. Rights under the Plan are not transferable by a Participant other than by will or the laws of descent and distribution, and are exercisable during the Participant's lifetime only by the Participant.

16. Application of Funds. All funds received or held by the Company under the Plan may be combined with other corporate funds and may be used for any corporate purpose.

17. Adjustment in Case of Changes Affecting Common Stock. In the event of a subdivision of outstanding shares of Common Stock, the payment of a dividend in Common Stock or any other change affecting the Common Stock, the number of shares approved for the Plan and the share limitation set forth in Section 8 shall be equitably or proportionately adjusted to give proper effect to such event.

18. Amendment of the Plan. The Board may at any time and from time to time amend the Plan in any respect, except that without the approval within 12 months of such Board action by the stockholders, no amendment shall be made increasing the number of shares approved for the Plan or making any other change that would require stockholder approval in order for the Plan, as amended, to qualify as an "employee stock purchase plan" under Section 423(b) of the Code.

19. Insufficient Shares. If the total number of shares of Common Stock that would otherwise be purchased on any Exercise Date plus the number of shares purchased under previous Offerings under the Plan exceeds the maximum number of shares issuable under the Plan, the shares then available shall be apportioned among Participants in proportion to the amount of payroll deductions accumulated on behalf of each Participant that would otherwise be used to purchase Common Stock on such Exercise Date.

20. Termination of the Plan. The Plan may be terminated at any time by the Board. Upon termination of the Plan, all amounts in the accounts of Participants shall be promptly refunded. The Plan shall automatically terminate on the tenth anniversary of the date the Plan was approved by the Company's stockholders

21. Governmental Regulations. The Company's obligation to sell and deliver Common Stock under the Plan is subject to obtaining all governmental approvals required in connection with the authorization, issuance, or sale of such stock.

22. Governing Law. This Plan and all Options and actions taken thereunder shall be governed by, and construed in accordance with, the laws of the State of Delaware, applied without regard to conflict of law principles.

23. Issuance of Shares. Shares may be issued upon exercise of an Option from authorized but unissued Common Stock, from shares held in the treasury of the Company, or from any other proper source.

24. Tax Withholding. Participation in the Plan is subject to any minimum required tax withholding on income of the Participant in connection with the Plan. Each Participant agrees, by entering the Plan, that the Company and its Subsidiaries shall have the right to deduct any such taxes from any payment of any kind otherwise due to the Participant, including shares issuable under the Plan.

25. Notification Upon Sale of Shares. Each Participant agrees, by entering the Plan, to give the Company prompt notice of any disposition of shares purchased under the Plan where such disposition occurs within two years after the date of grant of the Option pursuant to which such shares were purchased.

26. Effective Date and Approval of Shareholders. The Plan shall take effect on the later of the date it is adopted by the Board and the date it is approved by the holders of a majority of the votes cast at a meeting of stockholders at which a quorum is present or by written consent of the stockholders.

**Exhibit 10.12**

## LEASE AGREEMENT

THIS LEASE AGREEMENT is made as of this 31st day of March, 2016, between ARE-East River Science Park, LLC, a Delaware limited liability company ("**Landlord**"), and Rocket Pharmaceuticals, Ltd., a Cayman Islands corporation ("**Tenant**").

## BASIC LEASE PROVISIONS

**Address:** 430 East 29th Street, New York, New York, 10016.

**Premises:** That portion of the Project, containing approximately 4,420 rentable square feet (as determined by Landlord and accepted for all purposes by Tenant), in Suites 1010 and 1040 on the tenth (10th) floor in the 418,639 rentable square foot West Tower (the "Building") of The Alexandria Center for Life Science - New York City (collectively, together with the underlying land, related site improvements and the immediately adjacent East Tower, the "Project"), as shown on **Exhibit A**.

**Shared Lab Area:** That portion of the Building on the tenth floor, as shown on **Exhibit N**.

**Project**: The Alexandria Center for Life Science – New York City, including the Land, all buildings (including the Building) and other improvements located (or to be located) thereon and appurtenances thereto.

**Base Rent:** $406,640.00 per annum, payable in advance in equal monthly installments of $33,886.67.

**Building**: The approximately 418,639 rentable square foot building known as the West Tower of the Project (the "**West Tower**").

**Building's Share:** The proportionate share of the Project attributed to the Building is 57.53%.

**Land:** That certain real property more particularly described on **Exhibit B**.

**Tenant's Share:** 1.056%.

**Tenant's Share (SLA):** 14.54%.

**Security Deposit:** $203,320.00.

**Target Commencement Date:** On or prior to May 1, 2016.

**Rent Commencement Date:** Commencement Date.

**Rent Adjustment Percentage:** 3.0%

**Base Term:** Beginning on the Commencement Date and ending sixty-three (63) months from the first day of the first full calendar month of the Term (as defined in Section 2) hereof.

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**Permitted Use:** Research and development laboratory, related office and other related uses consistent with the character of the Project and otherwise in compliance with the provisions of Section 7 hereof.

**Address for Rent Payment via Regular Mail:**
P.O. Box 975383Dallas, TX 75397-5383

**Address for Rent Payment via Overnight Courier:**
JP Morgan Chase
Alexandria Real Estate Equities
Lockbox 975383 TX1-0006
14800 Frye RoadFort Worth, TX 76155

**Wire/ACH Payment Information:**
**Bank Name:**JPMorgan Chase Bank NA
**Bank Address:201 N. Central Ave.Phoenix, AZ 85004**
**Account Name:**ARE-East River, LLC
**Account Number:**790081186
**Wire ABA Number:**021000021
**ACH ABA Number:**122100024

**Tenant's Notice Address:**
Prior to Tenant's occupancy:

Rocket Pharmaceuticals, Ltd.
250 West 55th Street, 16th FL, Suite A
New York, NY 10019

Upon Tenant's occupancy:

Rocket Pharmaceuticals, Ltd.
430 East 29th Street, Suites 1010 and 1040
New York, NY 10016

**Landlord's Notice Address:**
385 East Colorado Blvd., Suite 299Pasadena, CA 91101
Attention: Corporate Secretary

The following Exhibits and Addenda are attached hereto and incorporated herein by this reference:

[X] **EXHIBIT A** - PREMISES DESCRIPTION
[ ] **EXHIBIT C** – INTENTIONALLY OMITTED
[X] **EXHIBIT E** - RULES AND REGULATIONS
[ ] **EXHIBIT G** – INTENTIONALLY OMITTED
[X] **EXHIBIT I** – SHARED LAB SYSTEMS
[ ] **EXHIBIT K** – INTENTIONALLY OMITTED
[X] **EXHIBIT M** – SUPERIOR INSTRUMENT EXCERPTS
[X] **EXHIBIT B** - DESCRIPTION OF PROJECT
[X] **EXHIBIT D** - COMMENCEMENT DATE
[X] **EXHIBIT F** - TENANT'S PERSONAL PROPERTY
[ ] **EXHIBIT H** – INTENTIONALLY OMITTED
[X] **EXHIBIT J** – ADDITIONAL INSUREDS
[X] **EXHIBIT L** – OPEN SPACE DESCRIPTION
[X] **EXHIBIT N** - SHARED LAB AREA

1. **Lease of Premises.** Upon and subject to all of the terms and conditions hereof, Landlord hereby leases the Premises to Tenant and Tenant hereby leases the Premises from Landlord. Tenant shall also have a license, on a non-exclusive basis in common with other tenants and users of the Project, to use all of the Building's public hallways, lobbies, fitness center, corridors and passages and the Building's public stairways as "Common Areas" from time to time, in accordance with the Rules and Regulations applicable thereto and all Legal Requirements; but "Common Areas" shall not include any area within the Premises or any other leased or leasable area of the Project, and such access and use shall be subject to the terms of the Superior Instruments (as defined in Section 27). Landlord reserves the right to modify, from time to time, the Project, the Building, the Open Space and the Common Areas, provided that such

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modifications do not materially adversely affect Tenant's use of the Premises for the Permitted Use. No vault or cellar is leased hereunder, anything to the contrary indicated elsewhere in this Lease notwithstanding. As used herein, the term "**Open Space**" shall mean the portion of the Project that will be subject to a permanent and perpetual public use and access easement, of a location and size substantially as shown on **Exhibit L**, or otherwise in accordance with the Declaration (Corrective) dated December 29, 2006 by ARE – East River Science Park, LLC, recorded February 20, 2007 at CRFN 2007000094401, as the same may be modified from time to time.

2. **Delivery; Landlord's Work; Acceptance of Premises; Commencement Date**. Landlord shall use reasonable efforts to deliver the Premises to Tenant on or before the Target Commencement Date, with Landlord's Work, if any, Substantially Completed ("**Delivery**" or "**Deliver**"). "**Landlord's Work**" shall mean the completion of the core and shell of the building and completion of the Shared Lab Area and installation of the Shared Lab Systems (as hereinafter defined) in substantial conformance with the Exhibits to this Lease. **"Substantially Completed**" and "**Substantial Completion**" shall mean the completion of Landlord's Work, subject only to punch list items which do not materially impact Tenant's use of the Premises. Tenant shall be solely responsible for ensuring that the Shared Lab Area, the Building and tenant improvement designs and specifications are consistent with Tenant's requirements. Tenant shall solely be responsible for all costs incurred by Landlord to alter the Building as a result of Tenant's requested changes, if any, which changes shall be subject to approval by Landlord in its sole discretion. Landlord shall have no obligation to, and shall not, secure any permits, approvals or entitlements related to Tenant's specific use of the Premises or Tenant's business operations therein. Except as set forth in this Section 2, Landlord shall have no obligation to perform any work at the Project in connection with preparing the Premises for, or accommodating, Tenant's occupancy. If Landlord fails to timely Deliver the Premises, Landlord shall not be liable to Tenant for any loss or damage resulting therefrom, and this Lease shall not be void or voidable, provided that Landlord shall remain obligated to use its commercially reasonable efforts in accordance with the terms hereof to Deliver the Premises. Tenant expressly waives any right to rescind this Lease under Section 223-a of the New York Real Property Law or under any present or future statute of similar import then in force and further expressly waives the right to recover any damages, direct or indirect, which may result from Landlord's failure to deliver possession of the Premises by the Target Commencement Date or to grant access to certain portions of the Premises prior to the Target Commencement Date as permitted hereunder. Tenant agrees that the provisions of this Section 2 are intended to constitute "an express provision to the contrary" within the meaning of said Section 223-a. Notwithstanding the foregoing, in the event that Landlord is unable to deliver the Premises to Tenant within 180 days after the Target Commencement Date, then Tenant shall have the right to cancel this Lease, on thirty (30) days written notice, which shall be effective unless Landlord delivers the Premises before the expiration of such 30-day notice period. In the event that Tenant so terminates this Lease, Tenant shall receive a refund of any monies paid or tendered to Landlord.

(a) The "**Commencement Date**" shall be the earliest of: (i) the date Landlord Delivers the Premises to Tenant; (ii) the date Landlord could have Delivered the Premises but for Tenant Delays; and (iii) the date Tenant conducts any regular business in the Premises or any part thereof. Upon request of Landlord, and upon the happening of any of the foregoing events, Tenant shall execute and deliver a written acknowledgment of the Commencement Date and the expiration date of the Term when such are established in the form of the "Acknowledgement of Commencement Date" attached to this Lease as **Exhibit D**; provided, however, Tenant's failure to execute and deliver such acknowledgment shall not affect Landlord's rights hereunder. The "**Term**" of this Lease shall be the Base Term, as defined above in the Basic Lease Provisions.

(b) Tenant shall accept the Premises in their "AS-IS" condition as of the Commencement Date, and, other than Landlord's Work, Landlord shall have no obligation for any defects in the Premises, to perform any work or make any installations in order to prepare the Premises for Tenant's occupancy. Tenant's taking possession of the Premises shall be conclusive evidence that Tenant accepts the Premises and that the Premises were in good condition at the time possession was taken. Any occupancy of the

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Premises by Tenant before the Commencement Date shall be subject to all of the terms and conditions of this Lease, including the obligation to pay Rent.

(c) Tenant agrees and acknowledges that neither Landlord nor any agent of Landlord has made any representation or warranty with respect to the condition of all or any portion of the Premises, the Building or the Project, and/or the suitability of the Premises, the Building or the Project for the conduct of Tenant's business, and Tenant waives any implied warranty that the Premises, the Building or the Project are suitable for the Permitted Use. No rights, easements or licenses are acquired by Tenant by implication or otherwise except as expressly set forth in this Lease. This Lease constitutes the complete agreement of Landlord and Tenant with respect to the subject matter hereof and supersedes any and all prior representations, inducements, promises, agreements, understandings and negotiations which are not contained herein. Landlord in executing this Lease does so in reliance upon Tenant's representations, warranties, acknowledgments and agreements contained herein.

3. **Rent**.

(a) **Base Rent**. The first month's Base Rent and the Security Deposit shall be due and payable on delivery of an executed copy of this Lease to Landlord. Tenant shall pay to Landlord in advance, without demand, abatement, deduction or set-off, monthly installments of Base Rent on or before the first day of each calendar month during the Term hereof, in lawful money of the United States of America, at the office of Landlord for payment of Rent set forth above, or to such other person or at such other place as Landlord may from time to time designate in writing. Payments of Base Rent for any fractional calendar month shall be prorated. The obligation of Tenant to pay Base Rent and other sums to Landlord and the obligations of Landlord under this Lease are independent obligations. Tenant shall have no right at any time to abate, reduce, or set-off any Rent (as defined in Section 5) due hereunder except for any abatement as may be expressly provided in this Lease.

(b) **Additional Rent.** In addition to Base Rent, Tenant agrees to pay to Landlord as additional rent ("**Additional Rent**"): (i) Tenant's Share of "Operating Expenses" (as defined in Section 5), (ii) administrative rent for property management services in the amount of 3.00% of the Base Rent (determined without regard to any rent abatement that may be applicable) ("**Administrative Rent**") and (iii) any and all other amounts Tenant assumes or agrees to pay under the provisions of this Lease, including, without limitation, any and all other sums that may become due by reason of any default of Tenant or failure to comply with the agreements, terms, covenants and conditions of this Lease to be performed by Tenant, after any applicable notice and cure period.

4. **Base Rent Adjustments**. Base Rent shall be increased on each annual anniversary of the first day of the first full month during the Term of this Lease (each an "**Adjustment Date**") by multiplying the Base Rent payable immediately before such Adjustment Date by the Rent Adjustment Percentage and adding the resulting amount to the Base Rent payable immediately before such Adjustment Date. Base Rent, as so adjusted, shall thereafter be due as provided herein. Base Rent adjustments for any fractional calendar month or any portion of a calendar year shall be prorated based on the number of days in the respective month or year which fall within the Term. Notwithstanding anything to the contrary contained in this Lease, but provided Tenant is not in Default hereunder, Landlord hereby grants Tenant an abatement of the Base Rent payable during the period beginning on the Commencement Date and ending three (3) months after the Commencement Date ("**Base Rent Abatement**"). For the avoidance of doubt, if the Commencement Date occurs on the first day of a month, the Base Rent Abatement will be measured from that date. If the Commencement Date occurs on a day other than the first day of a month, the Base Rent Abatement will be measured from the first day of the following month, and Base Rent shall be payable on a prorated basis for the portion of the month in which the Commencement Date occurs. Except as provided in the preceding sentences, Tenant shall pay the full amount of Base Rent due in accordance with the provisions of this Lease. The Administrative Rent set forth in Section 3(b) above and the Operating Expenses set forth in Section 5 below shall not be abated and shall be based on the amount of Base Rent


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that would have been payable without regard to the Base Rent Abatement. Notwithstanding anything to the contrary in this Section 4, the adjustment in the Base Rent as set forth in this Section 4 shall be based on the full and unabated amount of Base Rent payable for the first 12 month period from and after the Commencement Date.

5. **Operating Expense Payments**. Landlord shall deliver to Tenant a written estimate of Operating Expenses for each calendar year during the Term (the "**Annual Estimate**"), which may be revised by Landlord from time to time during such calendar year. During each month of the Term, on the same date that Base Rent is due, Tenant shall pay Landlord an amount equal to 1/12th of Tenant's Share of the Annual Estimate. Payments for any fractional calendar month or any portion of a calendar year shall be prorated based on the number of days in the respective month or year which fall within the Term.

(a) The term "**Operating Expenses**" means all costs and expenses of any kind or description whatsoever incurred or accrued each calendar year by Landlord with respect to the Building (including the Building's Share of all costs and expenses of any kind or description incurred or accrued by Landlord with respect to the Project which are not specific to the Building or any other building located in the Project) (including, without duplication, Taxes (as defined in Section 9), all Building and project related costs in connection with the shell and core of the Building, site improvements, transportation, maintenance, common area utilities, taxes, real estate taxes or PILOT payments (as defined in Section 9), insurance and capital repairs and improvements amortized (with interest at the Default Rate) over the lesser of 7 years and the useful life of such capital items), and the costs and expenses of maintaining, repairing, replacing and operating the Shared Lab Area and the Shared Lab Systems (as such terms are defined in Section 46), excluding only:

(i) the original construction costs of the Project and costs of correcting defects in such original construction;

(ii) capital expenditures for expansion of the Project;

(iii) interest, principal payments of any Mortgage (as defined in Section 27) debts of Landlord, financing costs and amortization of funds borrowed by Landlord, whether secured or unsecured, and all payments of base rent (but not taxes or operating expenses) under any ground lease or other underlying lease of all or any portion of the Project;

(iv) depreciation of the Project (provided that the exclusion of depreciation shall not preclude inclusion of amortization of capital improvements, which is includable in Operating Expenses in accordance with the terms of this Lease);

(v) advertising, legal and space planning expenses and leasing commissions and other costs and expenses incurred in procuring and leasing space to tenants for the Project, including any leasing office maintained in the Project, free rent and construction allowances for tenants;

(vi) legal and other expenses incurred in the negotiation or enforcement of leases;

(vii) costs of completing, fixturing, improving, renovating, painting, redecorating or other work, which Landlord pays for or performs for other tenants within their premises, and costs of correcting defects in such work; in each instance other than those ordinary building repairs and maintenance to Building structures, windows and Building Systems;

(viii) costs to be reimbursed by other tenants of the Project or Taxes to be paid directly by Tenant or other tenants of the Project, whether or not actually paid;

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(ix) salaries, wages, benefits and other compensation paid to officers and employees of Landlord who are not assigned in whole or in part to the operation, management, maintenance or repair of the Project;

(x) general organizational, administrative and overhead costs relating to maintaining Landlord's existence, either as a corporation, partnership, or other entity, including general corporate, legal and accounting expenses;

(xi) costs (including attorneys' fees and costs of settlement, judgments and payments in lieu thereof) incurred in connection with disputes with tenants, other occupants, or prospective tenants, and costs and expenses, including legal fees, incurred in connection with negotiations or disputes with employees, consultants, management agents, leasing agents, purchasers or mortgagees of the Building;

(xii) costs incurred by Landlord due to the violation by Landlord, its employees, agents or contractors or any tenant of the terms and conditions of any lease of space in the Project or any Legal Requirement (as defined in Section 7);

(xiii) penalties, fines or interest, and any professional or other expenses related thereto, incurred as a result of Landlord's inability or failure to make payment of Taxes and/or to file any tax or informational returns when due, or from Landlord's failure to make any payment of Taxes required to be made by Landlord hereunder before delinquency;

(xiv) overhead and profit increment paid to Landlord or to subsidiaries or affiliates of Landlord for goods and/or services in or to the Project to the extent the same materially exceeds the costs of such goods and/or services rendered by unaffiliated third parties on a competitive basis;

(xv) costs of Landlord's charitable or political contributions, or of fine art maintained at the Project;

(xvi) costs in connection with services (including electricity), items or other benefits of a type which are not standard for the Project and which are not available to Tenant without specific charges therefor, but which are provided to another tenant or occupant of the Project, whether or not such other tenant or occupant is specifically charged therefor by Landlord;

(xvii) costs incurred in the sale or refinancing of the Project;

(xviii) subject to Section 9(a), net income taxes of Landlord or the owner of any interest in the Project, franchise, capital stock, gift, estate or inheritance taxes or any federal, state or local documentary taxes imposed against the Project or any portion thereof or interest therein; and

(xix) any expenses otherwise includable within Operating Expenses to the extent actually reimbursed by persons other than tenants of the Project under leases for space in the Project.

(b) Within 120 days after the end of each calendar year (or such longer period as may be reasonably required), Landlord shall furnish to Tenant a statement (an "**Annual Statement**") showing in reasonable detail: (a) the total and Tenant's Share of actual Operating Expenses for the previous calendar year, and (b) the total of Tenant's payments in respect of Tenant's Share of Operating Expenses for such year. If Tenant's Share of actual Operating Expenses for such year exceeds Tenant's payments of Tenant's Share of Operating Expenses for such year, then the excess shall be due and payable by Tenant as Rent

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within 30 days after delivery of such Annual Statement to Tenant. If Tenant's payments of Operating Expenses for such year exceed Tenant's Share of actual Operating Expenses for such year, then Landlord shall pay the excess to Tenant within 30 days after delivery of such Annual Statement, except that after the expiration, or earlier termination of the Term or if Tenant is delinquent in its obligation to pay Rent, Landlord shall pay the excess to Tenant after deducting all other amounts due Landlord. Expenses included in Shared Lab Expenses for recovery from Tenant and/or other tenants under Paragraph 46(h)(i) of this Lease shall not also be included in Operating Expenses to the extent that inclusion in Operating Expenses would result in double recovery by Landlord. Costs shall be included in Operating Expenses even if Landlord may later recoup or recover some or all of such costs from third-parties, including without limitation, under insurance policies and indemnity agreements. To the extent that any costs included in Operating Expenses are later recouped or recovered, the net amount of the recoupment or recovery shall be included as a credit to Operating Expenses in the year of actual receipt by Landlord of the recoupment or recovery.

(c) Each Annual Statement shall be final and binding upon Tenant unless Tenant, within 30 days after Tenant's receipt thereof, shall contest any item therein by giving written notice to Landlord, specifying each item contested and the reason therefor. If, during such 30 day period, Tenant reasonably and in good faith questions or contests the accuracy of Landlord's statement of Tenant's Share of Operating Expenses, Landlord will provide such information as Landlord reasonably determines to be responsive to Tenant's questions (the "**Expense Information**"). If Tenant's review of such Expense Information shows that the payments actually made by Tenant with respect to Operating Expenses for the calendar year in question exceeded Tenant's Share of Operating Expenses for such calendar year, Landlord shall at Landlord's option either (i) credit the excess amount to the next succeeding installments of estimated Operating Expenses or (ii) pay the excess to Tenant within 30 days after delivery of such statement, except that after the expiration or earlier termination of this Lease or if Tenant is delinquent in its obligation to pay Rent, Landlord shall pay the excess to Tenant after deducting all other amounts due Landlord. If Tenant's payments with respect to Operating Expenses for such calendar year were less than Tenant's Share of Operating Expenses for the calendar year, Tenant shall pay the deficiency to Landlord within 30 days after delivery of such statement. Operating Expenses for the calendar years in which Tenant's obligation to share therein begins and ends shall be prorated. Notwithstanding anything set forth herein to the contrary, if the Building is not at least 95% occupied on average during any year of the Term, Tenant's Share of Operating Expenses for such year shall be computed as though the Building had been 95% occupied on average during such year, provided, however, that in no event shall such computation under this sentence result in Landlord recovering more than 100% of the actual expenses incurred by Landlord. **"Tenant's Share**" shall be the percentage set forth in the Basic Lease Provisions as Tenant's Share as reasonably adjusted by Landlord. Landlord may equitably increase Tenant's Share (or Tenant's Share of Operating Expenses, as the case may be) for any item of expense or cost reimbursable by Tenant that relates to a repair, replacement, or service that benefits only the Premises or only a portion of the Project that includes the Premises or that varies with occupancy or use. Base Rent, Additional Rent (including Tenant's Share of Operating Expenses) and other amounts payable by Tenant to Landlord hereunder are collectively referred to herein as "**Rent**."

(d) In the event Tenant reviews the Expense Information, any and all materials reviewed by or at Tenant's request shall be deemed "**Confidential Materials**," and Tenant shall maintain all Confidential Materials in the strictest confidence and not disclose any portion thereof to any third party without the express written consent of Landlord. Tenant shall (i) use the Confidential Materials solely for the purpose of reviewing the accuracy of the Annual Statement, and for no other purpose and (ii) with respect to its employees, officers and directors, (A) allow the same to review the Confidential Materials strictly on a "need to know" basis and (B) cause the same to abide by the terms of this Section, to the same extent that Tenant is obligated to abide hereby, and shall be liable to Landlord for any failure herein or breach hereof including any accidental or non-intentional failure or breach.

