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

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**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, 2016

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 001-37990

**LEAP THERAPEUTICS, INC.**

(Exact name of registrant as specified in its charter)

**Delaware** **27-4412575**  
State or other jurisdiction of (I.R.S. Employer  
incorporation or organization Identification No.)

**47 Thorndike Street, Suite B1-1, Cambridge,** **02141**  
**MA** (Zip Code)  
(Address of principal executive offices)

Registrant's telephone number, including area code **(617) 714-0360**

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

<u>Title of each class</u>	<u>Name of each exchange on which registered</u>
Common Stock, \$0.001 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 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 website, 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, or a smaller reporting company. See definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer       Accelerated filer       Non-accelerated filer       Smaller reporting company   
(Do not check if a smaller reporting company)

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

The registrant cannot compute the aggregate market value of the voting and non-voting common equity held by non-affiliates of the registrant by reference to the price at which the common equity was last sold, or the average bid and asked price of such common equity, as of June 30, 2016, the last business day of the registrant's most recently completed second fiscal quarter, because the registrant's common equity was not publicly traded as of such date. The registrant's common stock, par value \$0.001 per share, began trading on the NASDAQ Global Market on January 24, 2017.

As of March 29, 2017 there were 9,392,414 shares of the registrant's common stock, par value \$0.001 per share, outstanding.

**DOCUMENTS INCORPORATED BY REFERENCE:**

None.



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## **SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS AND INDUSTRY DATA**

This Annual Report on Form 10-K contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934, which reflect our current views with respect to, among other things, our operations and financial performance. In some cases, you can identify forward-looking statements by terminology such as "anticipate," "believe," "estimate," "expect," "intend," "may," "plan," "predict," "project," "will" or the negative of such terms or other comparable terminology. Forward-looking statements appear in a number of places throughout this Annual Report and include statements regarding our intentions, beliefs, projections, outlook, analyses or current expectations concerning, among other things, our ability and plan to develop and commercialize DKN-01 and TRX518; status, timing and results of pre-clinical studies and clinical trials; the potential benefits of DKN-01 and TRX518; the timing of our development programs and seeking regulatory approval of DKN-01 and TRX518; our ability to obtain and maintain regulatory approval; our estimates of expenses and future revenues and profitability; our estimates regarding our capital requirements and our needs for additional financing; our estimates of the size of the potential markets for DKN-01 and TRX518; our ability to attract collaborators with acceptable development, regulatory and commercial expertise; the benefits to be derived from any collaborations, license agreements, and other acquisition efforts, including those relating to the development and commercialization of DKN-01 and TRX518; sources of revenues and anticipated revenues, including contributions from any collaborations or license agreements for the development and commercialization of products; our ability to create an effective sales and marketing infrastructure if we elect to market and sell DKN-01 and TRX518 directly; the rate and degree of market acceptance of DKN-01 and TRX518; the timing and amount of reimbursement for DKN-01 and TRX518; the success of other competing therapies that may become available; the manufacturing capacity for DKN-01 and TRX518; our intellectual property position; our ability to maintain and protect our intellectual property rights; our results of operations, financial condition, liquidity, prospects, and growth and strategies; the industry in which we operate; and the trends that may affect the industry or us.

By their nature, forward-looking statements involve risks and uncertainties because they relate to events, competitive dynamics and industry change, and depend on the economic circumstances that may or may not occur in the future or may occur on longer or shorter timelines than anticipated. Although we believe that we have a reasonable basis for each forward-looking statement contained in this Annual Report, we caution you that forward-looking statements are not guarantees of future performance and that our actual results of operations, financial condition and liquidity, and the development of the industry in which we operate may differ materially from the forward-looking statements contained in this Annual Report. In addition, even if our results of operations, financial condition and liquidity, and events in the industry in which we operate are consistent with the forward-looking statements contained in this Annual Report, they may not be predictive of results or developments in future periods. You should carefully read this Annual Report and the documents that we have filed as exhibits to this Annual Report completely.