6. **Security Deposit**. Tenant shall deposit with Landlord, upon delivery of an executed copy of this Lease to Landlord, a security deposit (the "**Security Deposit**") for the performance of all of Tenant's


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obligations hereunder in the amount set forth in the Basic Lease Provisions, which Security Deposit shall be in the form of an unconditional and irrevocable letter of credit (the "**Letter of Credit**"): (i) in form and substance satisfactory to Landlord, (ii) naming Landlord as beneficiary, (iii) expressly allowing Landlord to draw upon it at any time from time to time by delivering to the issuer notice that Landlord is entitled to draw thereunder, (iv) issued by an FDIC-insured financial institution satisfactory to Landlord, and (v) redeemable by presentation of a sight draft in the state of Landlord's choice. If Tenant does not provide Landlord with a substitute Letter of Credit complying with all of the requirements hereof at least 30 days before the stated expiration date of any then current Letter of Credit, Landlord shall have the right to draw the full amount of the current Letter of Credit and hold the funds drawn in cash without obligation for interest thereon as the Security Deposit. The Security Deposit shall be held by Landlord as security for the performance of Tenant's obligations under this Lease. The Security Deposit is not an advance rental deposit or a measure of Landlord's damages in case of Tenant's default. Upon each occurrence of a Default (as defined in Section 20), Landlord may use all or any part of the Security Deposit to pay delinquent payments due under this Lease, and the cost of any damage, injury, expense or liability caused by such Default, without prejudice to any other remedy provided herein or provided by law. Upon any such use of all or any portion of the Security Deposit, Tenant shall pay Landlord on demand the amount that will restore the Security Deposit to the amount set forth in the Basic Lease Provisions or Tenant shall promptly provide Landlord with an amendment to the Letter of Credit reflecting and ratifying Landlord's draw thereunder and Tenant's subsequent restoration of the Letter of Credit to the original amount. Tenant hereby waives the provisions of any law, now or hereafter in force, which provide that Landlord may claim from a security deposit only those sums reasonably necessary to remedy defaults in the payment of Rent, to repair damage caused by Tenant or to clean the Premises, it being agreed that Landlord may, in addition, claim those sums reasonably necessary to compensate Landlord for any other loss or damage, foreseeable or unforeseeable, caused by the act or omission of Tenant or any officer, employee, agent or invitee of Tenant. Upon bankruptcy or other debtor-creditor proceedings against Tenant, the Security Deposit shall be deemed to be applied first to the payment of Rent and other charges due Landlord for periods prior to the filing of such proceedings. Upon any such use of all or any portion of the Security Deposit, Tenant shall, within 5 days after demand from Landlord, restore the Security Deposit to its original amount. If Tenant shall fully perform every provision of this Lease to be performed by Tenant, the Security Deposit, or any balance thereof (i.e., after deducting therefrom all amounts to which Landlord is entitled under the provisions of this Lease), shall be returned to Tenant (or, at Landlord's option, to the last assignee of Tenant's interest hereunder) within 90 days after the expiration or earlier termination of this Lease. In the event the issuer of the Letter of Credit experiences a downgrade of its debt rating below "A-" by Standard & Poors Rating Services, a division of The McGraw-Hill Companies, Inc. ("**S&P**") or the equivalent rating by Moody's Investor Services, Inc. ("**Moody's**") at any time during which Tenant is obligated to provide the Letter of Credit, Landlord shall be entitled, in Landlord's sole discretion, to receive a replacement Letter of Credit from an issuing bank with a debt rating of "AA" by S&P or the equivalent rating by Moody's or better).

If Landlord transfers its interest in the Project or this Lease, Landlord shall either (a) transfer any Security Deposit then held by Landlord to a person or entity assuming Landlord's obligations under this Section 6, or (b) return to Tenant any Security Deposit then held by Landlord and remaining after the deductions permitted herein. Upon such transfer to such transferee or the return of the Security Deposit to Tenant, Landlord shall have no further obligation with respect to the Security Deposit, and Tenant's right to the return of the Security Deposit shall apply solely against Landlord's transferee. The Security Deposit is not an advance rental deposit or a measure of Landlord's damages in case of Tenant's default. Landlord's obligation respecting the Security Deposit is that of a debtor, not a trustee, and no interest shall accrue thereon.

Tenant covenants that it will not assign or encumber, or attempt to assign or encumber, the Security Deposit. Neither Landlord, nor its successors or assigns, shall be bound by any such assignment, encumbrance, attempted assignment or attempted encumbrance. It is agreed that the provisions of this Section shall apply to every sale, transfer or assignment made of the security to a new Landlord. Tenant

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shall pay and be liable for any and all fees arising from any transfer of the Letter of Credit upon transfers of ownership of the Project, Building or Premises.

7. **Use**.

(a) Tenant shall have 24 hours per day, 7 days per week access to its Premises, the Building and the parking area, subject to restricted access due to Force Majeure, necessary for repairs or emergency conditions, or arising due to Legal Requirements. Tenant shall use the Premises solely for the Permitted Use set forth in the Basic Lease Provisions, and in compliance with all present and future laws, orders, judgments, ordinances, regulations, codes, directives, permits, licenses, covenants and restrictions of all state, federal, municipal and local governments, departments, commissions and boards and any direction of any public officer pursuant to law, and all orders, rules and regulations of the New York Board of Fire Underwriters, Insurance Services Office, or any similar body, in each case, applicable to the Premises and the use and occupancy thereof, including, without limitation, the Americans With Disabilities Act, 42 U.S.C. § 12101, et seq. (together with the regulations promulgated pursuant thereto, "**ADA**") (collectively, "**Legal Requirements**" and each, a "**Legal Requirement**"). Tenant shall not occupy, use or operate the Premises, or allow the Premises or any part thereof to be occupied, used or operated for any unlawful purpose or in violation of any certificate of occupancy affecting the Building and/or the Project or for any use that may constitute a nuisance, public or private. Tenant shall not permit any part of the Premises to be used as a "place of public accommodation", as defined in the ADA or any similar legal requirement. Tenant will use the Premises in a careful, safe and proper manner and will not commit or permit waste, overload the floor or structure of the Premises, subject the Premises to any use that would damage the Premises or obstruct or interfere with the rights of Landlord or other tenants or occupants of the Project, including, without limitation, conducting or giving notice of any auction, liquidation, or going out of business sale on the Premises.

(b) Immediately upon its discovery of any violation or breach of any Legal Requirement, this Lease or any Superior Instrument, Tenant shall take all necessary steps, legal and equitable, to compel the cure of such violation or breach, including, if necessary, the removal from the Premises of any subtenants or licensees using a portion of the Premises.

(c) Tenant will not use or permit the Premises to be used for any purpose or in any manner that is prohibited under the Ground Lease (as defined in Section 27) or that would void Tenant's, Landlord's or the Condominium Board's insurance, increase the insurance risk, or cause the disallowance of any sprinkler or other credits.

(d) Tenant shall reimburse Landlord or the Condominium Board, as applicable, promptly upon demand for any additional premium charged for any such insurance policy by reason of Tenant's failure to comply with the provisions of this Section 7 or otherwise caused by Tenant's use and/or occupancy of the Premises.

(e) Tenant shall cause any equipment or machinery to be installed in the Premises so as to reasonably prevent odors, sounds or vibrations from the Premises from extending into Common Areas, or other space in the Project. Tenant shall not place any machinery or equipment weighing 500 pounds or more in or upon the Premises or transport or move such items through the Common Areas of the Project or in the Project elevators without the prior written consent of Landlord. Landlord reserves the right to prescribe the weight and position of all safes, files, paper and book storage facilities, business machines and other heavy equipment and installations.

(f) Tenant shall not, without the prior written consent of Landlord, use the Premises in any manner which will require ventilation, air exchange, heating, gas, steam, electricity or water beyond the existing capacity of the Project as proportionately allocated to the Premises based upon Tenant's Share as usually furnished for the Permitted Use, nor shall Tenant use the Premises in a manner that results in

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transmissions from the Premises at a frequency which interferes with any other tenant's use of any portion of the Building or the Project other than the Premises.

(g) Tenant shall not use the Premises or any part thereof, or permit the Premises or any part thereof to be used for the preparation, dispensing, consumption or sale of food or beverages in any manner whatsoever, whether for "on" or "off" premises consumption (other than the consumption of food by employees and invitees of Tenant).

Landlord shall, as an Operating Expense (to the extent such Legal Requirement is generally applicable to similar buildings in the area in which the Project is located) or at Tenant's expense (to the extent such Legal Requirement is applicable solely by reason of Tenant's, as compared to other tenants of the Project, particular use of the Premises) make any alterations or modifications to the Common Areas or the exterior of the Building that are required by Legal Requirements, including the ADA. Tenant, at its sole expense, shall make any alterations or modifications to the interior of the Premises that are required by Legal Requirements (including, without limitation, compliance of the Premises with the ADA). Notwithstanding any other provision herein to the contrary, Tenant shall be responsible for any and all demands, claims, liabilities, losses, costs, expenses, actions, causes of action, damages or judgments, and all reasonable expenses incurred in investigating or resisting the same (including, without limitation, reasonable attorneys' fees, charges and disbursements and costs of suit) (collectively, "**Claims**") arising out of or in connection with Legal Requirements, and Tenant shall indemnify, defend, hold and save Landlord harmless from and against any and all Claims arising out of or in connection with any failure of the Premises to comply with any Legal Requirement.

8. **Holding Over**. If, with Landlord's express written consent, Tenant retains possession of the Premises after the expiration or earlier termination of the Term, (i) unless otherwise agreed in such written consent, such possession shall be subject to immediate termination by Landlord at any time, or shall become a tenant at sufferance upon the terms described hereinbelow, (ii) all of the other terms and provisions of this Lease (including, without limitation, the adjustment of Base Rent pursuant to Section 4 hereof) shall remain in full force and effect (excluding any expansion or renewal option or other similar right or option) during such holdover period, (iii) Tenant shall continue to pay Base Rent in the amount payable upon the date of the expiration or earlier termination of this Lease or such other amount as Landlord may indicate, in Landlord's sole and absolute discretion, in such written consent, and (iv) all other payments shall continue under the terms of this Lease. The parties recognize and agree that the damage to Landlord resulting from any failure by Tenant to timely surrender possession of the Premises as aforesaid will be extremely substantial, will exceed the amount of the monthly installments of the Base Rent and Rental theretofore payable hereunder, and will be impossible to accurately measure. Tenant therefore agrees that if Tenant remains in possession of the Premises after the expiration or earlier termination of the Term without the express written consent of Landlord, then, in addition to any other rights or remedies Landlord may have hereunder or at law, and without in any manner limiting Landlord's right to demonstrate and collect any damages suffered by Landlord and arising from Tenant's failure to surrender the Premises as provided herein, (A) Tenant shall become a tenant at sufferance upon the terms of this Lease except that the monthly rental shall be equal to 200% of the greater of the Rent in effect during the last 30 days of the Term and the then fair market rental value for the Premises, and (B) Tenant shall be responsible for all damages suffered by Landlord resulting from or occasioned by Tenant's holding over, including consequential damages. No holding over by Tenant, whether with or without consent of Landlord, shall operate to extend this Lease except as otherwise expressly provided, and this Section 8 shall not be construed as consent for Tenant to retain possession of the Premises. Acceptance by Landlord of Rent after the expiration of the Term or earlier termination of this Lease shall not result in a renewal or reinstatement of this Lease. The acceptance by Landlord of any such use and occupancy payment by Tenant pursuant to this Section 8 shall in no event preclude Landlord from commencing and prosecuting a holdover or summary eviction proceeding, and the provisions of this Section 8 shall be deemed to be an "agreement expressly providing otherwise" within the meaning of Section 232-c of the Real Property Law of the State of New York and any successor or similar law of like import. Nothing contained in this Section

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8 shall (i) imply any right of Tenant to remain in the Premises after the expiration of the Term without the execution of a new lease, (ii) imply any obligation of Landlord to grant a new lease or (iii) be construed to limit any right or remedy that Landlord has against Tenant as a holdover tenant or trespasser and no acceptance by Landlord of payments from Tenant after the Expiration Date shall be deemed to be other than on account of the amount to be paid by Tenant in accordance with the provisions of this Section 8. The provisions of this Section 8 shall survive the expiration or earlier termination of this Lease.

9. **Taxes**.

(a) Landlord shall pay, as part of Operating Expenses, all taxes, levies, fees, assessments and governmental charges of any kind, existing as of the Commencement Date or thereafter enacted (collectively referred to as "**Taxes**"), imposed by any federal, state, regional, municipal, local or other governmental authority or agency, including, without limitation, quasi-public agencies (collectively, "**Governmental Authority**") during the Term, including, without limitation, all Taxes: (i) imposed on or measured by or based, in whole or in part, on rent payable to (or gross receipts received by) Landlord under this Lease and/or from the rental by Landlord of the Project or any portion thereof, or (ii) based on the square footage, assessed value or other measure or evaluation of any kind of the Premises or the Project, or (iii) assessed or imposed by or on the operation or maintenance of any portion of the Premises or the Project, including parking, or (iv) assessed or imposed by, or at the direction of, or resulting from Legal Requirements, or interpretations thereof, promulgated by any Governmental Authority, or (v) imposed as a license or other fee, charge, tax, or assessment on Landlord's business or occupation of leasing space in the Project, or (vi) any taxes or assessments levied after the date of this Lease in whole or in part for public benefits to the Project, including without limitation any Business Improvement District ("BID") tax increment financing ("TIF") or Commercial Rent Occupancy Tax ("CROT") taxes and assessments payable by Landlord and any and all other governmental and quasi-governmental assessments) without taking into account any discount that Landlord may receive by virtue of any early payment of Taxes. Landlord may contest by appropriate legal proceedings the amount, validity, or application of any Taxes or liens securing Taxes. Taxes shall include all payments in lieu of taxes ("PILOT") and other impositions and costs for which Landlord is responsible under any Superior Lease (as defined in Section 27) including without limitation under Articles 3 and 4 of the Ground Lease or under the IDA Lease Documents (as defined in Section 27). Taxes shall not take into account any exemption which Landlord is entitled to under any governmental incentive program for investment and/or employment creation where Landlord is the induced party including without limitation the Industrial and Commercial Incentive Program ("**ICIP**") or under the IDA Lease Documents or Ground Lease or any other governmental incentive program. Taxes shall not include any net income taxes, franchise, capital stock, gift, estate or inheritance taxes imposed on Landlord or the owner of any interest in the Project or any federal, state or local documentary taxes imposed against the Project or any portion thereof or interest therein, except to the extent the same, however denominated, are imposed in substitution for any Taxes payable hereunder as a result of any change in the manner of taxation of the ownership or operation of real estate in which case the same shall be deemed to be included within the definition of the term "Taxes." If any such Tax is levied or assessed directly against Tenant, then Tenant shall be responsible for and shall pay the same at such times and in such manner as the taxing authority shall require. Tenant shall pay, prior to delinquency, any and all Taxes levied or assessed against any personal property or trade fixtures placed by Tenant in the Premises, whether levied or assessed against Landlord or Tenant. If any Taxes on Tenant's personal property or trade fixtures are levied against Landlord or Landlord's property, or if the assessed valuation of the Project is increased by a value attributable to improvements in or alterations to the Premises, whether owned by Landlord or Tenant and whether or not affixed to the real property so as to become a part thereof, higher than the base valuation on which Landlord from time-to-time allocates Taxes to all tenants in the Project, Landlord shall have the right, but not the obligation, to pay such Taxes. Landlord's determination of any excess assessed valuation shall be binding and conclusive, absent manifest error. The amount of any such payment by Landlord shall constitute Additional Rent due from Tenant to Landlord immediately upon demand. With respect to any tax year, all reasonable and customary expenses, including attorneys' fees and disbursements, experts' and other witnesses' fees, incurred in contesting the validity or amount of any Taxes or in obtaining a refund of Taxes

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shall be considered as part of the Taxes for such tax year. Special assessments, if any, shall be deemed paid in the maximum number of installments allowed by the Governmental Authority having jurisdiction thereover, notwithstanding that Landlord may elect to pay the same on a different schedule. If at any time the methods of taxation prevailing as of the date hereof shall be altered so that in lieu of or as an express substitute for the whole or any part of the Taxes, assessments, rents, rates, charges, levies or impositions now assessed, levied or imposed upon all or any part of the Project or any part thereof, there shall be assessed, levied or imposed (1) a tax, assessment, levy, imposition or charge based on the income or rents received therefrom, whether or not wholly or partially as a capital levy or otherwise, or (2) a tax, assessment, levy, imposition or charge measured by or based in whole or in part upon all or any part of the Project, or (3) a license fee measured by the rents, or (4) any other tax, assessment, levy, imposition, charge or license fee with respect to the Project, or any part thereof, however described or imposed, then all such taxes, assessments, levies, impositions, charges or license fees or the part thereof so measured or based shall be deemed to be Taxes.

(b) Tenant hereby covenants and agrees to (i) pay any and all CROT taxes and assessments payable by Landlord with respect to any rent due hereunder, (ii) pay any and all New York City and New York state transfer taxes, sales taxes and any and all other taxes payable by or on behalf of Tenant, as the same shall become due or payable, and (iii) file all tax returns required to be filed in connection with the foregoing.

10. **Parking**. Subject to all matters of record, Force Majeure, a Taking (as defined in Section 19 below), the terms and conditions of this Lease and the exercise by Landlord of its rights hereunder, Tenant shall have the right, in common with other tenants of the Project pro rata in accordance with the rentable area of the Premises and the rentable areas of the Project occupied by such other tenants, and subject to the payment by Tenant of Landlord's customary parking fees and charges, the payment of which constitutes Rent hereunder, to park in those areas designated for non-reserved parking, subject in each case to Landlord's rules and regulations and subject to the rights of ingress and egress of other tenants and their employees, agents and invitees to other areas of the Project, provided, however, that Landlord shall have the right, without notice in an emergency and otherwise for any reason upon not less than five (5) days' written notice, to relocate all or part of the non-reserved or reserved parking to other locations in the parking areas of the Project, and/or to suspend or terminate the right to use any or all the parking spaces. Landlord may allocate parking spaces among Tenant and other tenants in the Project pro rata as described above if Landlord determines that such parking facilities are becoming crowded. Landlord shall not be responsible for enforcing Tenant's parking rights against any third parties, including other tenants of the Project. If applicable, Tenant shall comply with the Project's transportation plans to be created by Landlord under the guidelines set forth by the City of New York.

11. **Utilities; Services; Refuse and Trash.**

(a) **General**.Landlord shall provide, subject to the terms of this Section 11, water, electricity, heat, steam, air conditioning, ventilating, light, power, telephone, sewer, and fire sprinklers to the extent the Project is plumbed for such services (collectively, "**Utilities**"). Landlord shall pay for (and shall not include in Operating Expenses) all Utilities used on the Premises, all maintenance charges for Utilities, and any storm sewer charges or other similar charges for Utilities imposed by any Governmental Authority or Utility provider, and any taxes, penalties, surcharges or similar charges thereon. Tenant acknowledges that Landlord is not the generator of Utilities and that Landlord's obligation to deliver Utilities to the Premises pursuant to this Lease consequently is subject to the provision of electrical energy and water service to the Project, as applicable, by the respective utility company responsible for delivering same to the Project. Landlord shall have no liability for the availability, capacity, quality, continuity or character of service of Utilities, and no eviction or constructive eviction of Tenant, termination of this Lease or abatement of Rent shall arise due to, nor shall Landlord have any liability due to any loss, cost, claim, damage or expense arising from the availability, capacity, quality, continuity or character of service of Utilities or any interruption, deterioration or removal of any of the foregoing, except as caused by Landlord's willful misconduct. Tenant

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acknowledges that the capacity of such utilities available to the Premises is part of the overall capacity of such utilities available to the Project for its use on a non-exclusive basis in common with all other tenants at the Project. Tenant agrees to limit use of water and sewer with respect to Common Areas to normal restroom use.

(b) **Special Provisions Regarding Electricity**.

(i) In the event that any tax shall be imposed upon Landlord's receipts from the sale, use or resale of electrical energy or any other utility service to Tenant, the pro rata share allocable to such service received by Tenant shall be passed onto, included in the bill of, and paid by Tenant if and to the extent not prohibited by applicable Legal Requirements.

(ii) Tenant shall enter into such modifications of this Lease as Landlord may from time to time reasonably request in connection with any requirement of the New York State Public Service Commission, or any successor thereto, or any requirement of law pertaining to the supplying of electrical service or the charges therefor under any provision of the Lease. If because of any such requirement, any provision of this Section cannot be given full effect, whether with respect to any past period or any future period, the parties shall enter into such modifications of the Lease setting forth substitute provisions, consistent with such requirements, which, to the maximum extent possible, achieve the intended purposes of the provisions of this Section which cannot be given full effect.

(c) **Refuse and Trash**. Landlord shall provide refuse and trash collection and janitorial services at the Building for ordinary office refuse and rubbish and cleaning, and the cost of such services shall be included in Operating Expenses. To the extent that the refuse and trash and/or cleaning needs generated by Tenant exceeds the refuse and trash and/or cleaning needs customarily generated by other tenants of the Building, Tenant shall pay to Landlord the costs that Landlord reasonably incurs for such removal and/or cleaning, within 10 days after rendition of bills therefor, as Additional Rent. In respect of refuse and trash other than ordinary office refuse and rubbish (such as bio/medical waste, "wet trash" and construction debris, and cleaning with respect thereto), at Landlord's option (i) Landlord shall provide collection and janitorial services for such refuse and trash, and Tenant shall pay to Landlord an amount equal to 105% of the Landlord's cost therefor, within 10 days after rendition of bills therefor, as Additional Rent, or (ii) Tenant shall contract directly with the third-party service provider (acceptable to Landlord in its sole discretion) for the provision of such services and, in such case, Tenant shall pay such service provider directly, prior to delinquency. In all cases, Tenant shall store and stage all its waste, refuse, trash and recyclables within its Premises or in such enclosure areas as may be designated by Landlord and shall keep the Premises in a neat and clean condition. Tenant shall not dispose of any refuse in the Common Areas, and if Tenant does so, Tenant shall be liable for Landlord's reasonable charge for such removal. Tenant shall comply with all Legal Requirements, whether imposed on Landlord or Tenant, regarding the collection, sorting, separation and recycling of waste products, garbage, refuse and trash in the Premises and cleaning the Premises. Upon request by Landlord, Tenant shall sort and separate into categories designated by Landlord and shall place in separate receptacles (as may be designated by Landlord) all waste products, garbage, refuse and trash in the Premises.

(d) **Loading Dock and Freight Elevator**. Landlord shall provide, on a non-exclusive, first-come, first-served basis, freight elevator service to the floor on which the Premises are located and access to a loading dock adjacent to such freight elevator for Tenant's deliveries in and out of the Premises in connection with the Permitted Use. Tenant's use of the freight elevator and the loading dock shall be subject to the Superior Instruments, the Rules and Regulations, Landlord's security requirements for the Building and/or the Project, and the terms of this Lease. Landlord shall have the right to change the operation or manner of operation of any of the elevators in the Building and/or to discontinue temporarily the use of any one or more cars in any of the elevator banks provided that at all times there will be at least one passenger elevator serving the Premises at all times (subject to such passenger elevator not being in service due to repairs or alterations being made thereto).

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12. **Alterations and Tenant's Property**.

(a) Any alterations, additions, or improvements made to the Premises by or on behalf of Tenant, including additional locks or bolts of any kind or nature upon any doors or windows in the Premises, but excluding installation, removal or realignment of furniture systems (other than removal of furniture systems owned or paid for by Landlord) not involving any modifications to the structure of the Building or connections (other than by ordinary plugs or jacks) to Building Systems (as defined in Section 13) ("**Alterations**") shall be subject to Landlord's prior written consent, which may be given or withheld in Landlord's sole discretion if any such Alteration affects the structure of the Building or Building Systems, or if Landlord deems that such proposed Alteration will adversely affect Landlord's ability to re-lease the Premises, but which shall otherwise not be unreasonably withheld or delayed. If Landlord approves any Alterations, Landlord may impose such conditions on Tenant in connection with the commencement, performance and completion of such Alterations as Landlord may deem appropriate in Landlord's reasonable discretion. Any request for approval shall be in writing, delivered not less than 15 business days in advance of any proposed construction, and accompanied by plans, specifications, bid proposals, work contracts and such other information concerning the nature and cost of the Alterations as may be reasonably requested by Landlord, including the identities and mailing addresses of all persons performing work or supplying materials. Landlord's right to review plans and specifications and to monitor construction shall be solely for its own benefit, and Landlord shall have no duty to ensure that such plans and specifications or construction comply with applicable Legal Requirements. Tenant shall cause, at its sole cost and expense, all Alterations to comply with any applicable insurance requirements and with Legal Requirements and shall implement at its sole cost and expense any alteration or modification required by Legal Requirements as a result of any Alterations. Tenant shall pay to Landlord, as Additional Rent, on demand an amount equal to 10% of all charges incurred by Tenant or its contractors or agents in connection with any Alteration to cover Landlord's overhead and expenses for plan review, coordination, scheduling and supervision. Before Tenant begins any Alteration, Tenant shall post on and about the Premises notices of non-responsibility pursuant to applicable law. Tenant shall reimburse Landlord and the Condominium Board for, and indemnify and hold Landlord and the Condominium Board harmless from, any expense incurred by Landlord and/or the Condominium Board, as applicable, by reason of faulty work done by Tenant or its contractors, delays caused by such work, or inadequate cleanup.

(b) In the event Tenant installs a security systems or additional locks, Tenant shall supply Landlord with the necessary card(s) or key(s) and security codes to permit entry in the event of an emergency endangering life or property.

(c) Tenant shall furnish security or make other arrangements satisfactory to Landlord to assure payment for the completion of all Alterations work free and clear of liens, and shall provide (and cause each contractor or subcontractor to provide) certificates of insurance for workers' compensation and other coverage in amounts and from an insurance company satisfactory to Landlord protecting Landlord and the Condominium Board against liability for personal injury or property damage during construction. Upon completion of any Alterations, Tenant shall deliver to Landlord: (i) sworn statements setting forth the names of all contractors and subcontractors who did the work and final lien waivers from all such contractors and subcontractors; and (ii) "as built" plans for any such Alteration.

(d) Other than (i) the items, if any, listed on **Exhibit F** attached hereto, (ii) any items agreed by Landlord in writing to be included on **Exhibit F** in the future, and (iii) any trade fixtures, machinery, equipment and other personal property which may be removed without damage to the Premises, which damage shall be repaired (including capping or terminating utility hook-ups behind walls) by Tenant prior to the expiration or earlier termination of the Term (collectively, "**Tenant's Property**"), all property of any kind paid for by or on behalf of Landlord, all Alterations, real property fixtures, built-in machinery and equipment, built-in casework and cabinets and other similar additions and improvements built into the Premises so as to become an integral part of the Premises such as fume hoods which penetrate the roof or plenum area, built-in cold rooms, built-in warm rooms, walk-in cold rooms, walk-in warm rooms, deionized

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water systems, glass washing equipment, autoclaves, chillers, built-in plumbing, electrical and mechanical equipment and systems, and any power generator and transfer switch (collectively, "**Installations**") shall be and shall remain the property of Landlord during the Term and following the expiration or earlier termination of the Term, shall not be removed by Tenant at any time during the Term and shall remain upon and be surrendered with the Premises as a part thereof in accordance with Section 28 following the expiration or earlier termination of this Lease; provided, however, that Landlord shall, at the time its approval of such Installation is requested notify Tenant if it has elected to cause Tenant to remove such Installation upon the expiration or earlier termination of this Lease. If Landlord so elects, Tenant shall remove such Installation upon the expiration or earlier termination of this Lease and restore any damage caused by or occasioned as a result of such removal, including, when removing any of Tenant's Property which was plumbed, wired or otherwise connected to any of the Building Systems, capping off all such connections behind the walls of the Premises and repairing any holes. In the event Tenant fails to remove any such Installation in accordance with the foregoing sentence, Landlord may do so at Tenant's expense. During any such restoration period that extends beyond the expiration or earlier termination of the Term, Tenant shall pay Rent to Landlord as provided herein as if said space were otherwise occupied by Tenant.

(e) No Alteration shall (i) affect the exterior walls, fascia or fenestration of the Building or the demising walls of the Premises, (ii) affect any part of the Project other than the Premises or require any alterations, installations, improvements, additions or other physical changes to be performed in or made to any portion of the Project other than the Premises, (iii) adversely affect any service required to be furnished by Landlord to Tenant or to any other tenant or occupant of the Project, (iv) adversely affect the functioning of any Building System, and (v) affect or require an amendment to (other than to confirm completion of the Alteration) the Certificate of Occupancy for the Premises or for any other part of the Project.

(f) Tenant covenants and agrees that no security agreement, lien, lease, conditional sales agreement, chattel mortgage or other title retention or instrument of similar import (a "Security Agreement") shall be placed upon any improvement made by Tenant which is affixed to the Premises. In the event that any of Tenant's Property are purchased or acquired by Tenant subject to a Security Agreement, Tenant agrees that no Security Agreement or Uniform Commercial Code filing statement shall be permitted to be filed against the Premises, the Building or any other part of the Project. If any such lien, based on a Security Agreement or Uniform Commercial Code filing statement, is filed against the Premises or any other part of the Project, Tenant shall, within 20 business days following notice thereof from Landlord, cause such lien or notice to be removed or discharged at Tenant's cost and expense.

(g) Tenant shall use its commercially reasonable and diligent efforts to perform such Alterations and other work at such times and in such manner as shall minimize any interference, disruption or disturbance from such performance.

(h) Tenant shall not, at any time prior to or during the Term, directly or indirectly employ, or permit the employment of, any contractor, mechanic or laborer in the Premises, in connection with any Alteration, if such employment would interfere or cause any conflict with other contractors, mechanics or laborers engaged in the construction, maintenance or operation of the Project by Landlord, Tenant or others. In the event of any such interference or conflict, Tenant, upon demand of Landlord, shall cause all contractors, mechanics or laborers causing such interference or conflict to leave the Building immediately.

13. **Landlord's Repairs**. Landlord, as an Operating Expense, shall maintain all of the structural and Building Systems (as defined below) in good repair, reasonable wear and tear and uninsured losses and damages caused by Tenant, or by any of Tenant's agents, servants, employees, invitees and contractors (collectively, "**Tenant Parties**") excluded. Losses and damages caused by Tenant or any Tenant Party shall be repaired by Landlord at Tenant's sole cost and expense. Landlord reserves the right to stop Building Systems services when necessary (i) by reason of accident or emergency, or (ii) for planned repairs, alterations or improvements, which are, in the judgment of Landlord, desirable or necessary to be made, until said repairs, alterations or improvements shall have been completed. Landlord shall have no

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responsibility or liability for failure to supply Building Systems services during any such period of interruption; provided, however, that Landlord shall, except in case of emergency, make a commercially reasonable effort to give Tenant 24 hours advance notice of any planned stoppage of Building Systems services for routine maintenance, repairs, alterations or improvements. Tenant shall promptly give Landlord written notice of any repair required to be effected by Landlord pursuant to this Section 13, after which Landlord shall have a reasonable opportunity to effect such repair. Landlord shall not be liable for any failure to make any repairs or to perform any maintenance unless such failure shall persist for an unreasonable time after Tenant's written notice of the need for such repairs or maintenance. Tenant waives its rights under any state or local law to terminate this Lease or to make such repairs at Landlord's expense and agrees that the parties' respective rights with respect to such matters shall be solely as set forth herein. Repairs required as the result of fire, earthquake, flood, vandalism, war, or similar cause of damage or destruction shall be controlled by Section 18. As used herein, the term "**Building Systems**" shall mean, collectively, the HVAC, plumbing, fire sprinkler, elevators and all other building systems located outside of the Premises and serving the Premises and other portions of the Project,

If at any time any windows of the Premises are temporarily closed or darkened due to any Legal Requirement or by reason of repairs, maintenance, alterations, or improvements to the Building, or any scaffolding or "sidewalk bridge" is erected in front of the Building due to any Legal Requirement or by reason of any repairs, maintenance, alterations to the Building or any property adjacent to the Building, Landlord shall not be liable for any damage Tenant may sustain thereby and Tenant shall not be entitled to any compensation therefor, nor abatement or diminution of Base Rent or any other amount due under this Lease, nor shall the same release Tenant from its obligations hereunder, in whole or in part, by reason of inconvenience or annoyance to Tenant, or injury to or interruption of Tenant's business, or otherwise, nor impose any liability upon Landlord or its agents.

14. **Tenant's Repairs**. Subject to Section 13 hereof, Tenant, at its expense, shall repair, replace and maintain in good condition all portions of the Premises, including, without limitation, entries, doors, ceilings, interior windows, interior walls, and the interior side of demising walls. Such repair and replacement may include capital expenditures and repairs whose benefit may extend beyond the Term. Should Tenant fail to make any such repair or replacement or fail to maintain the Premises, Landlord shall give Tenant notice of such failure. If Tenant fails to commence cure of such failure within 10 days of Landlord's notice, and thereafter diligently prosecute such cure to completion, Landlord may perform such work and shall be reimbursed by Tenant within 10 days after demand therefor; provided, however, that if such failure by Tenant creates or could create an emergency, Landlord may immediately commence cure of such failure and shall thereafter be entitled to recover the costs of such cure from Tenant. Subject to Sections 17 and 18, Tenant shall bear the full uninsured cost of any repair or replacement to any part of the Project that results from damage caused by Tenant or any Tenant Party and any repair that benefits only the Premises. Tenant shall not clean nor require, permit, suffer or allow any window in the Premises to be cleaned from the outside in violation of Section 202 of New York State Labor Law or any other applicable law, or of the Rules of the Board of Standards and Appeals, or of any other Board or body having or asserting jurisdiction.

15. **Mechanic's Liens**. Tenant shall discharge, by bond or otherwise, any mechanic's lien filed against the Premises or against the Project for work claimed to have been done for, or materials claimed to have been furnished to, Tenant (other than for Landlord's Work) within 10 days after the filing thereof, at Tenant's sole cost and shall otherwise keep the Premises and the Project free from any liens arising out of work performed for, materials furnished to, or obligations incurred by Tenant. Should Tenant fail to discharge any lien described herein, Landlord shall have the right, but not the obligation, to pay such claim or post a bond or otherwise provide security to eliminate the lien as a claim against title to the Project and the cost thereof shall be immediately due from Tenant as Additional Rent. If Tenant shall lease or finance the acquisition of office equipment, furnishings, or other personal property of a removable nature utilized by Tenant in the operation of Tenant's business, Tenant covenants that any Security Agreement, and any Uniform Commercial Code Financing Statement filed as a matter of public record by any lessor or

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creditor of Tenant, shall upon its face or by exhibit thereto indicate that such Security Agreement or Financing Statement is applicable only to removable personal property of Tenant located within the Premises. Tenant shall cause to be inserted in any such Security Agreement the following provision: "Notwithstanding anything to the contrary contained herein, this lease, chattel mortgage, conditional sales agreement, title retention agreement or security agreement shall not create or be filed as a lien against the land, building and improvements comprising the real property in which the goods, machinery, equipment, appliances or other personal property covered hereby are to be located or installed"; and, in no event shall the address of the Project be furnished on any such Financing Statement without qualifying language as to applicability of the lien only to removable personal property, located in an identified suite held by Tenant.

16. **Indemnification**. Tenant shall indemnify, defend and hold harmless Landlord and the Condominium Board, the entities (if any) comprising Landlord, each affiliate or subsidiary of Landlord, and its and their partners, members, shareholders, officers, directors, employees and agents, Lessors (including, without limitation, the City and any administrator of the Ground Lease) and Mortgagees (as defined in Section 27) (each individually and collectively the "**Landlord Indemnitees**") from and against any and all Claims against the Landlord Indemnitees of whatever nature arising directly or indirectly from, or out of: (a) any negligence or willful misconduct by, Tenant, its officers, members, managers, directors, partners, contractors, licensees, agents, servants, employees, invitees or visitors, sublessees and assigns (b) any accident, injury, death or damage whatsoever caused to any Person or to the property of any Person occurring within or about the Premises, (c) any accident, injury, death or damage whatsoever caused to any Person or to the property of any Person occurring outside of the Premises but anywhere within or about the Land, where such accident, injury, death or damage is caused (or is claimed to have been caused) by or otherwise involves an act or omission, or the negligence or willful misconduct, of Tenant or Tenant's contractors, licensees, agents, servants, employees, invitees or visitors and (d) any accident, injury, death or damage whatsoever caused to any Person or to the property of any Person occurring within or about the Premises, where such accident, injury, death or damage is caused (or is claimed to have been caused) by or otherwise relates to the use or occupancy of the Premises or a breach or default by Tenant in the performance of any of its obligations hereunder, unless, in each case set forth in clauses (a) through (d), caused solely by the willful misconduct or negligence of Landlord. This indemnity, defense and hold harmless agreement shall include indemnification from and against any and all liability, fines, suits, demands, costs and expenses of any kind or nature (including reasonable attorneys' fees and disbursements) incurred in or in connection with any such claim or proceeding brought thereon, and the defense thereof.

17. **Insurance**.

(a) Landlord shall maintain all risk property and, if applicable, sprinkler damage insurance covering the full replacement cost of the Project or such lesser coverage amount as Landlord may elect provided such coverage amount is not less than 90% of such full replacement cost. Landlord shall further procure and maintain commercial general liability insurance with a single loss limit of not less than $2,000,000 for bodily injury and property damage with respect to the Project. Landlord may, but is not obligated to, maintain such other insurance and additional coverages as it may deem necessary, including, but not limited to, flood, environmental hazard and earthquake, loss or failure of building equipment, errors and omissions, rental loss during the period of repair or rebuilding, workers' compensation insurance and fidelity bonds for employees employed to perform services and insurance for any improvements installed by Tenant or which are in addition to the standard improvements customarily furnished by Landlord without regard to whether or not the same are made a part of the Project. All such insurance, including any deductible associated therewith, shall be included as part of the Operating Expenses. The Project may be included in a blanket policy (in which case the cost of such insurance allocable to the Project will be determined by Landlord and/or the Condominium Board based upon the insurer's cost calculations). Tenant shall also reimburse Landlord for any increased premiums or additional insurance which Landlord reasonably deems necessary as a result of Tenant's use of the Premises. Tenant (and, during the prosecution of any Alterations, its general contractor, contractors and/or subcontractors), at its sole cost

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and expense, shall maintain during the Term: all risk property insurance (including fire, extended coverage, vandalism, boiler and machinery (and artificially generated electrical current), water and sprinkler damage, and off-premises failure of power or other utility services) with 18 months of business interruption and extra expense coverage, covering the full replacement cost of all property and improvements installed or placed in the Premises by Tenant at Tenant's expense (including, without limitation, builder's risk coverage for all Alterations); workers' compensation insurance with no less than the minimum limits required by law; employer's liability insurance with such limits as required by law; comprehensive automobile liability insurance (including automotive liability, including pollution coverage, from loading and unloading) with combined bodily injury and property damage coverage limits, per occurrence, of at least $1,000,000, but only in the event that Tenant owns, leases or rents vehicles for use in or around the Project; and commercial general liability insurance and umbrella liability, in each case, for minimum combined bodily injury and property damage coverage limits totaling $2,000,000 per occurrence and $5,000,000 in the aggregate. The commercial general liability insurance policy shall name (i) Landlord, (ii) its officers, members, shareholders, directors, employees, managers, agents, invitees, contractors, subcontractors, general contractor (or construction manager, as applicable), (iii) Alexandria Real Estate Equities, Inc., (iv) New York City Health and Hospitals Corporation (and any other Ground Landlord (as defined in Section 27) from time to time), (v) the City, (vi) the IDA (as defined in Section 27), (vii) the New York City Economic Development Corporation (and any other Ground Lease (as defined in Section 27) administrator/agent from time to time), and (viii) the Condominium Board (collectively, "**Landlord Parties**"), as additional insureds, the specific entities which are to be named are set forth in **Exhibit J** hereto; insure on an occurrence and not a claims-made basis; be issued by insurance companies which have a rating of not less than policyholder rating of A and financial category rating of at least Class X in "Best's Insurance Guide"; shall not be cancelable for nonpayment of premium unless 30 days prior written notice shall have been given to Landlord and the Condominium Board from the insurer; contain a hostile fire endorsement and a contractual liability endorsement; and provide primary coverage to Landlord and the Condominium Board (any policy issued to Landlord or the Condominium Board providing duplicate or similar coverage shall be deemed excess over Tenant's policies). Copies of such policies (if requested by Landlord or the Condominium Board), or certificates of insurance showing the limits of coverage required hereunder and showing Landlord and the Condominium Board as an additional insured, along with reasonable evidence of the payment of premiums for the applicable period, shall be delivered to Landlord and the Condominium Board by Tenant upon commencement of the Term and prior to or upon each renewal of said insurance. Tenant's policy may be a "blanket policy" with an aggregate per location endorsement which specifically provides that the amount of insurance shall not be prejudiced by other losses covered by the policy. Tenant shall, at least 5 business days prior to the expiration of such policies, furnish Landlord and the Condominium Board with renewal certificates. In addition, upon receipt by Tenant of any notice of cancellation or any other notice from the insurance carrier which may adversely affect the coverage of the insureds under such policy of insurance, Tenant shall promptly deliver to Landlord and the Condominium Board and any other additional insured hereunder a copy of such notice. If at any time Tenant (or its general contractor, contractors and/or subcontractors) shall fail to procure or maintain all insurance required to be carried by Tenant pursuant to this Lease, Landlord or the Condominium Board may procure (but shall have no obligation to procure) such insurance on behalf of Tenant (and its general contractor, contractors and/or subcontractors) and the cost thereof shall be payable by Tenant upon demand. Such insurer(s) shall be selected by Tenant, subject to Landlord's approval, not to be unreasonably withheld, conditioned or delayed.

(b) In each instance where insurance is to name Landlord and the Condominium Board as an additional insured, Tenant shall upon written request of Landlord also designate and furnish certificates so evidencing Landlord and the Condominium Board as additional insured to: (i) any lender of Landlord or the Condominium Board holding a security interest in the Project or any portion thereof, (ii) the landlord under any lease wherein Landlord is tenant of the real property on which the Project is located, if the interest of Landlord is or shall become that of a tenant under a ground or other underlying lease rather than that of a fee owner, and/or (iii) any management company retained by Landlord or the Condominium Board to manage the Project.

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(c) The property insurance obtained by Landlord and Tenant shall include a waiver of subrogation by the insurers and all rights based upon an assignment from its insured, against Landlord or Tenant, and their respective officers, directors, employees, members, managers, shareholders, partners, agents, representatives, servants, guests, invitees, visitors and contractors ("**Related Parties**"), in connection with any loss or damage thereby insured against. The Condominium Board shall also be a Related Party of Landlord hereunder. Neither party nor its respective Related Parties shall be liable to the other for loss or damage caused by any risk insured against under property insurance required to be maintained hereunder, and each party waives any claims against the other party, and its respective Related Parties, for such loss or damage. The failure of a party to insure its property shall not void this waiver. Landlord and its respective Related Parties shall not be liable for, and Tenant hereby waives all claims against such parties for, business interruption and losses occasioned thereby sustained by Tenant or any person claiming through Tenant resulting from any accident or occurrence in or upon the Premises or the Project from any cause whatsoever. If the foregoing waivers shall contravene any law with respect to exculpatory agreements, the liability of Landlord or Tenant shall be deemed not released but shall be secondary to the other's insurer.

(d) Landlord may require insurance policy limits to be raised to conform with requirements of Landlord's lender or the Condominium Board and/or to bring coverage limits to levels then being generally required of new tenants within the Project.

(e) Tenant acknowledges that Landlord shall not carry insurance on, and shall not be responsible for damage to, Tenant's Property or any Alterations, betterments or improvements made by Tenant to the Premises. Tenant agrees that Landlord shall not be required to maintain insurance coverage with respect to the portions of the Premises for which Tenant is required to maintain insurance in accordance with the terms of this Lease.

18. **Restoration**.

(a) If, at any time during the Term, the Project or the Premises are damaged or destroyed by a fire or other insured casualty, Landlord shall notify Tenant within 60 days after discovery of such damage or destruction as to the amount of time Landlord reasonably estimates it will take to restore the Project or the Premises, as applicable (the "**Restoration Period**"). If the Restoration Period is estimated to exceed 12 months from the date that Landlord obtains all required permits to perform the restoration (the "**Maximum Restoration Period**"), Landlord may, in such notice, elect to terminate this Lease as of the date that is 75 days after the date of discovery of such damage or destruction. Unless Landlord so elects to terminate this Lease, Landlord shall, subject to receipt of sufficient insurance proceeds (with any deductible to be treated as a current Operating Expense), promptly restore the Premises (excluding any improvements installed by Tenant or by Landlord and paid for by Tenant unless covered by the insurance Landlord maintains as an Operating Expense hereunder, in which case such improvements shall be included, to the extent of such insurance proceeds, in Landlord's restoration), subject to delays arising from the collection of insurance proceeds, from Force Majeure events or as needed to obtain any license, clearance or other authorization of any kind required to enter into and restore the Premises issued by any Governmental Authority having jurisdiction over the use, storage, handling, treatment, generation, release, disposal, removal or remediation of Hazardous Materials (as defined in Section 30) in, on or about the Premises (collectively referred to herein as "**Hazardous Materials Clearances**"); provided, however, that if repair or restoration of the Premises is not substantially complete as of the end of the Maximum Restoration Period or, if longer, the Restoration Period, Landlord may, in its sole and absolute discretion, elect not to proceed with such repair and restoration, in which event Landlord shall notify Tenant of its decision, and shall be relieved of its obligation to make such repairs or restoration and this Lease shall terminate as of the date that is the later of (i) 10 days after the date of such notice from Landlord, and (ii) the date all required Hazardous Materials Clearances are obtained, but Landlord shall retain any Rent paid and the right to any Rent payable by Tenant prior to such election by Landlord or Tenant.

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(b) Tenant, at its expense, shall promptly perform, subject to delays arising from the collection of insurance proceeds, from Force Majeure (as defined in Section 34) events or from obtaining Hazardous Materials Clearances, all repairs or restoration not required to be done by Landlord and shall promptly re-enter the Premises and commence doing business in accordance with this Lease. Notwithstanding the foregoing, Landlord may terminate this Lease if the Premises are damaged during the last year of the Term and Landlord reasonably estimates that it will take more than 2 months to repair such damage, or if insurance proceeds are not available for such restoration. Rent shall be abated from the date, following the discovery of such damage or destruction, that all required Hazardous Material Clearances are obtained until the repair and restoration of the Premises is substantially completed, in the proportion which the area of the Premises, if any, which is not usable by Tenant bears to the total area of the Premises, unless Landlord provides Tenant with other space during the period of repair that is suitable for the temporary conduct of Tenant's business. Such abatement shall be the sole remedy of Tenant, and except as provided in this Section 18, Tenant waives any right to terminate this Lease by reason of damage or casualty loss.

(c) The provisions of this Lease, including this Section 18, constitute an express agreement between Landlord and Tenant with respect to any and all damage to, or destruction of, all or any part of the Premises, or any other portion of the Project, and any statute or regulation which is now or may hereafter be in effect shall have no application to this Lease or any damage or destruction to all or any part of the Premises or any other portion of the Project, the parties hereto expressly agreeing that this Section 18 sets forth their entire understanding and agreement with respect to such matters.

(d) Tenant hereby expressly waives the provision of Section 227 of the Real Property Law and agrees that the foregoing provisions of this Section 18 shall govern and control in lieu thereof, this Section 18 being an express agreement.

(e) Landlord and Tenant acknowledge that Condominium Board has the responsibility under the Condominium By-Laws for certain aspects of restoration. In the event that Condominium Board, not Landlord, is responsible, in part or in full, under the Condominium Declaration for a restoration under this Section 18, the fulfillment by the Condominium Board of such obligation of Landlord, in part or in full, shall be deemed to constitute satisfaction by Landlord to the same extent of the restoration obligations of Landlord hereunder.

19. **Condemnation**. If the whole or any material part of the Premises, the Building or the Project is taken for any public or quasi-public use under governmental law, ordinance, or regulation, or by right of eminent domain, or by private purchase in lieu thereof (a "**Taking**" or "**Taken**"), and the Taking would in Landlord's reasonable judgment, either prevent or materially interfere with Tenant's use of the Premises or materially interfere with or impair Landlord's ownership or operation of the Building or Project, then upon written notice by Landlord this Lease shall terminate and Rent shall be apportioned as of said date. If part of the Premises shall be Taken, and this Lease is not terminated as provided above, Landlord shall promptly restore the Premises and the Project as nearly as is commercially reasonable under the circumstances to their condition prior to such partial Taking and the rentable square footage of the Building, the rentable square footage of the Premises, Tenant's Share of Operating Expenses and the Rent payable hereunder during the unexpired Term shall be reduced to such extent as may be fair and reasonable under the circumstances. Upon any such Taking, Landlord shall be entitled to receive the entire price or award from any such Taking without any payment to Tenant, and Tenant hereby assigns to Landlord Tenant's interest, if any, in such award. Tenant shall have the right, to the extent that same shall not diminish Landlord's award, to make a separate claim against the condemning authority (but not Landlord) for such compensation as may be separately awarded or recoverable by Tenant for moving expenses and damage to Tenant's trade fixtures, if a separate award for such items is made to Tenant. Tenant hereby waives any and all rights it might otherwise have pursuant to any provision of state law to terminate this Lease upon a partial Taking of the Premises or the Project.

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20. **Events of Default**. Each of the following events shall be a default ("**Default**") by Tenant under this Lease:

(a) **Payment Defaults**. Tenant shall fail to pay any installment of Rent or any other payment hereunder when due, including, without limitation, any penalties or interest accrued thereon.

(b) **Insurance**. Any insurance required to be maintained by Tenant pursuant to this Lease shall be canceled or terminated or shall expire or shall be reduced or materially changed, or Landlord or the Condominium Board shall receive a notice of nonrenewal of any such insurance and Tenant shall fail to obtain replacement insurance at least 20 days before the expiration, cancellation, termination, or reduction of, or material change in, the current coverage.

(c) **Abandonment**. Tenant shall abandon the Premises.

(d) **Improper Transfer**. Tenant shall assign, sublease or otherwise transfer (including, without limitation, by operation of law) or attempt to transfer all or any portion of Tenant's interest in this Lease or the Premises except as expressly permitted herein, or Tenant's interest in this Lease shall be attached, executed upon, or otherwise judicially seized and such action is not released or dismissed within 90 days of the action.

(e) **Liens**. Tenant shall fail to discharge or otherwise obtain the release of any lien placed upon the Premises in violation of this Lease within 10 days after any such lien is filed against the Premises.

(f) **Insolvency Events**. Tenant or any guarantor or surety of Tenant's obligations hereunder shall: (A) make a general assignment for the benefit of creditors; (B) commence any case, proceeding or other action seeking to have an order for relief entered on its behalf as a debtor or to adjudicate it a bankrupt or insolvent, or seeking reorganization, arrangement, adjustment, liquidation, dissolution or composition of it or its debts or seeking appointment of a receiver, trustee, custodian or other similar official for it or for all or of any substantial part of its property (collectively a "**Proceeding for Relief**"); (C) become the subject of any Proceeding for Relief which is not dismissed within 90 days of its filing or entry or (D) die or suffer a legal disability (if Tenant, guarantor, or surety is an individual) or be dissolved or otherwise fail to maintain its legal existence (if Tenant, guarantor or surety is a corporation, partnership or other entity).

(g) **Estoppel Certificate or Subordination Agreement.** Tenant fails to execute any document required from Tenant under Sections 23 or 27 within 5 days after a second notice requesting such document.

(h) **Other Defaults**. Tenant shall fail to observe, perform or comply with any provision of this Lease other than those specifically referred to in this Section 20, and, except as otherwise expressly provided herein, such failure shall continue for a period of 10 days after written notice thereof from Landlord to Tenant.

Any notice given under Section 20(h) hereof shall: (i) specify the alleged default, (ii) demand that Tenant cure such default, (iii) be in lieu of, and not in addition to, or shall be deemed to be, any notice required under any provision of applicable law, and (iv) not be deemed a forfeiture or a termination of this Lease unless Landlord elects otherwise in such notice; provided that if the nature of Tenant's default pursuant to Section 20(h) is such that it cannot be cured by the payment of money and reasonably requires more than 10 days to cure, then Tenant shall not be deemed to be in default if Tenant commences such cure within said 10 day period and thereafter diligently prosecutes the same to completion; provided, however, that such cure shall be completed no later than 30 days from the date of Landlord's notice. Notwithstanding the foregoing, if at the end of such 30-day period (i) cure has not been completed due to outstanding governmental approvals, governmental delay or administrative process and (ii) Tenant has completed or otherwise effected all work, payments and other acts or aspects of cure which are reasonably within the

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control of Tenant to complete or effect but for such governmental action, then the period for cure shall be further extended to the extent necessary, provided that Tenant uses its diligent and continuous efforts to obtain such governmental action, provided further, that Tenant gives Landlord written notice on or before the expiration of said 30-day period of (i) Tenant's completion of all such steps other than those directly requiring the outstanding governmental action required, (ii) the steps Tenant will take, and (iii) the time Tenant reasonably expects will be needed to obtain the outstanding governmental action required.

21. **Landlord's Remedies**.

(a) **Payment By Landlord; Interest**. Upon a Default by Tenant hereunder, Landlord may, without waiving or releasing any obligation of Tenant hereunder, make such payment or perform such act. All sums so paid or incurred by Landlord, together with interest thereon (from the date such sums were paid or incurred, at the annual rate (the "**Default Rate**") equal to the Prime Rate + 4% (but in no event less than 12% or more than the maximum rate permitted under applicable law)) shall be payable to Landlord on demand as additional Rent. Nothing herein shall be construed to create or impose a duty on Landlord to mitigate any damages resulting from Tenant's Default hereunder. As used herein, the term "**Prime Rate**" shall mean the highest prime rate (or base rate) reported in the Money Rates column or section of The Wall Street Journal (Eastern Edition) published from time to time, as the rate in effect for corporate loans at large U.S. money center commercial banks (whether or not such rate has actually been charged by any such bank). If The Wall Street Journal ceases publication of the Prime Rate, the "Prime Rate" shall mean the prime rate (or base rate) announced by Citibank, N.A., New York, New York (whether or not such rate has actually been charged by such bank). If such bank discontinues the practice of announcing the Prime Rate, the "Prime Rate" shall mean the highest rate charged by such bank on short-term, unsecured loans to its most creditworthy large corporate borrowers.

(b) **Late Payment Rent**. Late payment by Tenant to Landlord of Rent and other sums due will cause Landlord to incur costs not contemplated by this Lease, the exact amount of which will be extremely difficult and impracticable to ascertain. Such costs include, but are not limited to, processing and accounting charges and late charges which may be imposed on Landlord under any Mortgage covering the Premises. Therefore, if any installment of Rent due from Tenant is not received by Landlord within 5 days after the date such payment is due, Tenant shall pay to Landlord an additional sum of 6% of the overdue Rent as a late charge. The parties agree that this late charge represents a fair and reasonable estimate of the costs Landlord will incur by reason of late payment by Tenant. In addition to the late charge, Rent not paid when due and remaining unpaid on the 5th day after it first became due shall bear interest at the Default Rate from the date it first became due until paid.

(c) **Remedies**. Upon and during the continuance of a Default, Landlord, at its option, without further notice or demand to Tenant, shall have in addition to all other rights and remedies provided in this Lease, at law or in equity, the option to pursue any one or more of the following remedies, each and all of which shall be cumulative and nonexclusive, without any notice or demand whatsoever. No cure, in whole or in part, of such Default by Tenant after Landlord has taken any action (beyond giving Tenant notice of such Default) to pursue any remedy provided for herein (including retaining counsel to file an action or otherwise pursue any remedies) shall in any way affect Landlord's right to pursue such remedy or any other remedy provided Landlord herein or under law or in equity, unless Landlord, in its sole discretion, elects to waive such Default.

(i) This Lease and the Term and estate hereby granted are subject to the limitation that whenever a Default shall have happened and be continuing, Landlord shall have the right, at its election, then or thereafter while any such Default shall continue and notwithstanding the fact that Landlord may have some other remedy hereunder or at law or in equity, to give Tenant written notice of Landlord's intention to terminate this Lease on a date specified in such notice, which date shall be not less than 5 days after the giving of such notice, and upon the date so specified, this Lease and the estate hereby granted shall expire and terminate with the same force and effect as

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if the date specified in such notice were the date hereinbefore fixed for the expiration of this Lease, and all right of Tenant hereunder shall expire and terminate, and Tenant shall be liable as hereinafter in this Section 21(c) provided. If any such notice is given, Landlord shall have, on such date so specified, the right of re-entry and possession of the Premises and the right to remove all persons and property therefrom and to store such property in a warehouse or elsewhere at the risk and expense, and for the account, of Tenant. Should Landlord elect to re-enter as herein provided or should Landlord take possession pursuant to legal proceedings or pursuant to any notice provided for by law, Landlord may from time to time re-let the Premises or any part thereof for such term or terms and at such rental or rentals and upon such terms and conditions as Landlord may deem advisable, with the right to make commercially reasonable alterations in and repairs to the Premises.

(ii) In the event of any termination of this Lease as in this Section 21 provided or as required or permitted by law or in equity, Tenant shall forthwith quit and surrender the Premises to Landlord, and Landlord may, without further notice, enter upon, re-enter, possess and repossess the same by summary proceedings, ejectment or otherwise, and again have, repossess and enjoy the same as if this Lease had not been made, and in any such event neither Tenant nor any person claiming through or under Tenant by virtue of any law or an order of any court shall be entitled to possession or to remain in possession of the Premises. Landlord, at its option, notwithstanding any other provision of this Lease, shall be entitled to recover from Tenant, as and for liquidated damages, the sum of;

(A) all Base Rent, Additional Rent and other amounts payable by Tenant hereunder then due or accrued and unpaid: and

(B) the amount equal to the aggregate of all unpaid Base Rent and Additional Rent which would have been payable if this Lease had not been terminated prior to the end of the Term then in effect, discounted to its then present value in accordance with accepted financial practice using a rate of 5% per annum, for loss of the bargain; and

(C) all other damages and expenses (including attorneys' fees and expenses), if any, which Landlord shall have sustained by reason of the breach of any provision of this Lease; less

(D) the net proceeds of any re-letting actually received by Landlord.

(iii) Nothing herein contained shall limit or prejudice the right of Landlord, in any bankruptcy or insolvency proceeding, to prove for and obtain as liquidated damages by reason of such termination an amount equal to the maximum allowed by any bankruptcy or insolvency proceedings, or 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 whether such amount shall be greater or less than the excess referred to above.

(iv) Nothing in this Section 21 shall be deemed to affect the right of either party to indemnifications pursuant to this Lease.

(v) If Landlord terminates this Lease upon the occurrence of a Default, Tenant will quit and surrender the Premises to Landlord or its agents, and Landlord may, without further notice, enter upon, re-enter and repossess the Premises by summary proceedings, ejectment or otherwise. The words "enter", "re-enter", and "re-entry" are not restricted to their technical legal meanings.


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(vi) If either party shall be in default in the observance or performance of any provision of this Lease, and an action shall be brought for the enforcement thereof in which it shall be determined that such party was in default, the party in default shall pay to the other all fees, costs and other expenses which may become payable as a result thereof or in connection therewith, including attorneys' fees and expenses.

(vii) If Tenant shall default in the keeping, observance or performance of any covenant, agreement, term, provision or condition herein contained, Landlord, without thereby waiving such default, may perform the same for the account and at the expense of Tenant (a) immediately or at any time thereafter and without notice in the case of emergency or in case such default will result in a violation of any legal or insurance requirements, or in the imposition of any lien against all or any portion of the Premises, and (b) in any other case if such default continues after any applicable cure period provided in Section 20. All reasonable costs and expenses incurred by Landlord and/or the Condominium Board in connection with any such performance by it for the account of Tenant and all reasonable costs and expenses, including attorneys' fees and disbursements incurred by Landlord and/or the Condominium Board in any action or proceeding (including any summary dispossess proceeding) brought by Landlord and/or the Condominium Board to enforce any obligation of Tenant under this Lease and/or the right of Landlord and/or the Condominium Board in or to the Premises, shall be paid by Tenant to Landlord within 10 days after demand.

(viii) Independent of the exercise of any other remedy of Landlord hereunder or under applicable law, Landlord may conduct an environmental test of the Premises as generally described in Section 30(d), at Tenant's expense.

(ix) Nothing contained in this Lease shall be construed as limiting or precluding the recovery by Landlord against Tenant of any sums or damages to which, in addition to the damages particularly provided above, Landlord may lawfully be entitled by reason of any default hereunder on the part of Tenant. Anything in this Lease to the contrary notwithstanding, during the continuation of any default by Tenant, Tenant shall not be entitled to exercise any rights or options, or to receive any funds or proceeds being held, under or pursuant to this Lease.

(x) Tenant waives and surrenders all right and privilege that Tenant might have under or by reason of any present or future law to redeem the Premises or to have a continuance of this Lease after Tenant is dispossessed or ejected therefrom by process of law or under the terms of this Lease or after any termination of this Lease. Tenant also waives the provisions of any law relating to notice and/or delay in levy of execution in case of any eviction or dispossession for nonpayment of rent, and the provisions of any successor or other law of like import.

(xi) Except as otherwise provided in this Section 21, no right or remedy herein conferred upon or reserved to Landlord is intended to be exclusive of any other right or remedy, and every right and remedy shall be cumulative and in addition to any other legal or equitable right or remedy given hereunder, or now or hereafter existing. No waiver of any provision of this Lease shall be deemed to have been made unless expressly so made in writing. Landlord shall be entitled, to the extent permitted by law, to seek injunctive relief in case of the violation, or attempted or threatened violation, of any provision of this Lease, or to seek a decree compelling observance or performance of any provision of this Lease, or to seek any other legal or equitable remedy.

(xii) Landlord may continue to collect Rent as the same becomes due without terminating this Lease and without waiving any other rights or remedies Landlord may have.

(xiii) Anything contained herein to the contrary notwithstanding, if any termination of this Lease shall be stayed by order of any court having jurisdiction over any proceeding related to an insolvency event described herein, or by federal or state statute, then, following the expiration

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of any such stay, or if the trustee appointed in any such proceeding, Tenant or Tenant as debtor-in-possession shall fail to assume Tenant's obligations under this Lease within the period prescribed therefor by law (or within 90 days after entry of the order for relief if no such period is prescribed by law) or such other period as may be allowed by the court, or if said trustee, Tenant or Tenant as debtor-in-possession shall fail to provide adequate protection of Landlord's right, title and interest in and to the Premises or adequate assurance of the complete and continuous future performance of Tenant's obligations under this Lease, Landlord, to the extent permitted by law or by leave of the court having jurisdiction over such proceeding, shall have the right, at its election, to terminate this Lease on 5 days' notice to Tenant, Tenant as debtor-in-possession or said trustee and upon the expiration of said 5 day period this Lease shall cease and expire as aforesaid and Tenant, Tenant as debtor-in-possession or said trustee shall promptly quit and surrender the Premises as aforesaid.

(xiv) Except as expressly provided herein, none of Landlord or any Landlord Party shall be liable for consequential damages hereunder.

22. **Assignment and Subletting**.

(a) **General Prohibition**. Without Landlord's prior written consent subject to and on the conditions described in this Section 22, Tenant shall not, directly or indirectly, voluntarily or by operation of law, assign this Lease or sublease the Premises or any part thereof or mortgage, pledge, or hypothecate its leasehold interest or grant any concession or license within the Premises, and any attempt to do any of the foregoing shall be void and of no effect. If Tenant is a corporation, partnership or limited liability company, the shares or other ownership interests thereof which are not actively traded upon a stock exchange or in the over-the-counter market, a transfer or series of related or unrelated transfers whereby twenty-five percent (25%) or more of the issued and outstanding shares or other direct or indirect ownership interests of such corporation, partnership or limited liability company are, or voting control is, transferred (but excepting transfers upon deaths of individual owners) from a person or persons or entity or entities which were owners thereof at the time of execution of this Lease to persons or entities who were not owners of at least fifty percent (50%) of the shares or other ownership interests of the corporation, partnership or limited liability company at the time of execution of this Lease, shall be deemed an assignment of this Lease requiring the consent of Landlord as provided in this Section 22. Notwithstanding the foregoing, (a) any public offering of shares or other ownership interest in Tenant on a recognized domestic U.S. stock exchange or (b) any private equity offering(s) which do(es) not result in a material change in management or control of Tenant, and does not result in a change in the majority control of the Board of Directors of Tenant, shall not be deemed an assignment. In addition to the foregoing, in no event shall the percentage attributable to Landlord's exercise of its right to purchase securities or other interests offered by Tenant, in connection with a Participation Agreement or otherwise, be counted for the purpose of this provision.

(b) If this Lease is assigned to any person or entity pursuant to the provisions of 11 U.S.C. Section 101 et seq., or any successor statute (the "Bankruptcy Code"), any and all monies or other consideration payable or otherwise to be delivered in connection with such assignment shall be paid or delivered to Landlord, shall be and remain the exclusive property of Landlord and shall not constitute property of Tenant or of the estate of Tenant within the meaning of the Bankruptcy Code. Any and all monies or other consideration constituting Landlord's property under the preceding sentence not paid or delivered to Landlord shall be held in trust for the benefit of Landlord and shall be promptly paid to or turned over to Landlord.

(c) If Tenant desires to assign, hypothecate or otherwise transfer this Lease or to sublet the Premises other than pursuant to a Permitted Assignment (as defined below), then at least 15 business days, but not more than 45 business days, before the date Tenant desires the assignment or sublease to be effective (the "**Assignment Date**"), Tenant shall give Landlord a notice (the "**Assignment Notice**") containing such information about the proposed assignee or sublessee, including the proposed use of the

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Premises and any Hazardous Materials proposed to be used, stored, handled, treated, generated in or released or disposed of from the Premises, the Assignment Date, any relationship between Tenant and the proposed assignee or sublessee, and all material terms and conditions of the proposed assignment or sublease, including a copy of the proposed assignment or sublease in its final form, and such other information as Landlord may deem reasonably necessary or appropriate to its consideration as to whether to grant its consent. Landlord may, by giving written notice to Tenant within 15 business days after receipt of the Assignment Notice: (i) grant such consent, (ii) refuse such consent, in its sole and absolute discretion, if (A) the proposed assignment, hypothecation or other transfer or subletting concerns more than (together with all other then effective subleases) 50% of the Premises or (B) the proposed assignee or subtenant is a tenant of the Project or any other property owned (in whole or in part) or managed by Landlord or an subsidiary or affiliate of Landlord or any other Person that has, within the 6 months prior, initiated negotiations with Landlord regarding, or toured (or made an appointment to tour) the Project with a view to, letting any portion of the Project, (iii) refuse such consent, in its reasonable discretion, if the proposed subletting concerns (together with all other then effective subleases) 50% or less of the Premises (provided that Landlord shall further have the right to review and approve or disapprove the proposed form of sublease prior to the effective date of any such subletting), (iv) sublease such portion of the Premises from the Tenant on the terms described in the Assignment Notice, or (v) terminate this Lease with respect to the space described in the Assignment Notice as of the Assignment Date (an "**Assignment Termination**"). If Landlord delivers notice of its election to exercise an Assignment Termination or to itself sublease the proposed portion of the Premises, Tenant shall have the right to withdraw such Assignment Notice by written notice to Landlord of such election within 10 business days after Landlord's notice electing to exercise the Assignment Termination. If Tenant withdraws such Assignment Notice, this Lease shall continue in full force and effect. If Tenant does not withdraw such Assignment Notice, this Lease, and the term and estate herein granted, shall terminate as of the Assignment Date with respect to the space described in such Assignment Notice, or Landlord's sublease shall take effect, as the case may be. No failure of Landlord to exercise any such option to terminate this Lease, or to deliver a timely notice in response to the Assignment Notice, shall be deemed to be Landlord's consent to the proposed assignment, sublease or other transfer. Tenant shall reimburse Landlord for all of Landlord's reasonable out-of-pocket expenses in connection with its consideration of any Assignment Notice. Any Person to which this Lease is assigned pursuant to the provisions of the Bankruptcy Code shall be deemed without further act or deed to have assumed all of the obligations arising under this Lease on and after the date of such assignment.

(d) If Tenant assumes this Lease and proposes to assign the same pursuant to the provisions of the Bankruptcy Code to any Person who shall have made a bona fide offer to accept an assignment of this Lease on terms acceptable to Tenant, then notice of such proposed assignment shall be given to Landlord by Tenant no later than 20 days after receipt by Tenant, but in any event no later than 10 days prior to the date that Tenant shall make application to a court of competent jurisdiction for authority and approval to enter into such assignment and assumption. Such notice shall set forth (i) the name and address of such Person, (ii) all of the terms and conditions of such offer, and (iii) adequate assurance of future performance by such Person under the Lease as set forth below, including, without limitation, the assurance referred to in Section 365(b)(3) of the Bankruptcy Code. Landlord shall have the prior right and option, to be exercised by notice to Tenant given at any time prior to the effective date of such proposed assignment, to accept an assignment of this Lease upon the same terms and conditions and for the same consideration, if any, as the bona fide offer made by such Person, less any brokerage commissions which would otherwise be payable by Tenant out of the consideration to be paid by such Person in connection with the assignment of this Lease.

(e) The term "adequate assurance of future performance" as used in this Lease shall mean that any proposed assignee shall, among other things, (i) deposit with Landlord on the assumption of this Lease a sum equal to 12 monthly installments of the then Base Rent as security for the faithful performance and observance by such assignee of the terms and obligations of this Lease, (ii) furnish Landlord with financial statements of such assignee for the prior 3 fiscal years, as finally determined after an audit and certified as correct by a certified public accountant, which financial statements shall show (A) net annual

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operating income of at least 8 times the then annual Base Rent for each of such 3 years and (B) a net worth of at least 10 times the aggregate Base Rent payable during the remaining term of the Lease, (iii) grant to Landlord a security interest in such property of the proposed assignee as Landlord shall deem necessary to secure such assignee's future performance under this Lease, and (iv) provide such other information or take such action as Landlord, in its reasonable judgment shall determine is necessary to provide adequate assurance of the performance by such assignee of its obligations under this Lease.

(f) If, at any time after the originally named Tenant herein may have assigned Tenant's interest in this Lease, this Lease shall be disaffirmed or rejected in any insolvency proceeding of the types described herein, or in any similar proceeding, or in the event of termination of this Lease by reason of any such proceeding or by reason of lapse of time following notice of termination based upon any Event of Default, each prior Tenant, including, without limitation, the originally named Tenant, upon request of Landlord given within 30 days next following any such disaffirmance, rejection or termination (and actual notice thereof to Landlord in the event of a disaffirmance or rejection or in the event of termination other than by act of Landlord), shall (i) pay to Landlord all Fixed Rent and other items of Rental due and owing by the assignee to Landlord under this Lease to and including the date of such disaffirmance, rejection or termination, and (ii) as "tenant", enter into a new lease with Landlord of the Premises for a term commencing on the effective date of such disaffirmance, rejection or termination and ending on the Expiration Date, unless sooner terminated as in such lease provided, at the same Fixed Rent and upon the then executory terms, covenants and conditions as are contained in this Lease, except that (A) Tenant's rights under the new lease shall be subject to the possessory rights of the assignee under this Lease and the possessory rights of any person claiming through or under such assignee or by virtue of any statute or of any order of any court, (B) such new lease shall require that Tenant shall cure all defaults existing under this Lease with due diligence, and (C) such new lease shall require Tenant to pay all items of Rental reserved in this Lease which, had this Lease not been so disaffirmed, rejected or terminated, would have accrued after the date of such disaffirmance, rejection or termination with respect to any period prior thereto. If any such prior Tenant shall default in its obligation to enter into said new lease for a period of 10 days next following Landlord's request therefor, then, in addition to all other rights and remedies by reason of such default, either at law or in equity, Landlord shall have the same rights and remedies against such Tenant as if such Tenant had entered into such new lease and such new lease had thereafter been terminated as of the commencement date thereof by reason of such Tenant's default thereunder.

Notwithstanding the foregoing, Landlord's consent to an assignment of this Lease or a subletting of any portion of the Premises to any Affiliate of Tenant (a "**Permitted Assignment**") shall not be required for so long as the transferee remains an Affiliate of Tenant and assumes all of the obligations of Tenant under this Lease, provided that Landlord shall have the right to approve the form of any such sublease or assignment.

(g) **Additional Conditions**. As a condition to any such assignment or subletting, whether or not Landlord's consent is required, Landlord may require:

(i) that any assignee or subtenant agree, in writing at the time of such assignment or subletting, that if Landlord gives such party notice that Tenant is in default under this Lease, such party shall thereafter make all payments otherwise due Tenant directly to Landlord, which payments will be received by Landlord without any liability except to credit such payment against those due under this Lease, and any such third party shall agree to attorn to Landlord or its successors and assigns should this Lease be terminated for any reason; provided, however, in no event shall Landlord or its successors or assigns be obligated to accept such attornment;

(ii) a list of Hazardous Materials, certified by the proposed assignee or sublessee to be true and correct, which the proposed assignee or sublessee intends to use, store, handle, treat, generate in, release or dispose of from the Premises, together with copies of all documents relating to such use, storage, handling, treatment, generation, release or disposal of Hazardous Materials

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by the proposed assignee or subtenant in the Premises or on the Project, prior to the proposed assignment or subletting, including, without limitation: permits; approvals; reports and correspondence; storage and management plans; plans relating to the installation of any storage tanks to be installed in or under the Project (provided, said installation of tanks shall only be permitted after Landlord has given its written consent to do so, which consent may be withheld in Landlord's sole and absolute discretion); and all closure plans or any other documents required by any and all federal, state and local Governmental Authorities for any storage tanks installed in, on or under the Project for the closure of any such tanks. Neither Tenant nor any such proposed assignee or subtenant is required, however, to provide Landlord with any portion(s) of such documents containing information of a proprietary nature which, in and of themselves, do not contain a reference to any Hazardous Materials or hazardous activities;

(iii) that the originally named Tenant herein reaffirm its continuing primary liability under this Lease; and

(iv) that the assignee or subtenant remake the representations and warranties of Tenant hereunder as of the effective date of such assignment or subletting.

(h) **No Release of Tenant, Sharing of Excess Rents**. Notwithstanding any assignment or subletting, Tenant and any guarantor or surety of Tenant's obligations under this Lease shall at all times remain fully and primarily responsible and liable for the payment of Rent and for compliance with all of Tenant's other obligations under this Lease. If the Rent due and payable by a sublessee or assignee (or a combination of the rental payable under such sublease or assignment plus any bonus or other consideration therefor or incident thereto in any form) exceeds the rental payable under this Lease, (excluding however, any Rent payable under this Section 22) ("**Excess Rent**"), then Tenant shall be bound and obligated to pay Landlord as Additional Rent hereunder 50% of such Excess Rent within 10 days following receipt thereof by Tenant. If Tenant shall sublet the Premises or any part thereof, Tenant hereby immediately and irrevocably assigns to Landlord, as security for Tenant's obligations under this Lease, all rent from any such subletting, and Landlord as assignee and as attorney-in-fact for Tenant, or a receiver for Tenant appointed on Landlord's application, may collect such rent and apply it toward Tenant's obligations under this Lease; except that, until the occurrence of a Default, Tenant shall have the right to collect such rent.

(i) **No Waiver**. The consent by Landlord to an assignment or subletting shall not relieve Tenant or any assignees of this Lease or any sublessees of the Premises from obtaining the consent of Landlord to any further assignment or subletting nor shall it release Tenant or any assignee or sublessee of Tenant from full and primary liability under this Lease. The acceptance of Rent hereunder, or the acceptance of performance of any other term, covenant, or condition thereof, from any other person or entity shall not be deemed to be a waiver of any of the provisions of this Lease or a consent to any subletting, assignment or other transfer of the Premises.

(j) **Prior Conduct of Proposed Transferee.** Notwithstanding any other provision of this Section 22, if (i) the proposed assignee or sublessee of Tenant has been required by any prior landlord, lender or Governmental Authority to take remedial action in connection with Hazardous Materials contaminating a property, where the contamination resulted from such party's action or use of the property in question, (ii) the proposed assignee or sublessee is subject to an enforcement order issued by any Governmental Authority in connection with the use, storage, handling, treatment, generation, release or disposal of Hazardous Materials (including, without limitation, any order related to the failure to make a required reporting to any Governmental Authority), or (iii) the risk that Landlord would be targeted as a responsible party in connection with the remediation of any pre-existing environmental condition in the vicinity of or underlying the Project would be materially increased or exacerbated by the proposed use of Hazardous Materials by such proposed assignee or sublessee, Landlord shall have the absolute right to refuse to consent to any assignment or subletting to any such party.

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23. **Estoppel Certificate.** Tenant shall, within 10 business days of written notice from Landlord, execute, acknowledge and deliver a statement in writing in any form reasonably requested by a proposed lender or purchaser, (i) certifying that this Lease is unmodified and in full force and effect (or, if modified, stating the nature of such modification and certifying that this Lease as so modified is in full force and effect) and the dates to which the rental and other charges are paid in advance, if any, (ii) acknowledging that there are not any uncured defaults on the part of Landlord hereunder, or specifying such defaults if any are claimed, and (iii) setting forth such further information with respect to the status of this Lease or the Premises as may be requested thereon. Any such statement may be relied upon by any prospective purchaser or encumbrancer of all or any portion of the real property of which the Premises are a part. Tenant's failure to deliver such statement within such time shall, at the option of Landlord, be conclusive upon Tenant that the Lease is in full force and effect and without modification except as may be represented by Landlord in any certificate prepared by Landlord and delivered to Tenant for execution.

24. **Quiet Enjoyment**. So long as Tenant shall perform all of the covenants and agreements herein required to be performed by Tenant, Tenant shall, subject to the terms of this Lease and the Superior Instruments, at all times during the Term, have peaceful and quiet enjoyment of the Premises against any person claiming by, through or under Landlord.

25. **Prorations.** All prorations required or permitted to be made hereunder shall be made on the basis of a 360 day year and 30 day months.

26. **Rules and Regulations**. Tenant shall, at all times during the Term and any extension thereof, comply with all reasonable rules and regulations at any time or from time to time established by Landlord covering use of the Premises and the Project (the "**Rules and Regulations**"). The current Rules and Regulations are attached hereto as **Exhibit E**. If there is any conflict between said Rules and Regulations and other provisions of this Lease, the terms and provisions of this Lease shall control. Landlord shall not have any liability or obligation for the breach of any Rules or Regulations by other tenants in the Project and shall not enforce such Rules and Regulations in a discriminatory manner.

27. **Subordination**.

(a) The following capitalized terms, whenever used in this Lease, shall have the respective meanings ascribed to such terms as follows: (i) "**Superior Instruments**" shall mean each of the Ground Lease, the IDA Lease Documents, the Condominium Declaration and any Superior Lease or Mortgage, the Operating Agreement (as defined in the Ground Lease) and all matters to which any of the foregoing are subordinate; (ii) "**Ground Lease**" shall mean that certain Agreement of Lease, dated as of December 29, 2006, between New York City Health and Hospitals Corporation, a New York not-for-profit corporation, as landlord, and Landlord, as tenant, entered into in respect of the Project and as the same may be further amended or otherwise modified; (iii) "**Ground Landlord**" shall mean the then landlord under the Ground Lease; (iv) "**IDA Lease Documents**" shall mean, collectively, (A) that certain IDA Lease Agreement between Landlord, as landlord, and The New York City Industrial Development Agency ("**IDA**"), as tenant, dated as of December 1, 2006, entered into in respect of the Project and as the same may be further amended or otherwise modified, and (B) that certain Lease Agreement (the "**IDA Lease**"), between IDA, as landlord, and Landlord as tenant, dated as of December 1, 2006 entered into in respect of the Project and as the same may be further amended or otherwise modified; (v) "**Superior Leases**" shall mean the leases to which this Lease is subject and subordinate; (vi) "**Superior Lessor**" shall mean the lessor under a Superior Lease; (vii) "**Superior Party**" shall mean each of the Ground Landlord, any Superior Lessor, the Condominium Board, any Mortgagee and the City of New York; (viii) "**Mortgage**" shall mean any mortgage, deed of trust, security assignment and other encumbrance now existing or hereafter created on or against the Project or the Premises, and all amendments, restatements, renewals, modifications, consolidations, refinancing, assignments and extensions thereof; (ix) "**Mortgagee**" shall mean the Holder or Holders (including the agent for any lending syndicate) of a Mortgage and shall be deemed to include the beneficiary under a deed of trust; and (x) the "**Condominium Declaration**" shall have the meaning set forth below.

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On or about December 4, 2014, the Project was subjected to the provisions of Article 9-B of the New York Real Property Law, thereby creating The East River Science Park Condominium (the "**Condominium**") in accordance with that certain Declaration Establishing a Plan for Condominium Ownership of the Premises known as 430-450 East 29th Street, New York, New York Pursuant to Article 9-B of the Real Property Law of the State of New York, as the same may be further amended or otherwise modified (the "**Condominium Declaration**"). The units of the Condominium are sometimes referred to herein individually as a "**Unit**" and collectively as "**Units**."

(b) This Lease and Tenant's interest and rights hereunder are hereby made and shall be subject and subordinate at all times to the Superior Instruments and to the lien of any Mortgage, without the necessity of any further instrument or act on the part of Tenant; provided, however that so long as there is no Default hereunder, Tenant's right to possession of the Premises shall not be disturbed by the Holder of any such Mortgage. Tenant agrees, at the election of the Holder of any such Mortgage, to attorn to any such Holder. Tenant agrees upon demand to execute, acknowledge and deliver such instruments, confirming such subordination, and such instruments of attornment as shall be requested by any such Holder, provided any such instruments contain appropriate non-disturbance provisions assuring Tenant's quiet enjoyment of the Premises as set forth in Section 24 hereof. Tenant hereby appoints Landlord attorney-in-fact for Tenant irrevocably (such power of attorney being coupled with an interest) to execute, acknowledge and deliver any such instrument and instruments for and in the name of Tenant and to cause any such instrument to be recorded. Notwithstanding the foregoing, any such Holder may at any time subordinate its Mortgage to this Lease, without Tenant's consent, by notice in writing to Tenant, and thereupon this Lease shall be deemed prior to such Mortgage without regard to their respective dates of execution, delivery or recording and in that event such Holder shall have the same rights with respect to this Lease as though this Lease had been executed prior to the execution, delivery and recording of such Mortgage and had been assigned to such Holder. If (i) in connection with obtaining financing for the Project, or of any Superior Lease, or any modification to the Condominium Declaration, a banking, insurance or other Superior Party shall request reasonable modifications in this Lease as a condition to such financing or modification to the Condominium Declaration, and/or (ii) the provisions of any Superior Instruments require Tenant to deliver any instruments or acknowledgements, Tenant will not unreasonably withhold its consent thereto and/or unreasonably condition or delay the delivery thereof, as the case may be, provided that such modifications and/or instruments or acknowledgements, in either instance, do not (A) extend or shorten the Term, (B) reduce the usable area of the Premises, (C) increase the Base Rent or any Additional Rent (D) except to a de minimis extent, otherwise increase the obligations of Tenant or the rights of Landlord under this Lease or (E) except to a de minimis extent, otherwise decrease the obligations of Landlord or the rights of Tenant under this Lease. At Ground Landlord's option, on the termination of the Ground Lease pursuant to an event of default by Landlord as the tenant thereunder, the Tenant shall attorn to, or shall enter into a direct lease on terms identical to the Lease with, Ground Landlord for the balance of the unexpired term of this Lease.

(c) By its execution and delivery of this Lease, Tenant expressly acknowledges and agrees that it shall comply, and cause its agents, employees, contractors, subcontractors, subtenants, operators, licensees, franchisees, concessionaires or other occupants of the Premises to comply, fully and faithfully at all times, to the extent applicable to the Premises, with all terms, covenants and conditions of the Superior Instruments of which Tenant has been given notice from time to time and which by their terms are applicable to a space lease of all or any portion of the Project (collectively, "**Tenant's Superior Instrument Obligations**"), such acknowledgment and agreement being a material inducement to Landlord's execution and delivery of this Lease and leasing of the Premises to Tenant. Tenant further acknowledges and agrees that, pursuant to the Ground Lease, any act or omission of Tenant or any of its agents, employees, contractors, subcontractors, subtenants, operators, licensees, franchisees, concessionaires or other occupants of the Premises that violates any provision of the Ground Lease may be deemed to be a violation of such provision by Landlord as the tenant under the Ground Lease.

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(d) Tenant acknowledges and agrees that, notwithstanding anything herein to the contrary, Landlord may modify or amend this Lease from time to time in order to avoid the occurrence of a default under the Superior Instruments, provided such modification or amendment does not (i) extend or shorten the Term, (ii) reduce the usable area of the Premises, (iii) increase the Base Rent or any Additional Rent (iv) except to a de minimis extent, otherwise increase the obligations of Tenant or the rights of Landlord under this Lease or (v) except to a de minimis extent, otherwise decrease the obligations of Landlord or the rights of Tenant under this Lease. Tenant shall promptly execute any such modification or amendment to this Lease.

(e) The Condominium Board shall be a third party beneficiary of all sections in this Lease in which it is mentioned. In the event that, under the Condominium Documents, any duty of Landlord hereunder is within the power of the Condominium Board, (i) if Landlord and Condominium Board are Affiliates, such duty hereunder shall be a duty to cause Condominium Board to take such action, and (ii) if Landlord and Condominium Board are not Affiliates, such duty hereunder shall be a duty to take commercially reasonable efforts to cause Condominium Board to take such action. To the extent that Condominium Board shall fulfill any of Landlord's duties hereunder, the same shall constitute satisfaction by Landlord of such duties.

28. **Surrender**.

(a) Upon the expiration of the Term or earlier termination of Tenant's right of possession, Tenant shall surrender the Premises to Landlord in the same condition as received, subject to any Alterations or Installations permitted by Landlord to remain in the Premises, free of Hazardous Materials brought upon, kept, used, stored, handled, treated, generated in, or released or disposed of from, the Premises by any person other than a Landlord Party (collectively, "**Tenant HazMat Operations**") and with all Hazardous Materials Clearances in place, and in broom clean condition, ordinary wear and tear and casualty loss and condemnation (which are covered by Sections 18 and 19) excepted. At least 3 months prior to the surrender of the Premises, Tenant shall deliver to Landlord a narrative description of the actions proposed (or required by any Governmental Authority) to be taken by Tenant in order to surrender the Premises (including any Installations permitted by Landlord to remain in the Premises) at the expiration or earlier termination of the Term, free from any residual impact from the Tenant HazMat Operations and otherwise released for unrestricted use and occupancy (the "**Surrender Plan**"). Such Surrender Plan shall be accompanied by a current listing of (i) all Hazardous Materials licenses and permits held by or on behalf of any Tenant Party with respect to the Premises, and (ii) all Hazardous Materials used, stored, handled, treated, generated, released or disposed of from the Premises, and shall be subject to the review and approval of Landlord's environmental consultant. In connection with the review and approval of the Surrender Plan, upon the request of Landlord, Tenant shall deliver to Landlord or its consultant such additional non-proprietary information concerning Tenant HazMat Operations as Landlord shall request. On or before such surrender, Tenant shall deliver to Landlord evidence that the approved Surrender Plan shall have been satisfactorily completed and Landlord shall have the right, subject to reimbursement at Tenant's expense as set forth below, to cause Landlord's environmental consultant to inspect the Premises and perform such additional procedures as may be deemed reasonably necessary to confirm that the Premises are, as of the effective date of such surrender or early termination of this Lease, free from any residual impact from Tenant HazMat Operations. Tenant shall reimburse Landlord, as Additional Rent, for the actual out-of pocket expense incurred by Landlord for Landlord's environmental consultant to review and approve the Surrender Plan and to visit the Premises and verify satisfactory completion of the same, which cost shall not exceed $5,000. Landlord shall have the unrestricted right to deliver such Surrender Plan and any report by Landlord's environmental consultant with respect to the surrender of the Premises to third parties.

(b) If Tenant shall fail to prepare or submit a Surrender Plan approved by Landlord, or if Tenant shall fail to complete the approved Surrender Plan, or if such Surrender Plan, whether or not approved by Landlord, shall fail to adequately address any residual effect of Tenant HazMat Operations in, on or about

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the Premises, such failure shall be deemed a failure to vacate in accordance with this Lease, and Landlord shall retain all remedies available under this Lease, at law or equity including, without limitation, the right to collect rent on a holdover basis, and Landlord shall have the right to take such actions as Landlord may deem reasonable or appropriate to assure that the Premises and the Project are surrendered free from any residual impact from Tenant HazMat Operations, the cost of which actions shall be reimbursed by Tenant as Additional Rent, without regard to the limitation set forth in the first paragraph of this Section 28.

(c) On or before the expiration of the Term, Tenant shall immediately return to Landlord all keys and/or access cards to parking facilities, the Project, restrooms or all or any portion of the Premises furnished to or otherwise procured by Tenant. If any such access card or key is lost, Tenant shall pay to Landlord, at Landlord's election, either the cost of replacing such lost access card or key or the cost of reprogramming the access security system in which such access card was used or changing the lock or locks opened by such lost key. Any Tenant's Property, Alterations and property not so removed by Tenant as permitted or required herein shall be deemed abandoned and may be stored, removed, and disposed of by Landlord at Tenant's expense, and Tenant waives all claims against Landlord for any damages resulting from Landlord's retention and/or disposition of such property. All obligations of Tenant hereunder not fully performed as of the termination of the Term, including the obligations of Tenant under Section 30 hereof, shall survive the expiration or earlier termination of the Term, including, without limitation, indemnity obligations, payment obligations with respect to Rent and obligations concerning the condition and repair of the Premises.

29. **Waiver of Jury Trial; Consent to Jurisdiction; Prohibited Parties**.

(a) TENANT AND LANDLORD WAIVE ANY RIGHT TO TRIAL BY JURY OR TO HAVE A JURY PARTICIPATE IN RESOLVING ANY DISPUTE, WHETHER SOUNDING IN CONTRACT, TORT, OR OTHERWISE, BETWEEN LANDLORD AND TENANT ARISING OUT OF THIS LEASE OR ANY OTHER INSTRUMENT, DOCUMENT, OR AGREEMENT EXECUTED OR DELIVERED IN CONNECTION HEREWITH OR THE TRANSACTIONS RELATED HERETO.

(b) Landlord and Tenant each hereby (i) irrevocably and unconditionally consents and submits to the jurisdiction of any Federal, state, county or municipal court sitting in the County and State of New York in respect to any action or proceeding concerning any matters arising out of or in any way relating to this Lease; (ii) irrevocably waives all objections as to venue and any and all rights it may have to seek a change of venue with respect to any such action or proceedings if the same is brought in the County of New York ; (iii) agrees that this Lease and the rights and obligations of the parties shall be governed by and construed, and all actions, proceedings and all controversies and disputes arising under or of or relating to this Lease shall be resolved in accordance with the internal substantive laws of the State of New York applicable to agreements made and to be wholly performed within the State of New York, (iv) waives any defense to any action or proceeding granted by the laws of any other country or jurisdiction unless such defense is also allowed by the laws of the State of New York and (v) agrees that any final judgment rendered against it in any such action or proceeding shall be conclusive and may be enforced in any other jurisdiction by suit on the judgment or in any other manner provided by law. Tenant hereby represents that it is subject to service of process in the State of New York and covenants that it will remain so subject for the term of this Lease. If for any reason Tenant should cease to be so subject to service of process in the State of New York, Tenant hereby designates and appoints Gaurav Shah, M.D., 250 West 55th Street, 16th Floor, Suite A, New York, NY 10019, as its agent upon whom may be served all process, pleadings, notices or other papers which may be served upon Tenant as a result of any of its obligations under this Lease, and if such agent shall cease to act or otherwise cease to be subject to service of process in the State of New York, Tenant designates and appoints the Secretary of State of New York as its agent for service; provided, however, that the serving of such process, pleadings, notices or other papers shall not constitute a condition to Tenant's obligations hereunder. For the term of this Lease, Tenant's agent designated herein shall accept and acknowledge in Tenant's behalf service of any and all process in any such suit, action or proceeding brought in any such court. Tenant agrees and consents that any such service of process upon

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such agents and written notice of such service to the Lessee in the manner set forth herein shall be taken and held to be valid personal service upon Tenant whether or not Tenant shall then be doing, or at any time shall have done, business within the State of New York and that any such service of process shall be of the same force and validity as if service were made upon Tenant according to the laws governing the validity and requirements of such service in the State of New York, and waive all claim of error by reason of any such service. Such agents shall not have any power or authority to enter into any appearance or to file any pleadings in connection with any suit, action or other legal proceedings against Tenant or to conduct the defense of any such suit, action or any other legal proceeding except as expressly authorized by Tenant.

(c) Tenant represents and warrants to Landlord that (i) it and each Affiliate or Principal directly or indirectly owning an interest in it is not a Prohibited Entity (as defined in Section 29(d)), (ii) none of the funds or other assets of it constitute property of, or are beneficially owned, directly or indirectly, by, any Person (as defined in Section 29(d)) on the List (as defined in Section 29(d)), (iii) no Person on the List has any interest of any nature whatsoever in it (whether directly or indirectly), and (iv) none of its funds have been derived from any unlawful activity with the result that the investment in it is prohibited by law or that this Lease is in violation of law. Tenant covenants and agrees (I) to comply with all Legal Requirements relating to money laundering, anti-terrorism, trade embargos and economic sanctions, now or hereafter in effect, (II) to immediately notify the other in writing if any of the representations, warranties or covenants set forth in this Section 29(c) are no longer true or have been breached or if it has a reasonable basis to believe that they may no longer be true or have been breached, (III) not to use funds from any Person on the List to make any payment due to Landlord under this Lease and (IV) at the request of the other, to provide such information as may be reasonably requested by Landlord to determine the other's compliance with the terms hereof. Tenant hereby acknowledges and agrees that inclusion on the List of Tenant or any Affiliate or Principal of Tenant at any time during this Lease Term shall be a material default of this Lease. Tenant, and all beneficial owners of Tenant, are currently (i) in compliance with and shall at all times during the Term of this Lease remain in compliance with the regulations of the Office of Foreign Assets Control ("**OFAC**") of the U.S. Department of Treasury and any statute, executive order, or regulation relating thereto (collectively, the "**OFAC Rules**"), (ii) not listed on, and shall not during the Term of this Lease be listed on, the Specially Designated Nationals and Blocked Persons List, Foreign Sanctions Evaders List, or the Sectoral Sanctions Identifications List, which are all maintained by OFAC and/or on any other similar list maintained by OFAC or other governmental authority pursuant to any authorizing statute, executive order, or regulation, and (iii) not a person or entity with whom a U.S. person is prohibited from conducting business under the OFAC Rules. Notwithstanding anything to the contrary contained herein, Tenant shall not permit the Premises or any portion thereof to be used or occupied by any Person on the List (on a permanent, temporary or transient basis), and any such use or occupancy of the Premises by any such Person shall be a material default of this Lease. Notwithstanding anything to the contrary contained in this Section 29(c), so long as Landlord or its ultimate parent is a company whose capital stock is traded on a recognized public exchange, Landlord makes no representations or warranties as to the persons or entities owning an interest in Landlord.

(d) The following capitalized terms, whenever used in this Lease, shall have the respective meanings ascribed to such terms as follows: (i) "**Prohibited Entity**" shall mean (A) any Prohibited Person or (B) any Person that is identified on the List; (ii) "**Prohibited Person**" shall mean (A) any Person (1) that is in default, after notice and beyond the expiration of any applicable cure period, of such Person's obligations under any material written agreement with the City, the State of New York or any of their instrumentalities, or (2) that directly controls, is controlled by, or is under common control with a Person that is in default, after notice and beyond the expiration of any applicable cure period, of such Person's obligations under any material written agreement with the City, the State of New York or any of their instrumentalities, unless, in each instance, such default or breach either (a) has been waived in writing by the City, the State of New York or any of their instrumentalities as the case may be, or (b) is being disputed in a court of law, administrative proceeding, arbitration or other forum, or (c) is cured within 30 days after a determination and notice to Tenant from Landlord that such Person is a Prohibited Person as a result of such default; (B) any Person that is an Organized Crime Figure; (C) any government, or any Person that is

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directly or indirectly controlled (rather than only regulated) by a government, that is finally determined to be in violation of (including, but not limited to, any participant in an international boycott in violation of) the Export Administration Act of 1979, as amended, or any successor statute, or the regulations issued pursuant thereto, or any government that is, or any Person that, directly or indirectly, is controlled (rather than only regulated) by a government that is subject to the regulations or controls thereof; (D) any government, or any Person that, directly or indirectly, is controlled (rather than only regulated) by a government, the effects or the activities of which are regulated or controlled pursuant to regulations of the United States Treasury Department or executive orders of the President of the United States of America issued pursuant to the Trading with the Enemy Act of 1917, as amended; (E) any Person that is in default in the payment to the City of any real estate taxes, sewer rents or water charges totaling more than $10,000, unless such default is then being contested in good faith in accordance with applicable Legal Requirements or unless such default is cured within 30 days after a determination and notice to Tenant from Landlord that such Person is a Prohibited Person as a result of such default; or (F) any Person (1) that has solely owned, at any time during the 3-year period immediately preceding a determination of whether such Person is a Prohibited Person, any property which, while in the ownership of such Person, was acquired by the City by in rem tax foreclosure, other than a property in which the City has released or is in the process of releasing its interest pursuant to the Administrative Code of the City, or (2) that, directly or indirectly controls, is controlled by, or is under common control with a Person that has owned, at any time in the 3-year period immediately preceding a determination of whether such Person is a Prohibited Person, any property which, while in the ownership of such Person, was acquired by the City by in rem tax foreclosure, other than a property in which the City has released or is in the process of releasing its interest to such Person pursuant to the Administrative Code of the City; (iii) "**Organized Crime Figure**" shall mean any Person (A) who has been convicted in a criminal proceeding for a felony or any crime involving moral turpitude or that is an organized crime figure or is reputed to have substantial business or other affiliations with an organized crime figure, or (B) who, directly or indirectly controls, is controlled by, or is under common control with, a Person who has been convicted in a criminal proceeding for a felony or any crime involving moral turpitude or that is an organized crime figure or is reputed to have substantial business or other affiliations with an organized crime figure; and, the determination as to whether any Person is an organized crime figure or is reputed to have substantial business or other affiliations with an organized crime figure shall be within the sole discretion of Landlord, which discretion shall be exercised in good faith, or as determined by the Ground Landlord in accordance with the terms of the Ground Lease; (iv) "**Person**" shall mean (A) an individual, corporation, limited liability company, partnership, joint venture, estate, trust, unincorporated association or other business entity, (B) any federal, state, county or municipal government (or any bureau, department, agency or instrumentality thereof), and (C) any fiduciary acting in such capacity on behalf of any of the foregoing; (v) "**List**" shall mean, collectively, as updated from time to time, the Specially Designated Nationals and Blocked Persons List, Foreign Sanctions Evaders List, or the Sectoral Sanctions Identifications List, which are all maintained by OFAC and/or on any other similar list maintained by OFAC pursuant to any authorizing statute, executive order or regulation; and (vi) "**Principal**" shall mean, in respect of Tenant, any Person that is a direct or indirect owner of an equity interest in Tenant.

30. **Environmental Requirements**.

(a) **Prohibition/Compliance/Indemnity**. Tenant shall not cause or permit any Hazardous Materials (as hereinafter defined) to be brought upon, kept, used, stored, handled, treated, generated in or about, or released or disposed of from, the Premises or the Project in violation of applicable Environmental Requirements (as hereinafter defined) by Tenant or any Tenant Party. If Tenant breaches the obligation stated in the preceding sentence, or if the presence of Hazardous Materials in the Premises during the Term or any holding over results in contamination of the Premises, the Project or any adjacent property, or if contamination of the Premises, the Project or any adjacent property by Hazardous Materials brought into, kept, used, stored, handled, treated, generated in or about, or released or disposed of from, the Premises by anyone other than Landlord and Landlord's employees, agents and contractors otherwise occurs during the Term or any holding over, Tenant hereby indemnifies and shall defend and hold Landlord, its officers, directors, employees, agents and contractors harmless from any and all actions (including, without

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limitation, remedial or enforcement actions of any kind, administrative or judicial proceedings, and orders or judgments arising out of or resulting therefrom), costs, claims, damages (including, without limitation, punitive damages and damages based upon diminution in value of the Premises or the Project, or the loss of, or restriction on, use of the Premises or any portion of the Project), expenses (including, without limitation, attorneys', consultants' and experts' fees, court costs and amounts paid in settlement of any claims or actions), fines, forfeitures or other civil, administrative or criminal penalties, injunctive or other relief (whether or not based upon personal injury, property damage, or contamination of, or adverse effects upon, the environment, water tables or natural resources), liabilities or losses (collectively, "**Environmental Claims**") which arise during or after the Term as a result of such contamination. This indemnification of Landlord by Tenant includes, without limitation, costs incurred in connection with any investigation of site conditions or any cleanup, treatment, remedial, removal, or restoration work required by any federal, state or local Governmental Authority because of Hazardous Materials present in the air, soil or ground water above, on, or under the Premises. Without limiting the foregoing, if the presence of any Hazardous Materials on the Premises, the Building, the Project or any adjacent property caused or permitted by Tenant or any Tenant Party results in any contamination of the Premises, the Building, the Project or any adjacent property, Tenant shall promptly take all actions at its sole expense and in accordance with applicable Environmental Requirements as are necessary to return the Premises, the Building, the Project or any adjacent property to the condition existing prior to the time of such contamination, provided that Landlord's approval of such action shall first be obtained, which approval shall not unreasonably be withheld so long as such actions would not potentially have any material adverse long-term or short-term effect on the Premises, the Building or the Project.

(b) **Business.** Landlord acknowledges that it is not the intent of this Section 30 to prohibit Tenant from using the Premises for the Permitted Use. Tenant may operate its business according to prudent industry practices so long as the use or presence of Hazardous Materials is strictly and properly monitored according to all then applicable Environmental Requirements. As a material inducement to Landlord to allow Tenant to use Hazardous Materials in connection with its business, Tenant agrees to deliver to Landlord prior to the Commencement Date a list identifying each type of Hazardous Materials to be brought upon, kept, used, stored, handled, treated, generated on, or released or disposed of from, the Premises and setting forth any and all governmental approvals or permits required in connection with the presence, use, storage, handling, treatment, generation, release or disposal of such Hazardous Materials on or from the Premises ("**Hazardous Materials List**"). Tenant shall deliver to Landlord an updated Hazardous Materials List at least once a year and shall also deliver an updated list before any new Hazardous Material is brought onto, kept, used, stored, handled, treated, generated on, or released or disposed of from, the Premises. Tenant shall deliver to Landlord true and correct copies of the following documents (the "**Haz Mat Documents**") relating to the use, storage, handling, treatment, generation, release or disposal of Hazardous Materials prior to the Commencement Date, or if unavailable at that time, concurrent with the receipt from or submission to a Governmental Authority: permits; approvals; reports and correspondence; storage and management plans, notice of violations of any Legal Requirements; plans relating to the installation of any storage tanks to be installed in or under the Project (provided, said installation of tanks shall only be permitted after Landlord has given Tenant its written consent to do so, which consent may be withheld in Landlord's sole and absolute discretion); all closure plans or any other documents required by any and all federal, state and local Governmental Authorities for any storage tanks installed in, on or under the Project for the closure of any such tanks; and a Surrender Plan (to the extent surrender in accordance with Section 28 cannot be accomplished in 3 months). Tenant is not required, however, to provide Landlord with any portion(s) of the Haz Mat Documents containing information of a proprietary nature which, in and of themselves, do not contain a reference to any Hazardous Materials or hazardous activities. It is not the intent of this Section 30(b) to provide Landlord with information which could be detrimental to Tenant's business should such information become possessed by Tenant's competitors.

(c) **Tenant Representation and Warranty**. Tenant hereby represents and warrants to Landlord that (i) neither Tenant nor any of its legal predecessors has been required by any prior landlord,

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lender or Governmental Authority at any time to take remedial action in connection with Hazardous Materials contaminating a property which contamination was permitted by Tenant of such predecessor or resulted from Tenant's or such predecessor's action or use of the property in question, and (ii) Tenant is not subject to any enforcement order issued by any Governmental Authority in connection with the use, storage, handling, treatment, generation, release or disposal of Hazardous Materials (including, without limitation, any order related to the failure to make a required reporting to any Governmental Authority). If Landlord determines that this representation and warranty was not true as of the date of this lease, Landlord shall have the right to terminate this Lease in Landlord's sole and absolute discretion.

(d) **Testing**. Landlord shall have the right to conduct annual tests of the Premises to determine whether any contamination of the Premises or the Project has occurred as a result of Tenant's use. Tenant shall be required to pay the reasonable cost of such annual test of the Premises; provided, however, that if Tenant conducts its own tests of the Premises using third party contractors and test procedures acceptable to Landlord which tests are certified to Landlord, Landlord shall accept such tests in lieu of the annual tests to be paid for by Tenant. In addition, at any time, and from time to time, prior to the expiration or earlier termination of the Term, Landlord shall have the right to conduct appropriate tests of the Premises and the Project to determine if contamination has occurred as a result of Tenant's use of the Premises. In connection with such testing, upon the request of Landlord, Tenant shall deliver to Landlord or its consultant such non-proprietary information concerning the use of Hazardous Materials in or about the Premises by Tenant or any Tenant Party. If contamination has occurred for which Tenant is liable under this Section 30, Tenant shall pay all costs to conduct such tests. If no such contamination is found, Landlord shall pay the costs of such tests (which shall not constitute an Operating Expense). Landlord shall provide Tenant with a copy of all third party, non-confidential reports and tests of the Premises made by or on behalf of Landlord during the Term without representation or warranty and subject to a confidentiality agreement. Tenant shall, at its sole cost and expense, promptly and satisfactorily remediate any environmental conditions identified by such testing in accordance with all Environmental Requirements. Landlord's receipt of or satisfaction with any environmental assessment in no way waives any rights which Landlord may have against Tenant.

(e) **Underground Tanks**. If underground or other storage tanks storing Hazardous Materials located on the Premises or the Project are used by Tenant or are hereafter placed on the Premises or the Project by Tenant, Tenant shall install, use, monitor, operate, maintain, upgrade and manage such storage tanks, maintain appropriate records, obtain and maintain appropriate insurance, implement reporting procedures, properly close any underground storage tanks, and take or cause to be taken all other actions necessary or required under applicable state and federal Legal Requirements, as now exist or may hereafter be adopted or amended in connection with the installation, use, maintenance, management, operation, upgrading and closure of such storage tanks.

(f) **Tenant's Obligations**. Tenant's obligations under this Section 30 shall survive the expiration or earlier termination of this Lease. During any period of time after the expiration or earlier termination of this Lease required by Tenant or Landlord to complete the removal from the Premises of any Hazardous Materials (including, without limitation, the release and termination of any licenses or permits restricting the use of the Premises and the completion of the approved Surrender Plan), Tenant shall continue to pay the full Rent in accordance with this Lease attributable to any portion of the Premises not relet by Landlord in Landlord's sole discretion, which Rent shall be prorated daily.

(g) **Definitions.** As used herein, the term "**Environmental Requirements**" means all applicable present and future statutes, regulations, ordinances, rules, codes, judgments, orders or other similar enactments of any Governmental Authority regulating or relating to health, safety, or environmental conditions on, under, or about the Premises or the Project, or the environment, including without limitation, the following: the Comprehensive Environmental Response, Compensation and Liability Act; the Resource Conservation and Recovery Act; and all state and local counterparts thereto, and any regulations or policies promulgated or issued thereunder. As used herein, the term "**Hazardous Materials**" means and includes

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any substance, material, waste, pollutant, or contaminant listed or defined as hazardous or toxic, or regulated by reason of its impact or potential impact on humans, animals and/or the environment under any Environmental Requirements, asbestos and petroleum, including crude oil or any fraction thereof, natural gas liquids, liquefied natural gas, or synthetic gas usable for fuel (or mixtures of natural gas and such synthetic gas). As defined in Environmental Requirements, Tenant is and shall be deemed to be the "**operator**" of Tenant's "**facility**" and the "**owner**" of all Hazardous Materials brought on the Premises by Tenant or any Tenant Party, and the wastes, by-products, or residues generated, resulting, or produced therefrom.

(h) Tenant shall comply with (or cause to be complied with) all applicable federal, state and local laws concerning any Regulated Medical Waste that Tenant or any subtenant or occupant of the Premises produces, brings on, keeps, uses, stores, disposes or treats in or about the Premises or transported from the Premises. Tenant shall also comply with all applicable federal, state and local laws related to the health and safety of its employees. "**Regulated Medical Waste**" means any substance, gas, material or chemical, or any part thereof, which is defined as or included in the definition of "regulated medical waste" or words of similar import under any Requirement, including by not limited to Section 27-1502 of the New York Environmental Conservation Law, 42 U.S.C. Section 6901 et seq., the Medical Waste Tracking Act of 1988 and Track XIII of the New York State Public Health Law and the regulations promulgated thereunder.

31. **Tenant's Remedies/Limitation of Liability**. Landlord shall not be in default hereunder unless Landlord fails to perform any of its obligations hereunder within 30 days after written notice from Tenant specifying such failure (unless such performance will, due to the nature of the obligation, require a period of time in excess of 30 days, then after such period of time as is reasonably necessary). Upon any default by Landlord, Tenant shall give notice by registered or certified mail to any Holder of a Mortgage covering the Premises and to any landlord of any lease of property in or on which the Premises are located and Tenant shall offer such Holder and/or landlord a reasonable opportunity to cure the default, including time to obtain possession of the Project by power of sale or a judicial action if the same should prove necessary to effect a cure; provided Landlord shall have furnished to Tenant in writing the names and addresses of all such persons who are to receive such notices. All obligations of Landlord hereunder shall be construed as covenants, not conditions; and, except as may be otherwise expressly provided in this Lease, Tenant may not terminate this Lease for breach of Landlord's obligations hereunder.

All obligations of Landlord under this Lease will be binding upon Landlord only during the period of its ownership of the Premises and not thereafter. The term "**Landlord**" in this Lease shall mean only the owner for the time being of the Premises. Upon the transfer by such owner of its interest in the Premises, such owner shall thereupon be released and discharged from all obligations of Landlord thereafter accruing, but such obligations shall be binding during the Term upon each new owner for the duration of such owner's ownership.

32. **Inspection and Access**. Landlord and its agents, representatives, and contractors may enter the Premises at any reasonable time to inspect the Premises and to make such repairs as may be required or permitted pursuant to this Lease and for any other business purpose. Landlord and Landlord's representatives may enter the Premises during business hours on not less than 48 hours advance written notice (except in the case of emergencies in which case no such notice shall be required and such entry may be at any time, although Landlord shall use its reasonable efforts to notify Tenant of such entrance via telephone or otherwise, as soon as reasonably practicable, after the fact) for the purpose of effecting any such repairs, inspecting the Premises, showing the Premises to prospective purchasers and, during the last year of the Term, to prospective tenants or for any other business purpose. Landlord may erect a suitable sign on the Premises stating the Premises are available to let or that the Project is available for sale. Landlord may grant easements, make public dedications, designate Common Areas and create restrictions on or about the Premises, provided that no such easement, dedication, designation or restriction materially, adversely affects Tenant's use or occupancy of the Premises for the Permitted Use. At

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Landlord's request, Tenant shall execute such instruments as may be necessary for such easements, dedications or restrictions. Tenant shall at all times, except in the case of emergencies, have the right to escort Landlord or its agents, representatives, contractors or guests while the same are in the Premises, provided such escort does not materially and adversely affect Landlord's access rights hereunder.

33. **Security**. Tenant acknowledges and agrees that security devices and services, if any, while intended to deter crime may not in given instances prevent theft or other criminal acts and that Landlord is not providing any security services with respect to the Premises. Tenant agrees that Landlord shall not be liable for, and Tenant waives any claim against Landlord with respect to, any loss by theft or any other damage suffered or incurred by Tenant in connection with any unauthorized entry into the Premises or any other breach of security with respect to the Premises. Tenant shall be solely responsible for the personal safety of Tenant's officers, employees, agents, contractors, guests and invitees while any such person is in, on or about the Premises, the Building and/or the Project. Tenant shall at Tenant's cost obtain insurance coverage to the extent Tenant desires protection against such criminal acts. All employees, contractors and/or agents of any provider of security services to the Premises engaged by Tenant shall be prohibited from carrying firearms (e.g. handguns, rifles, shotguns, etc.). Each individual employee or independent contractor of any such service provider shall have been registered with Landlord by facsimile or mail at least 48 hours in advance of such person arriving at the Project to perform service, which registration shall require such personal information and history, and photographs, as Landlord shall reasonably require.

34. **Force Majeure**. Landlord shall not be responsible or liable for delays in the performance of its obligations hereunder when caused by, related to, or arising out of acts of God, strikes, lockouts, or other labor disputes, vandalism, embargoes, quarantines, weather, national, regional, or local disasters, calamities, or catastrophes, inability to obtain labor or materials (or reasonable substitutes therefor) at reasonable costs or failure of, or inability to obtain, utilities necessary for performance, governmental restrictions, orders, limitations, regulations, or controls, national emergencies, delay in issuance or revocation of permits, enemy or hostile governmental action, terrorism, insurrection, riots, civil disturbance or commotion, fire or other casualty, and other causes or events beyond the reasonable control of Landlord ("**Force Majeure**").

35. **Brokers, Entire Agreement, Amendment**. Landlord and Tenant each represents and warrants that it has not dealt with any broker, agent or other person (collectively, "**Broker**") in connection with this transaction and that no Broker brought about this transaction other than Cushman & Wakefield, Inc. Landlord and Tenant each hereby agree to indemnify and hold the other harmless from and against any claims by any Broker, other than the broker, if any named in this Section 35, claiming a commission or other form of compensation by virtue of having dealt with Tenant or Landlord, as applicable, with regard to this leasing transaction.

36. **Limitation on Landlord's Liability.** NOTWITHSTANDING ANYTHING SET FORTH HEREIN OR IN ANY OTHER AGREEMENT BETWEEN LANDLORD AND TENANT TO THE CONTRARY: (A) LANDLORD AND THE CONDOMINIUM BOARD SHALL NOT BE LIABLE TO TENANT OR ANY OTHER PERSON FOR (AND TENANT AND EACH SUCH OTHER PERSON ASSUME ALL RISK OF) LOSS, DAMAGE OR INJURY, WHETHER ACTUAL OR CONSEQUENTIAL TO: TENANT'S PERSONAL PROPERTY OF EVERY KIND AND DESCRIPTION, INCLUDING, WITHOUT LIMITATION TRADE FIXTURES, EQUIPMENT, INVENTORY, SCIENTIFIC RESEARCH, SCIENTIFIC EXPERIMENTS, LABORATORY ANIMALS, PRODUCT, SPECIMENS, SAMPLES, AND/OR SCIENTIFIC, BUSINESS, ACCOUNTING AND OTHER RECORDS OF EVERY KIND AND DESCRIPTION KEPT AT THE PREMISES AND ANY AND ALL INCOME DERIVED OR DERIVABLE THEREFROM; (B) THERE SHALL BE NO PERSONAL RECOURSE TO LANDLORD OR THE CONDOMINIUM BOARD FOR ANY ACT OR OCCURRENCE IN, ON OR ABOUT THE PREMISES OR ARISING IN ANY WAY UNDER THIS LEASE OR ANY OTHER AGREEMENT BETWEEN LANDLORD AND TENANT WITH RESPECT TO THE SUBJECT MATTER HEREOF AND ANY LIABILITY OF LANDLORD HEREUNDER SHALL BE STRICTLY

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LIMITED SOLELY TO LANDLORD'S INTEREST IN THE PROJECT OR ANY PROCEEDS FROM SALE OR CONDEMNATION THEREOF AND ANY INSURANCE PROCEEDS PAYABLE IN RESPECT OF LANDLORD'S INTEREST IN THE PROJECT OR IN CONNECTION WITH ANY SUCH LOSS; AND (C) IN NO EVENT SHALL ANY PERSONAL LIABILITY BE ASSERTED AGAINST ANY OF LANDLORD'S OR THE CONDOMINIUM BOARD'S OFFICERS, DIRECTORS, EMPLOYEES, AGENTS OR CONTRACTORS. UNDER NO CIRCUMSTANCES SHALL LANDLORD OR ANY OF LANDLORD'S OR THE CONDOMINIUM'S BOARD'S OFFICERS, DIRECTORS, EMPLOYEES, AGENTS OR CONTRACTORS BE LIABLE FOR INJURY TO TENANT'S BUSINESS OR FOR ANY LOSS OF INCOME OR PROFIT THEREFROM.

37. **Severability**. If any clause or provision of this Lease is illegal, invalid or unenforceable under present or future laws, then and in that event, it is the intention of the parties hereto that the remainder of this Lease shall not be affected thereby. It is also the intention of the parties to this Lease that in lieu of each clause or provision of this Lease that is illegal, invalid or unenforceable, there be added, as a part of this Lease, a clause or provision as similar in effect to such illegal, invalid or unenforceable clause or provision as shall be legal, valid and enforceable.

38. **Signs; Exterior Appearance**. Tenant shall not, without the prior written consent of Landlord, which may be granted or withheld in Landlord's sole discretion: (i) attach any awnings, exterior lights, decorations, balloons, flags, pennants, banners, painting or other projection to any outside wall of the Project, (ii) use any curtains, blinds, shades or screens other than Landlord's standard window coverings, (iii) coat or otherwise sunscreen the interior or exterior of any windows, (iv) place any bottles, parcels, or other articles on the window sills, (v) place any equipment, furniture or other items of personal property on any exterior balcony, or (vi) paint, affix or exhibit on any part of the Premises or the Project any signs, notices, window or door lettering, placards, decorations, or advertising media of any type which can be viewed from the exterior of the Premises. Interior signs on doors and the directory tablet shall be inscribed, painted or affixed for Tenant by Landlord at the sole cost and expense of Tenant, and shall be of a size, color and type acceptable to Landlord. Nothing may be placed on the exterior of corridor walls or corridor doors other than Landlord's standard lettering. The directory tablet shall be provided exclusively for the display of the name and location of tenants of the Project.

39. **Zoning Rights.** At all times, Landlord shall have the right, and Tenant shall not have the right, (i) to cause all or any part of the Premises and/or the zoning lot upon which the Building is located in whole or in part (hereinafter referred to solely for purposes of this Section 39 as the "Land") and/or the Building, to be combined with any other land, condominium units or other premises so as to constitute the combined premises into a single zoning "lot" or "development" or "enlargement" as those terms are now, or may hereafter be, defined in the Zoning Resolution of The City of New York (the "Zoning Resolution"), (ii) to cause any lot, development or enlargement at any time constituting or including all or any part of the Premises, the Land or the Building to be subdivided into two or more lots, developments or enlargements, (iii) to cause development rights (whether from the Land or other premises) to be transferred to any such lot, development or enlargement, (iv) to cause other combinations, subdivisions and transfers to be effected, whether similar or dissimilar to those now permitted by law or (v) to exploit, sell, convey, lease or otherwise transfer any so called "air rights," "air space," "zoning rights" or "development rights" above or appurtenant to the Land and/or the Building provided that and for so long as the foregoing actions described in clauses (i) through (v) do not (a) adversely affect Tenant or Tenant's use and enjoyment of the Premises, (b) increase the Base Rent or any Additional Rent, (c) otherwise increase the obligations of Tenant or the rights of Landlord under this Lease or (d) otherwise decrease the obligations of Landlord or the rights of Tenant under this Lease. Tenant hereby acknowledges that it is not a "party in interest" as defined in the Zoning Resolution, and shall not and cannot become a "party in interest" under any circumstances by virtue of its leasehold interest hereunder. Tenant further acknowledges that neither Tenant nor the estate or interest of Tenant hereunder would be "adversely affected" (within the meaning of the Zoning Resolution) by any development of the Land or the Building or any such combined premises nor by the filing of any declaration combining all or a part of the Land and/or the Building with any other premises and that Tenant's

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estate and interest hereunder are not and would not be superior to any such declaration. Notwithstanding the foregoing, in the event that Tenant is deemed to have any of the rights disclaimed above, or is deemed to be a party in interest, Tenant hereby transfers such rights and any rights as a party in interest to Landlord. In furtherance thereof, Tenant will within 3 business days after written request by Landlord execute and deliver to Landlord a waiver of its right to join in a Declaration of Restrictions pursuant to Section 12-10 of the Zoning Resolution.

40. **Excavation.** In the event that an excavation, or any construction, should be undertaken in connection with the Building or other purposes upon land adjacent to the Building and/or the Project, or should be authorized to be made, Tenant shall, upon reasonable prior notice, if necessary, afford to the person or persons causing or authorized to cause such excavation or construction or other purpose, the right, for brief periods of time and in a manner so as to avoid any material interference with Tenant's business, subject to such reasonable conditions as Tenant may reasonably impose, to enter upon the Premises for the purpose of doing such work as shall reasonably be necessary to protect or preserve the wall or walls of the Building, from injury or damage and to support them by proper foundations, pinning and/or underpinning, or otherwise.

41. **Employment Reporting and Requirements.**

(a) With regard to each annual period from July 1 through June 30 from and after the date of this Lease if requested by Landlord, Tenant shall complete with regard to itself and any of its subtenants, items 1-5, 15 and 16 of the Employment and Benefits Report (with the dates therein updated to reflect the applicable Fiscal Year) attached as Exhibit P to the Ground Lease, and Tenant shall sign such report and submit it to Landlord before July 15 immediately following such annual period; and

(b) Tenant shall, in good faith, consider such proposals as the City and/or City-related entities may make with regard to any jobs Tenant may seek to fill in relation to its activities on or concerning the Premises, and shall provide the City and such entities with the opportunity to (A) refer candidates who are City residents having the requisite experience for the positions in question, and/or (B) create a program to train City residents for those jobs, and to report to Ground Landlord, upon Ground Landlord's request, regarding the status of its consideration of such proposals (it being understood that Tenant shall not be required to hire any candidate which Tenant, in good faith, considers unqualified for the applicable position).

(c) Both Landlord and Ground Landlord and their respective designees shall be beneficiaries of each such agreement by Tenant. Landlord hereby reserves the right, on behalf of itself and Ground Landlord, and their respective designees, as such third party beneficiaries, to seek specific performance by Tenant, at the expense of Tenant, of the aforesaid obligations contained in this Section 41.

42. **Prohibited Distinctions.** Tenant covenants and agrees to be bound by the following covenants, which shall be binding for the benefit of Landlord and Ground Landlord and enforceable by Landlord and Ground Landlord against Tenant to the fullest extent permitted by law and equity:

(a) Tenant (and any lessees of the Premises or any part thereof) shall comply with all applicable federal, state, and local laws in effect from time to time prohibiting discrimination or segregation by reason of age, race, creed, religion, sex, color, national origin, ancestry, sexual orientation or affectional preference, disability, or marital status (collectively, "**Prohibited Distinctions**") in the lease or occupancy of the Premises.

(b) Tenant shall not effect or execute any agreement, lease, conveyance, or other instrument whereby the lease or occupancy of the Premises, or any part thereof, is restricted upon the basis of any Prohibited Distinction.

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(c) Tenant (and any lessees of the Premises or any part thereof) shall include the covenants of (a) and (b) in any agreement, sublease, conveyance, or other instrument with respect to the lease or occupancy of the Premises.

43. **IDA Lease Requirements**. Tenant shall provide, and shall cause any subtenant or other occupant of the Premises to provide, to Landlord and to any other entity specified by Landlord in writing, the information that Landlord needs in order to satisfy the reporting requirements set forth in the provisions of the IDA Lease excerpted on **Exhibit M** hereto, as the same may be modified from time to time by the governmental entities requiring the same. Tenant represents, and shall cause and subtenant or other occupant of the Premises to represent with respect to itself (in place of "Tenant"), that either: (A) Tenant's occupancy at the Project will not result in the removal of a plant or facility of Tenant located outside of the City, but within the State of New York, to the Project or in the abandonment of one or more of such plants or facilities of such Tenant located outside of the City but within the State of New York or (B) Tenant's location at the Project is reasonably necessary to discourage Tenant from removing its business to a location outside of the State of New York or is reasonably necessary to preserve Tenant's competitive position in its industry.

44. **ICIP.** Landlord hereby notifies Tenant that Landlord intends to avail itself of the Industrial and Commercial Incentive Program ("**ICIP**"). In connection therewith, all of Tenant's construction managers, contractors and subcontractors employed in connection with construction work at the Building shall be contractually required by Tenant to comply with the New York City Department of Small Business Services/Division of Labor Services ("**DLS**") requirements applicable to construction projects benefiting from the ICIP. Such compliance, as of the date hereof, includes the following: the submission and approval of a Construction Employment Report, attendance at a pre-construction conference with representatives of the DLS and adherence to the provisions of Article 22 of the ICIP Rules and Regulations, the provisions of New York City Charter Chapter 13-B and the provisions of Executive Order No. 50 (1980). Furthermore, at Landlord's request, Tenant shall (A) report to Landlord the number of workers permanently engaged in employment in the Premises, the nature of each worker's employment and, to the extent applicable, the New York City residency of each worker, (B) provide access to the Premises by employees and agents of the Department (as such term is defined in the ICIP Rules and Regulations) at all reasonable times upon reasonable advance notice, and (C) enforce the contractual obligations of Tenant's construction managers, contractors and subcontractors to comply with the DLS requirements.

45. **Release of Portion(s) of the Project.** Landlord, at any time and from time to time, shall have the right to subdivide, transfer title to, or enter into a ground lease or long-term net lease (a "**Partial Conveyance**") of, or convert to a condominium form of ownership, any portion of the Project (including, for example, by transferring one or more of the Project's buildings and/or another portion or portions of the Project) to another Person not in Control of, Controlled by or under common Control with, Landlord, which such Partial Conveyance may reduce the size of the Project. In the event of such a Partial Conveyance by Landlord, Landlord and Tenant agree to enter into an amendment of this Lease in form reasonably satisfactory to Landlord and Tenant to adjust the definitions of Real Property and Project, if necessary and in accordance with the conditions set forth in this Section 45, to describe accurately the land and improvements constituting the remaining portion of the Land and Project after such Partial Conveyance; to increase Tenant's Share, if necessary to reflect the transfer of the portion of the Land and/or the Project included in such Partial Conveyance; and to make any other changes that may be necessary or appropriate so that Tenant continues to be responsible for its other obligations, including the payment of Rent, under this Lease and to enjoy its rights and privileges under this Lease, subject to and in accordance with this Section 45.

46. **Shared Lab Area**

(a) **General Provisions**. Notwithstanding anything to the contrary herein, Tenant shall have a license, on a non-exclusive basis in common with other tenants and users of the tenth (10th) floor of the


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Building, to use the Shared Lab Area for the Permitted Use, in accordance with the Rules and Regulations applicable thereto and all Legal Requirements, but such access and use shall be subject to the terms of the Superior Instruments (as defined in Section 27). The Shared Lab Area contains certain equipment, furnishings, systems, and personal property, as more particularly described on **Exhibit I** (collectively, the "**Shared Lab Systems**"). The license granted hereby is personal to Tenant and shall not, except as provided in the next sentence, be assigned or otherwise pledged or transferred, directly or indirectly. In the case of a Permitted Assignment, Tenant shall have no further right to use the Shared Lab Area and the Shared Lab Systems in accordance with the terms and conditions of this Lease; provided, however, that the following shall have the non-exclusive license to use the Shared Lab Systems in accordance with the terms and conditions of this Lease: (i) a subtenant approved by Landlord in accordance with the provisions of this Lease that subleases 50% or more of the Premises, and (ii) an assignee permitted under a Permitted Assignment.

(b) **Relocation/Modification of Shared Lab Area**. Landlord shall have the right at any time and from time to time in the exercise of its sole and absolute subjective discretion to reconfigure, relocate, or modify the Shared Lab Area and to revise, expand, suspend, terminate, or discontinue any of the Shared Lab Systems. If the same does occur, Landlord agrees that the Shared Lab Area shall either remain on, or be readily accessible by Tenant from, the 10th Floor of the Building. Landlord shall provide reasonable notice to Tenant of the relocation, suspension, termination, or discontinuance of any Shared Lab Systems as long as Landlord has actual knowledge of any such relocation, suspension, termination, or discontinuance.

(c) **Interference**. Tenant shall use the Shared Lab Area and the Shared Lab Systems in a manner that will not interfere with the rights of any tenants or occupants in the Building or users of the Shared Lab Area or the providers of the services associated with the Shared Lab Systems. Landlord assumes no responsibility for enforcing Tenant's rights or for protecting the Shared Lab Area from any person or entity, including, but not limited to, other tenants or occupants of the Building or users of the Shared Lab Area.

(d) **Limitations**. Landlord's sole obligation for providing the Shared Lab Systems shall be: (A) to provide the Shared Lab Systems as is determined by Landlord in the exercise of its sole and absolute subjective discretion, and (B) to contract with one or more third parties to maintain the Shared Lab Systems that are deemed by Landlord in the exercise of its sole and absolute subjective discretion to need periodic maintenance in accordance with the manufacturer's or supplier's standard guidelines or otherwise. During any period of replacement, repair, or maintenance of the Shared Lab Systems when they are not operational (including, but not limited to, any delays thereto due to the inability to obtain parts or replacements), Landlord shall have no obligation to provide Tenant with alternative, supplemental, temporary, or back-up Shared Lab Systems. Tenant acknowledges and agrees that, because the Shared Lab Area and Shared Lab Systems are provided for the benefit of all tenants and users of the tenth (10th) floor of the Building, Landlord may reduce the Shared Lab Area and/or Shared Lab Systems and/or the resources therein from time to time in response to a lack of usage by such tenants or obsolescence or similar reasons and users and may increase, replace or otherwise modify the Shared Lab Area and/or Shared Lab Systems and/or resources therein from time to time in response to the needs of such tenants and users. Landlord shall have no liability for any such reduction, increase, replacement or modification of the Shared Lab Area and/or Shared Lab Systems, and none of the foregoing shall reduce the Base Rent payable by Tenant hereunder. Tenant acknowledges and agrees that increases, replacements and/or modifications of the Shared Lab Area and/or Shared Lab Systems may result in an increase in Operating Expenses (SLA), and Tenant agrees to pay Tenant's Share (SLA) of any such increase in accordance with Section 46(h) below. The terms and provisions of this paragraph shall survive the expiration or earlier termination of this Lease.

(e) **No Warranties**. Landlord makes no warranties of any kind, express or implied, with respect to the Shared Lab Area and Shared Lab Systems, and Landlord disclaims any such warranties.

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Without limiting the foregoing, Tenant expressly acknowledges and agrees that Landlord does not guaranty or warrant that the Shared Lab Systems will be operational at all times, will be of sufficient capacity to accommodate Tenant's use thereof, will be free of Hazardous Materials, or will function or perform adequately, and Landlord shall not be liable for any damages resulting from the failure of the Shared Lab Systems.

(f) **Other Lease Provisions**. Although the Shared Lab Area does not form a part of the Premises, the provisions of this Lease (A) governing Tenant's use, operation, and enjoyment of the Premises, (B) imposing obligations on Tenant for matters occurring in, on, within, or about the Premises or arising out of the use or occupancy of the Premises (including, but not limited to, those obligations relating to insurance, indemnification, Hazardous Materials Clearance, and environmental requirements triggered by Tenant's use of the Shared Lab Area), and (C) limiting Landlord's liability, shall apply with equal force to Tenant's use of the Shared Lab Area and the Shared Lab Systems.

(g) **Termination**. If Tenant Defaults in its obligations under this Section 46, Landlord shall have the right, in addition to any other rights and remedies available to Landlord for a Default by Tenant, to terminate immediately Tenant's license to use the Shared Lab Area. The expiration or earlier termination of this Lease shall automatically terminate the license hereby granted to Tenant to so use the Shared Lab Area.

(h) **Shared Lab Area Operating Expenses**.

(i) **Shared Lab Area Operating Expense Payments**. Landlord shall deliver to Tenant an Annual Estimate of Operating Expenses (SLA) for each calendar year during the Term, which may be revised by Landlord from time to time during such calendar year. During each month of the Term, on the same date that Base Rent is due, Tenant shall pay Landlord, as Additional Rent hereunder, an amount equal to 1/12th of Tenant's Share (SLA) of the Annual Estimate of Operating Expenses (SLA). Payments for any fractional calendar month or any portion of a calendar year shall be prorated based on the number of days in the respective month or year which fall within the Term.

(ii) The term "**Operating Expenses (SLA)**" means all costs and expenses of maintaining, repairing, replacing and operating the Shared Lab Area and the Shared Lab Systems incurred or accrued each calendar year by Landlord.

(iii) Each Annual Statement shall include (a) the total and Tenant's Share (SLA) of actual Operating Expenses (SLA) for the previous calendar year and (b) the total of Tenant's payments in respect of Tenant's Share (SLA) of actual Operating Expenses (SLA) for such year. If Tenant's Share (SLA) of actual Operating Expenses (SLA) for such year exceeds Tenant's payments of Tenant's Share (SLA) of Operating Expenses (SLA) for such year, then the excess shall be due and payable by Tenant as Rent within 30 days after delivery of such Annual Statement to Tenant. If Tenant's payments of Operating Expenses (SLA) for such year exceed Tenant's Share (SLA) of actual Operating Expenses (SLA) for such year, then Landlord shall pay the excess to Tenant within 30 days after delivery of such Annual Statement, except that after the expiration, or earlier termination of the Term or if Tenant is delinquent in its obligation to pay Rent, Landlord shall pay the excess to Tenant after deducting all other amounts due Landlord. Operating Expenses (SLA) for the calendar years in which Tenant's obligation to share therein begins and ends shall be prorated.

(iv) In the event of termination or discontinuance of the Shared Lab Area in its entirety, Tenant shall no longer be obligated to pay for Tenant's Share (SLA) of actual Operating Expenses (SLA) for any period from and after the effective date of such termination or discontinuance unless and until resumption of the Shared Lab Area.

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47. **Miscellaneous**.

(a) **Notices**. All notices or other communications between the parties shall be in writing and shall be deemed duly given upon delivery or refusal to accept delivery by the addressee thereof if delivered in person, or upon actual receipt if delivered by reputable overnight guaranty courier, addressed and sent to the parties at their addresses set forth above. Landlord and Tenant may from time to time by written notice to the other designate another address for receipt of future notices.

(b) **Joint and Several Liability**. If and when included within the term "**Tenant**," as used in this instrument, there is more than one person or entity, each shall be jointly and severally liable for the obligations of Tenant.

(c) **Financial Information**. Tenant shall furnish Landlord with true and complete copies of (i) Tenant's most recent audited annual financial statements within 90 days of the end of each of Tenant's fiscal years during the Term, (ii) Tenant's most recent unaudited quarterly financial statements within 45 days of the end of each of Tenant's first three fiscal quarters of each of Tenant's fiscal years during the Term, (iii) at Landlord's request from time to time, updated business plans, including cash flow projections and/or pro forma balance sheets and income statements, all of which shall be treated by Landlord as confidential information belonging to Tenant, (iv) corporate brochures and/or profiles prepared by Tenant for prospective investors, and (v) any other financial information or summaries that Tenant typically provides to its lenders or shareholders.

(d) **Recordation**. Neither this Lease nor a memorandum of lease shall be filed by or on behalf of Tenant in any public record. Landlord may prepare and file, and upon request by Landlord Tenant will execute, a memorandum of lease. Each such memorandum shall include such matters as may be required by the Register of New York County or Section 291-c of the Real Property Law of the State of New York to be included therein so as to permit the same to be recorded.

(e) **Interpretation**. The normal rule of construction to the effect that any ambiguities are to be resolved against the drafting party shall not be employed in the interpretation of this Lease or any exhibits or amendments hereto. Words of any gender used in this Lease shall be held and construed to include any other gender, and words in the singular number shall be held to include the plural, unless the context otherwise requires. The captions inserted in this Lease are for convenience only and in no way define, limit or otherwise describe the scope or intent of this Lease, or any provision hereof, or in any way affect the interpretation of this Lease.

(f) **Not Binding Until Executed**. The submission by Landlord to Tenant of this Lease shall have no binding force or effect, shall not constitute an option for the leasing of the Premises, nor confer any right or impose any obligations upon either party until execution of this Lease by both parties.

(g) **Limitations on Interest**. It is expressly the intent of Landlord and Tenant at all times to comply with applicable law governing the maximum rate or amount of any interest payable on or in connection with this Lease. If applicable law is ever judicially interpreted so as to render usurious any interest called for under this Lease, or contracted for, charged, taken, reserved, or received with respect to this Lease, then it is Landlord's and Tenant's express intent that all excess amounts theretofore collected by Landlord be credited on the applicable obligation (or, if the obligation has been or would thereby be paid in full, refunded to Tenant), and the provisions of this Lease immediately shall be deemed reformed and the amounts thereafter collectible hereunder reduced, without the necessity of the execution of any new document, so as to comply with the applicable law, but so as to permit the recovery of the fullest amount otherwise called for hereunder.


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(h) **Time**. Time is of the essence as to the performance of Tenant's obligations under this Lease, taking into account provisions for notice and/or cure periods expressly set forth herein.

(i) **Incorporation by Reference**. All exhibits and addenda attached hereto are hereby incorporated into this Lease and made a part hereof. If there is any conflict between such exhibits or addenda and the terms of this Lease, such exhibits or addenda shall control.

48. **Landlord Consent.**

(a) If, pursuant to the terms of this Lease, any consent or approval by Landlord or Tenant is not to be unreasonably withheld or is subject to a specified standard, then in the event of a final determination that the consent or approval was unreasonably withheld or that such specified standard has been met (such that the consent or approval should have been granted), the consent or approval shall be deemed granted but the granting of the consent or approval shall be the only remedy to the party requesting or requiring the consent or approval.

(b) If any matter which is the subject of a request for consent or approval hereunder by Tenant requires the consent or approval by any Superior Party under the Superior Instruments (including, by way of example, proposed Alterations), Tenant shall submit in writing such request (together with any plans, specifications or other materials or documents necessary or appropriate in connection therewith) to Landlord, and Landlord shall, provided Tenant is not then in monetary or material non-monetary default hereunder, in each instance, beyond the expiration of any applicable notice and/or cure period, promptly forward such request to such of the foregoing parties from whom consent is required and otherwise cooperate reasonably with Tenant in requesting and seeking to obtain such required consent; and, in any such case, Landlord shall in no event be deemed to have unreasonably withheld or delayed any such request for consent or approval if any of the foregoing parties shall fail to respond to such request (unless such failure is deemed to constitute consent under the applicable Superior Instrument) or shall deny same. If Landlord shall so determine that any such matter requires the consent or approval of any of the foregoing parties, Landlord shall use good faith reasonable efforts to obtain from such parties such consent or approval (but without any obligation to pay any fee to such party unless Tenant agrees to pay the same); provided that Tenant shall submit to Landlord, upon Landlord's request therefor, all plans, specifications or other materials, information or documentation as may be reasonably required by such parties, under the Superior Instruments in connection with each such parties' respective consideration of such request. Tenant shall pay to Landlord, within thirty (30) days after demand therefor, as Additional Rent, all actual out-of-pocket fees, charges or other expenses Landlord may incur arising out of any such request for consent or approval. In no event shall Tenant communicate (other than through Landlord) with any Superior Party in respect of any Alterations or any other matter pertaining to this Lease.

49. **Hazardous Activities**. Notwithstanding any other provision of this Lease, Landlord, for itself and its employees, agents and contractors, reserves the right to refuse to perform any repairs or services in any portion of the Premises which, pursuant to Tenant's routine safety guidelines, practices or custom or prudent industry practices, require any form of protective clothing or equipment other than safety glasses. In any such case, Tenant shall contract with parties who are acceptable to Landlord, in Landlord's reasonable discretion, for all such repairs and services, and Landlord shall, to the extent required, equitably adjust Tenant's Share of Operating Expenses in respect of such repairs or services to reflect that Landlord is not providing such repairs or services to Tenant.

50. **Internet Service.** It is currently anticipated that wireless internet service ("**Internet Service**") will be available in the Common Areas and Open Space in the Project. In the event that Internet Service is so available, Tenant shall have the right, on a non-exclusive basis in common with other tenants and users of the Project, to use such Internet Service, subject to the further terms of this Section 50.

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(a) Tenant acknowledges that Landlord is not the generator of Internet Service and that the availability and quality of Internet Service consequently is subject to the provision of the same to the Project by the third party provider(s) responsible for delivering same to the Project. Landlord shall have no liability for the availability, capacity, quality, continuity or character of service of Internet Service, and no abatement of Rent or other penalty shall arise due to, nor shall Landlord have any liability due to any loss, cost, claim, damage or expense arising from the availability, capacity, quality, continuity or character of service of Internet Service or any interruption, deterioration or removal of Internet Service. Tenant acknowledges that the capacity of Internet Service available for use by Tenant (if any) is part of the overall capacity of Internet Service available to the Project for use on a non-exclusive basis in common with all other tenants at the Project. Tenant agrees to limit Tenant's use of Internet Service to Tenant's reasonable share of the then-existing capacity of Internet Service, and Tenant shall not use Internet Service in a manner that interferes with any other tenant's or user's use of such Internet Service.

(b) By accessing or using Internet Service, Tenant accepts and agrees to comply with all terms and conditions applicable thereto (including any modifications and/or additions thereto provided in connection with accessing or using Internet Service from time to time).

(c) Tenant acknowledges and agrees that all information (including, without limitation, data files, written text, computer software, music, audio files or other sounds, photographs, graphics, videos or other images) which Tenant may have access to as a part of, or through Tenant's use of, Internet Service (collectively, "**Content**") is the sole responsibility of the person from whom such Content originated. Tenant acknowledges and agrees that by using Internet Service, Tenant may be exposed to Content that Tenant may find offensive, indecent or objectionable, and Tenant uses the Internet Service at its own risk. Landlord and any third party provider(s) responsible for delivering Internet Service to the Project reserve the right (but shall have no obligation) to pre-screen, review, flag, filter, modify, refuse or remove any or all Content from the Internet Service. Landlord does not control the Content posted via the Internet Service and, as such, does not guarantee the accuracy, integrity, or quality of such Content. Under no circumstances shall Landlord or any Superior Parties be liable in any way for any Content, including, without limitation, any errors or omissions in any Content, or for any loss or damage arising out of or in connection with Tenant's use of the Internet Service (including, without limitation, damages for loss of use, lost profits or loss of data or information of any kind).

(d) Tenant is solely responsible for maintaining Tenant's account for the use of Internet Service, and Tenant is fully responsible for all activities that occur under Tenant's account and in connection with Tenant's use of the Internet Service. Tenant agrees to notify Landlord and any third party provider(s) responsible for delivering Internet Service to the Project immediately of any unauthorized use of Tenant's account or any other breaches of security of which Tenant becomes aware. Tenant is solely responsible for, and shall indemnify, defend, and hold harmless Landlord and the Superior Parties for, any Content created, uploaded, posted, emailed, transmitted, displayed or otherwise made available by Tenant via the Internet Service and for any and all consequences of Tenant's use of the Internet Service (including, without limitation, any loss or damage suffered by Landlord or any Superior Parties arising therefrom or in connection therewith).

(e) Tenant agrees not to use the Internet Service to:

(i) upload, post, email, transmit or otherwise make available any Content that is unlawful, harmful, threatening, abusive, harassing, tortious, defamatory, vulgar, obscene, libelous, invasive of another's privacy, hateful, or racially, ethnically or otherwise objectionable under objective standards;

(ii) harm minors in any way;


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(iii) impersonate any person or entity or falsely state or otherwise misrepresent Tenant's affiliation with a person or entity;

(iv) forge headers or otherwise manipulate identifiers in order to disguise the origin of any Content transmitted through the Internet Service;

(v) upload, post, email, transmit or otherwise make available any Content that Tenant does not have a right to make available under any law or under contractual or fiduciary relationships (such as inside information, proprietary and confidential information learned or disclosed as part of employment relationships or under nondisclosure agreements);

(vi) upload, post, email, transmit or otherwise make available any Content that infringes any patent, trademark, trade secret, copyright or other proprietary or intellectual property rights of any party;

(vii) upload, post, email, transmit or otherwise make available any unsolicited or unauthorized advertising, promotional materials, "junk mail," "spam," "chain letters," "pyramid schemes," or any other form of solicitation, except in those areas (such as shopping) that are designated for such purpose;

(viii) upload, post, email, transmit or otherwise make available any material that contains software viruses or any other computer code, files or programs designed to interrupt, destroy or limit the functionality of any computer software or hardware or telecommunications equipment;

(ix) disrupt the normal flow of dialogue, cause a screen to "scroll" faster than other users of the Internet Services are able to type, or otherwise act in a manner that negatively affects other users' ability to engage in real time exchanges;

(x) interfere with or disrupt the Internet Services or servers or networks connected to the Internet Services, or disobey any requirements, procedures, policies or regulations of networks connected to the Internet Services, including using any device, software or routine to bypass our robot exclusion headers;

(xi) intentionally or unintentionally violate any applicable local, state, national or international law, including, but not limited to, regulations promulgated by the U.S. Securities and Exchange Commission, any rules of any national or other securities exchange, including, without limitation, the New York Stock Exchange, the American Stock Exchange or the NASDAQ, and any regulations having the force of law;

(xii) provide material support or resources (or to conceal or disguise the nature, location, source, or ownership of material support or resources) to any organization(s) designated by the United States government as a foreign terrorist organization pursuant to Section 219 of the Immigration and Nationality Act;

(xiii) "stalk" or otherwise harass another; or

(xiv) collect or store personal data about other users in connection with the prohibited conduct and activities set forth in clauses (i) through (xiii) above.

(f) Tenant acknowledges, consents to and agrees that Landlord and/or any third party provider(s) responsible for delivering Internet Service to the Project may access, preserve and disclose

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Tenant's account information associated with the Internet Service if required to do so by applicable Legal Requirements or in a good faith belief that such access, preservation or disclosure is reasonably necessary to (i) comply with legal process, (ii) comply with the directives of law enforcement officials, (iii) enforce the provisions of this Section 50 and/or the terms and conditions applicable to the Internet Service from time to time, (iv) respond to claims that any Content violates the rights of third parties, (v) respond to Tenant's requests for customer service, and/or (vi) protect the rights, property or personal safety of Landlord, the Superior Parties, any third party provider(s) responsible for delivering Internet Service to the Project, any users of Internet Service, any tenants or other occupants of the Project and the public.

(g) Tenant acknowledges and agrees that the Internet Service may include security components that permit digital materials to be protected, and that the use of these materials is subject to such usage rules as may be set by Landlord, any third party provider(s) responsible for delivering Internet Service to the Project, and/or any Content provider(s). Tenant shall not attempt to override or circumvent any of such usage rules, and any unauthorized reproduction, publication, further distribution or public exhibition of the materials provided on the Internet Service, in whole or in part, is strictly prohibited.

**[ Signatures on next page ]**

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IN WITNESS WHEREOF, Landlord and Tenant have executed this Lease as of the day and year first above written.

**TENANT:**

**ROCKET PHARMACEUTICALS, LTD.**,
a Cayman Islands corporation

By: /s/ Gaurav Shah
Name: Gaurav Shah, M.D.
Its: CEO

**LANDLORD:**

**ARE-EAST RIVER SCIENCE PARK, LLC**,
a Delaware limited liability company

By: ALEXANDRIA REAL ESTATE EQUITIES, L.P.,
a Delaware limited partnership,
managing member

By: ARE-QRS CORP.,
a Maryland corporation,
general partner

By: /s/ Gary Dean
Name: Gary Dean
Its: Senior Vice President, RE Legal Affairs

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**EXHIBIT A TO LEASE**

**DESCRIPTION OF PREMISES**

[See Attached]


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**EXHIBIT B TO LEASE**

**DESCRIPTION OF PROJECT**

**PARCEL. OF LAND**
**BEING NEW TAX LOT 99 IN TAX BLOCK 962**
**IN-THE BOROUGH OF MANHATTAN**
**CITY OF NEW YORK**
**NEW YORK COUNTY, NEW YORK**

All that certain plot, piece or parcel of land situate, lying and being In the Borough of Manhattan, City, County, and Stale of Now York, being more particularly bounded and described as follows:

**LOT 99 (PARCEL 3)**

BEGINNING at a point on the southerly side of former East 30th Street (60 feet side); said point being 416.74 feel distant easterly from the corner formed by the Intersection of the easterly side of First Avenue (100 feet wide) with the southerly side of former East 30th Street, discontinued and closed;

Running thence easterly along southerly side of former East 30th Street, discontinued and closed, a distance of 44.48 feet to a point;

Running thence southerly through lands now or formerly Bellevue Hospital (tax Lot 100), a distance of 154.73 feet to a point; said line forming an interior angle of 90 degrees 00 minutes 00 seconds with the last-mentioned course;

Running thence easterly through lands now or formerly Bellevue Hospital (tax Lot 100), a distance of 208.30 feet to a point of curvature; said line forming an interior angle of 90 degrees 00 minutes 39 seconds with the last-mentioned course;

Running thence southeasterly through lands now or formerly Bellevue Hospital (tax Lot 100) on a curve bearing to the left with a radius of 166.00 feet and a central angle of 00 degrees 49 minutes 52 seconds, an arc distance of 2.26 feet to a point of tangential reverse curve; the northerly side of the radial line of said curve forming an angle of 160 degrees 06 minutes 40 seconds with the northerly side of the last mentioned course;

Running thence southeasterly through lands now or formerly Bellevue Hospital (tax Lot 100) on a curve bearing to the right side with a radius of 1823.85 feet and a central angle of 04 degrees 26 minutes 04 seconds, an arc distance of 142.22 feet to a point of compound curve;

Running thence southeasterly through lands now or formerly Bellevue Hospital (tax Lot 100) on a curve bearing to the right with a radius of 931.43 feet and a central angle of 03 degrees 09 minutes 25 seconds, an arc distance of 50.77 feet to a point of reverse curve;

Running thence southeasterly through lands now or formerly Bellevue Hospital (tax Lot 100), on a curve bearing to the left with a radius of 264.50 feet and a central angle of 02 degrees 27 minutes 42 seconds, an arc distance of 11.36 feet to a point;

Running thence southeasterly through lands now or formerly Bellevue Hospital (tax Lot 100), a distance of 29.81 feet to a point; said line forming an exterior angle of 90 degrees 00 minutes 00 seconds with a radial line of the last-mentioned course;

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Running thence southwesterly through lands now or formerly Bellevue Hospital (tax Lot 100), a distance of 22.98 feet to a point; said line forming an interior angle of 89 degrees 09 minutes 05 seconds with the last-mentioned course;

Running thence southerly through lands now or formerly Bellevue Hospital (tax Lot 100), a distance of 12.82 feet to a point; said line forming an interior angle of 255 degrees 18 minutes 20 seconds with the last-mentioned course;

Running thence westerly through lands now or formerly Bellevue Hospital (tax Lot 100), a distance of 12.33 feet to a point; said line forming an interior angle of 90 degrees 01 minutes 30 seconds with the last-mentioned course;

Running thence southerly through lands now or formerly Bellevue Hospital (tax Lot 100), a distance of 7.95 feet to a point; said line forming an interior angle of 269 degrees 58 minutes 12 seconds with the last-mentioned course;

Running thence westerly through lands now or formerly Bellevue Hospital (tax Lot 100), a distance of 174.41 feet to a point; said line forming an interior angle of 90 degrees 00 minutes 00 seconds with the last-mentioned course;

Running thence northerly through lands now or formerly Bellevue Hospital (tax Lot 100), a distance of 53.17 feet to a point; said line forming an interior angle of 90 degrees 00 minutes 00 seconds with the last-mentioned course;

Running thence westerly through lands now or formerly Bellevue Hospital (tax Lot 100), a distance of 100.91 feet to a point; said line forming an interior angle of 270 degrees 00 minutes 00 seconds with the last-mentioned course;

Running thence westerly through lands now or formerly Bellevue Hospital (tax Lot 100), a distance of 141.75 feet to a point; said line forming an interior angle of 179 degrees 52 minutes 00 seconds with the last-mentioned course;

Running thence westerly through lands now or formerly Bellevue Hospital (tax Lot 100), a distance of 49.25 feet to a point; said line forming an interior angle of 180 degrees 08 minutes 00 seconds with the last-mentioned course;

Running thence southerly through land now or formerly of Bellevue Hospital (tax Lot 100), a distance of 0.60 feet to a point; said line forming an interior angle of 270 degrees 00 minutes 00 seconds with the last-mentioned course;

Running thence westerly through lands now or formerly Bellevue Hospital (tax Lot 100), a distance of 83.53 feet to a point; said line forming an interior angle of 90 degrees 00 minutes 00 seconds with the last-mentioned course;

Running thence northerly through lands now or formerly Bellevue Hospital (tax Lot 100), a distance of 102.83 feet to a point; said line forming an interior angle of 90 degrees 00 minutes 00 seconds with the last-mentioned course;

Running thence westerly through lands now or formerly Bellevue Hospital (tax Lot 100), a distance of 152.62 feet to a point on the easterly side of First Avenue; said line forming an interior angle of 270 degrees 00 minutes 00 seconds with the last-mentioned course;

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Running thence northerly along with easterly side of First Avenue, a distance of 53.87 feet to a point; said line forming an interior angle of 90 degrees 00 minutes 00 seconds with the last-mentioned course;

Running thence easterly through lands now or formerly Bellevue Hospital (tax Lot 100), a distance of 398.90 feet to a point of curvature, said line forming an interior angle of 90 degrees 00 minutes 00 seconds with the last-mentioned course;

Running thence northeasterly through lands now or formerly Bellevue Hospital (tax Lot 100) on a curve bearing to the left with a radius of 107.00 feet and a central angle of 02 degrees 56 minutes 57 seconds, an arc distance of 5.51 feet to a point, the radial line of said curve forming an exterior angle of 58 degrees 29 minutes 28 seconds with the last-mentioned course;

Running thence northeasterly through lands now or formerly Bellevue Hospital (tax Lot 100), a distance of 16.46 feet to a point, said line forming an exterior angle of 90 degrees 00 minutes 00 seconds with the radial line of the last-mentioned course;

Running thence northerly through lands now or formerly Bellevue Hospital (tax Lot 100), a distance of 48.42 feet to a point, said line forming an interior angle of 233 degrees 32 minutes 31 seconds with the last-mentioned course;

Running thence easterly through lands now or formerly Bellevue Hospital (tax Lot 100), a distance of 3.08 feet to a point, said line forming an interior angle of 90 degrees 00 minutes 00 seconds with the last-mentioned course;

Running thence northerly through lands now or formerly Bellevue Hospital (tax Lot 100), a distance of 76.00 feet to a point, said line forming an interior angle of 270 degrees 00 minutes 00 seconds with the last-mentioned course;

Running thence westerly through lands now or formerly Bellevue Hospital (tax Lot 100), a distance of 2.98 feet to a point, said line forming an interior angle of 270 degrees 00 minutes 00 seconds with the last-mentioned course;

Running thence northerly through lands now or formerly Bellevue Hospital (tax Lot 100), a distance of 61.14 feet, said line forming an interior angle of 90 degrees 00 minutes 00 seconds with the last-mentioned course to the place and point of beginning;

Together with the benefit of the easements set forth in that certain Temporary and Permanent Easement Agreement made between The City of New York, New York City Health and Hospitals Corporation and ARE-East River Science Park, LLC, dated December 29, 2006 to be recorded in the Office of the City Register, New York County.

THE FOLLOWING IS THE “OPTION LAND” UNDER THE GROUND LEASE, AND WILL BE INCLUDED IN THE “LAND” IF THE OPTION UNDER THE GROUND LEASE IS EXERCISED.

**A LEASE PARCEL OF LAND**
**BEING A PORTION OF TAX LOT 100 IN TAX BLOCK 962**
**IN THE BOROUGH OF MANHATTAN**
**CITY OF NEW YORK**
**NEW YORK COUNTY, NEW YORK**

All that certain plot, piece or parcel of land situate, lying in tax Block 962 as laid out on the Borough President of Manhattan Borough Survey Maps Nos. 34 and 39 and laid out on the Borough President of

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Manhattan Final Sectional Maps Nos. 44 and 45 and being a portion of tax Lot 100, Borough of Manhattan, City, County, and State of New York, being more particularly bounded and described as follows:

**PARCEL 2**

BEGINNING at a point on the southerly side of former East 30th Street (60 feet wide), discontinued and closed; said point have 461.22 feet distant from the corner formed by the Intersection of the easterly side of First Avenue with the southerly side of former East 30th Street (60 feet wide), discontinued and closed;

Running thence easterly along said southerly side of former East 30th Street, discontinued and closed, a distance of 156.64 feet to a point on the westerly side of Franklin D. Roosevelt Drive (width varies);

Running thence southerly along the westerly side of Franklin D. Roosevelt Drive, a distance of 0.02 feet to a point; said line forming an interior angle of 99 degrees 26 minutes 57 seconds with the last-mentioned course;

Running thence easterly along the westerly side of Franklin D. Roosevelt Drive, a distance of 10.10 feet to a point; said line forming an interior angle of 260 degrees 33 minutes 03 seconds with the last-mentioned course;

Running thence southeasterly through lands now or formerly Bellevue Hospital (tax Lot 100) on a curve bearing to the right with a radius of 24.00 feet and a central angel of 19 degrees 03 minutes 15 seconds, an arc distance of 7.98 feet to a point of tangent, the northerly side of the radial line of said curve forming an angle of 40 degrees 56 minutes 00 seconds with the southerly side of the last-mentioned course;

Running thence southeasterly through lands now or formerly Bellevue Hospital (tax Lot 100), a distance of 42.30 feet to a point of curvature;

Running thence southerly on a curve bearing to the right with a radius of 144.00 feet and a central angle of 22 degrees 15 minutes 45 seconds, an arc distance of 55.95 feet to a point of reverse curve;

Running thence southerly through lands now or formerly Bellevue Hospital (tax Lot 100) on a curve bearing to the left with a radius of 156.00 feet and a central angle of 20 degrees 15 minutes 42 seconds, an arc distance of 55.17 feet to a point;

Running thence westerly through lands now or formerly Bellevue Hospital (tax Lot 100), a distance of 206.30 feet to a point; said line forming an angle of 160 degrees 08 minutes 40 seconds on its northerly side with the northerly side of the radial line of the last-mentioned course;

Running thence northerly through lands now or formerly Bellevue Hospital (tax Lot 100), a distance of 154.73 feet to the place and point of Beginning; said line forming an interior angle of 90 degrees 00 minutes 39 seconds with the last-mentioned course,

Containing 29,680.05 square feet or 0.6787 acre.
Together with a Construction and Permanent Easement Agreement and Exhibits.

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**EXHIBIT C TO LEASE**

**[INTENTIONALLY OMITTED]**

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**EXHIBIT D TO LEASE**

**ACKNOWLEDGMENT OF COMMENCEMENT DATE**

This **ACKNOWLEDGMENT OF COMMENCEMENT DATE** is made as of this _____ day of _____, 20__, between ARE-East River Science Park, LLC a Delaware limited liability company ("**Landlord**"), and Rocket Pharmaceuticals, Ltd., a Cayman Islands corporation ("**Tenant**"), and is attached to and made a part of that certain Lease Agreement, dated as of March 31, 2016 (the "**Lease**"), by and between Landlord and Tenant. Any initially capitalized terms used but not defined herein shall have the meanings given them in the Lease.

Landlord and Tenant hereby acknowledge and agree, for all purposes of the Lease, that the Commencement Date of the Base Term of the Lease is _____ ____, 20__ and the termination date of the Base Term of the Lease shall be midnight on _____ ____, 20__. In case of a conflict between this Acknowledgment of Commencement Date and the Lease, this Acknowledgment of Commencement Date shall control for all purposes.

IN WITNESS WHEREOF, Landlord and Tenant have executed this ACKNOWLEDGMENT OF COMMENCEMENT DATE to be effective on the date first above written.

**TENANT:**

**ROCKET PHARMACEUTICALS, LTD.**,
a Cayman Islands corporation

By:
Its:

**LANDLORD:**

**ARE-EAST RIVER SCIENCE PARK, LLC**,
a Delaware limited liability company

By: ALEXANDRIA REAL ESTATE EQUITIES, L.P.,
a Delaware limited partnership,
managing member

By: ARE-QRS CORP.,
a Maryland corporation,
general partner

By:
Name:
Its:

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**EXHIBIT E TO LEASE**

**RULES AND REGULATIONS**

1. The sidewalks, entries, and driveways of the Project shall not be obstructed by Tenant, or any Tenant Party, or used by them for any purpose other than ingress and egress to and from the Premises.

2. Tenant shall not place any objects, including antennas, outdoor furniture, etc., in the parking areas, landscaped areas or other areas outside of its Premises, or on the roof of the Project.

3. Except for animals assisting the disabled, no animals shall be allowed in the offices, halls, or corridors in the Project.

4. Tenant shall not disturb the occupants of the Project or adjoining buildings by the use of any radio or musical instrument or by the making of loud or improper noises.

5. If Tenant desires telegraphic, telephonic or other electric connections in the Premises, Landlord or its agent will direct the electrician as to where and how the wires may be introduced; and, without such direction, no boring or cutting of wires will be permitted. Any such installation or connection shall be made at Tenant's expense.

6. Tenant shall not install or operate any steam or gas engine or boiler, or other mechanical apparatus in the Premises, except as specifically approved in the Lease. The use of oil, gas or inflammable liquids for heating, lighting or any other purpose is expressly prohibited. Explosives or other articles deemed extra hazardous shall not be brought into the Project.

7. Parking any type of recreational vehicles is specifically prohibited on or about the Project. Except for the overnight parking of operative vehicles, no vehicle of any type shall be stored in the parking areas at any time. In the event that a vehicle is disabled, it shall be removed within 48 hours. There shall be no "For Sale" or other advertising signs on or about any parked vehicle. All vehicles shall be parked in the designated parking areas in conformity with all signs and other markings. All parking will be open parking, and no reserved parking, numbering or lettering of individual spaces will be permitted except as specified by Landlord.

8. Tenant shall maintain the Premises free from rodents, insects and other pests.

9. Landlord reserves the right to exclude or expel from the Project any person who, in the judgment of Landlord, is intoxicated or under the influence of liquor or drugs or who shall in any manner do any act in violation of the Rules and Regulations of the Project.

10. Tenant shall not cause any unnecessary labor by reason of Tenant's carelessness or indifference in the preservation of good order and cleanliness. Landlord shall not be responsible to Tenant for any loss of property on the Premises, however occurring, or for any damage done to the effects of Tenant by the janitors or any other employee or person.

11. Tenant shall give Landlord prompt notice of any defects in the water, lawn sprinkler, sewage, gas pipes, electrical lights and fixtures, heating apparatus, or any other service equipment affecting the Premises.

12. Tenant shall not permit storage outside the Premises, including without limitation, outside storage of trucks and other vehicles, or dumping of waste or refuse or permit any harmful materials to be placed in any drainage system or sanitary system in or about the Premises.

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13. All moveable trash receptacles provided by the trash disposal firm for the Premises must be kept in the trash enclosure areas, if any, provided for that purpose.

14. No auction, public or private, will be permitted on the Premises or the Project.

15. No awnings shall be placed over the windows in the Premises except with the prior written consent of Landlord.

16. The Premises shall not be used for lodging, sleeping or cooking or for any immoral or illegal purposes or for any purpose other than that specified in the Lease. No gaming devices shall be operated in the Premises.

17. Tenant shall ascertain from Landlord the maximum amount of electrical current which can safely be used in the Premises, taking into account the capacity of the electrical wiring in the Project and the Premises and the needs of other tenants, and shall not use more than such safe capacity. Landlord's consent to the installation of electric equipment shall not relieve Tenant from the obligation not to use more electricity than such safe capacity.

18. Tenant assumes full responsibility for protecting the Premises from theft, robbery and pilferage.

19. Tenant shall not install or operate on the Premises any machinery or mechanical devices of a nature not directly related to Tenant's ordinary use of the Premises and shall keep all such machinery free of vibration, noise and air waves which may be transmitted beyond the Premises.

20. Landlord reserves the right to exclude any individuals from the Project at any time in its sole and absolute discretion. Tenant acknowledges this right and agrees to cooperate with Landlord, subject to applicable law, in Landlord's exercise of this right.

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**EXHIBIT F TO LEASE**

**TENANT'S PERSONAL PROPERTY**

None

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## EXHIBIT G TO LEASE

**[INTENTIONALLY OMITTED]**

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## EXHIBIT H TO LEASE

**[INTENTIONALLY OMITTED]**

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**EXHIBIT I TO LEASE**

**SHARED LAB SYSTEMS**

**10th Floor Science Hotel:**

- Built-in Laboratory Sterilizer.
- Built-in Glassware Washers.
- Shared Vacuum system located in 7th Floor Mechanical Room.
- Shared compressed air system located in 7th Floor Mechanical Room.
- Shared RO/DI water system located in 7th Floor Mechanical Room.

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**EXHIBIT J TO LEASE**

**ADDITIONAL INSUREDS**

The East River Science Park Condominium

Alexandria Real Estate Equities, Inc.

New York City Health and Hospitals Corporation

New York City Economic Development Corporation

New York City Industrial Development Agency

City of New York

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## EXHIBIT K TO LEASE

**[INTENTIONALLY OMITTED]**

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**EXHIBIT L TO LEASE**

**OPEN SPACE DESCRIPTION**

[See Attached]

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**EXHIBIT M TO LEASE**

**SUPERIOR INSTRUMENT EXCERPTS**

[See Attached]

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**EXHIBIT N TO LEASE**

**SHARED LAB AREA**

[See Attached]

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**Exhibit 21.1**

**Subsidiaries of Rocket Pharmaceuticals, Inc.**

| | Subsidiary | Jurisdiction of Incorporation | Rocket Ownership |
|---|---|---|---|
| 1. | Inotek Securities Corporation | Massachusetts | 100% |
| 2. | Inotek Ltd. | Bermuda | 100% |
| 3. | Rocket Pharmaceuticals, Ltd.[a] | Cayman Islands | 100% |

(a) Effective January 4, 2018, Rome Merger Sub, a wholly owned subsidiary of Inotek Pharmaceuticals Corporation, merged into Rocket Pharmaceuticals, Ltd.

**Exhibit 23.1**

**CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

We consent to the incorporation by reference in the Registration Statements on Forms S-8 (Nos. 333-204501, 333-212308 and 333-216892) and on Form S-3 (No. 333-210585) of Rocket Pharmaceuticals, Inc. (formerly known as Inotek Pharmaceuticals Corporation) of our report dated March 7, 2018, relating to the consolidated financial statements of Rocket Pharmaceuticals, Inc., appearing in this Annual Report on Form 10-K of Rocket Pharmaceuticals, Inc. for the year ended December 31, 2017.

/s/ RSM US LLP

Boston, Massachusetts
March 7, 2018

**Exhibit 31.1**

**Certifications under Section 302**

I, Gaurav Shah, MD, certify that:

1. I have reviewed this annual report on Form 10-K of Rocket Pharmaceuticals, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: March 7, 2018

/s/ Gaurav Shah, MD

Gaurav Shah, MD
*President, Chief Executive Officer and Director*
*(Principal Executive Officer)*

**Exhibit 31.2**

**Certifications under Section 302**

I, John Militello, certify that:

1. I have reviewed this annual report on Form 10-K of Rocket Pharmaceuticals, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on my most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: March 7, 2018

/s/ John Militello

John Militello
*Controller*
*(Principal Financial and Accounting Officer)*

**Exhibit 32.1**

**CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350,**
**AS ADOPTED PURSUANT TO**
**SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the annual report on Form 10-K of Rocket Pharmaceuticals, Inc. (the "Company") for the period ended December 31, 2017, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), each of the undersigned officers hereby certify, pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, 18 U.S.C. Section 1350, that their knowledge:

1) the Report which this statement accompanies fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and

2) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: March 7, 2018

/s/ Gaurav Shah, MD
Gaurav Shah, MD
*President, Chief Executive Officer and Director*
*(Principal Executive Officer)*

Date: March 7, 2018

/s/ John Militello
John Militello
*Controller*
*(Principal Financial and Accounting Officer)*

*The foregoing certifications are not deemed filed with the Securities and Exchange Commission for purposes of Section 18 of the Securities Exchange Act of 1934, as amended (Exchange Act), and are not to be incorporated by reference into any filing of Rocket Pharmaceuticals, Inc. under the Securities Act of 1933, as amended, or the Exchange Act, whether made before or after the date hereof, regardless of any general incorporation language in such filing.*