You should refer to Item 1A. Risk Factors in this Annual Report for a discussion of important factors that may cause our actual results to differ materially from those expressed or implied by our forward-looking statements. As a result of these factors, we cannot assure you that the forward-looking statements in this Annual Report will prove to be accurate. Furthermore, if our forward-looking statements prove to be inaccurate, the inaccuracy may be material. In light of the significant uncertainties in these forward-looking statements, you should not regard these statements as a representation or warranty by us or any other person that we will achieve our objectives and plans in any specified timeframe, or at all. Any forward-looking statements that we make in this Annual Report speaks only as of the date of such statement, and, except to the extent required by applicable law, we undertake no obligation to update such statements to reflect events or circumstances after the date of this Annual Report or to reflect the occurrence of unanticipated events. You should, therefore, not rely on these forward-looking statements as representing our views as of any date subsequent to the date of this Annual Report. Comparisons of results for current and any prior periods are not intended to

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express any future trends or indications of future performance, unless expressed as such, and should only be viewed as historical data.

DKN-01 and TRX518 are investigational drugs undergoing clinical development and have not been approved by the U.S. Food and Drug Administration (the "FDA"), nor been submitted to the FDA for approval. DKN-01 and TRX518 have not been, and may never be, approved by any regulatory agency or marketed anywhere in the world. Statements contained in this Annual Report should not be deemed to be promotional.

We obtained the industry, market and competitive position data in this Annual Report from our own internal estimates and research as well as from industry and general publications and research surveys and studies conducted by third parties. Industry publications and surveys generally state that the information contained therein has been obtained from sources believed to be reliable. We believe this data is accurate in all material respects as of the date of this Annual Report.

## INTRODUCTORY COMMENT

### References to Leap

Throughout this Annual Report on Form 10-K, the "Company," "Leap," "Leap Therapeutics," "we," "us," and "our," except where the context requires otherwise, refer to Leap Therapeutics, Inc. and its consolidated subsidiaries, and "our board of directors" refers to the board of directors of Leap Therapeutics, Inc.

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## PART I

### Item 1. Business.

#### Corporate Information and Recent Developments

We were incorporated in the state of Delaware as Dekkun Corporation on January 3, 2011 and changed our name to HealthCare Pharmaceuticals, Inc. effective May 29, 2014, and then to Leap Therapeutics, Inc. effective November 16, 2015. During 2015, HealthCare Pharmaceuticals Pty Ltd. ("HCP Australia") was formed and is our wholly owned subsidiary.

The mailing address of Leap's principal executive office is 47 Thorndike Street, Suite B1-1, Cambridge, MA 02141. Leap's telephone number is 617-714-0360. Leap's website address is [www.leaptx.com](http://www.leaptx.com) (the information contained therein or linked thereto shall not be considered incorporated by reference in this Annual Report).

On December 10, 2015, we entered into a merger agreement with GTR Inc. ("GTR"), an entity under common control, whereby a wholly owned subsidiary was merged with GTR and the surviving name of the wholly owned subsidiary was GTR Inc.

On August 29, 2016, we entered into a definitive merger agreement with Macrocare Ltd. ("Macrocare"), a publicly held, clinical-stage biotechnology company based in Petach Tikva, Israel, and M-Co Merger Sub Ltd. ("Merger Sub"), a wholly owned subsidiary of the Company which provided for the merger of Macrocare with and into Merger Sub, with Macrocare continuing after the merger as a wholly owned subsidiary of the Company. On February 1, 2017, Macrocare's name was changed to Leap Therapeutics Ltd. Macrocare, Inc., a Delaware corporation, is a wholly owned subsidiary of Leap Therapeutics Ltd., and an indirect wholly owned subsidiary of Leap.

Pursuant to the Merger Agreement, the existing equity holders of the Company agreed to invest an additional \$10.0 million at the closing of the transaction. On January 23, 2017, the Company issued 3,257,368 shares of its common stock in exchange for 100% of the outstanding ordinary shares of Macrocare upon consummation of the merger.

#### Overview

We are a biopharmaceutical company acquiring and developing novel therapeutics at the leading edge of cancer biology. Our approach is designed to target compelling tumor-promoting and immuno-oncology pathways to generate durable clinical benefit and enhanced outcomes for patients. Our programs are monoclonal antibodies that target key cellular pathways that enable cancer to grow and spread and specific mechanisms that activate the body's immune system to identify and attack cancer. Our two clinical stage programs are:

- *DKN-01*: A monoclonal antibody targeting Dickkopf-related protein 1, or DKK1, a protein that regulates important cell signaling pathways, known as the Wnt pathways, and influences the immune environment around tumor cells as well as tumor cell growth. When DKN-01 binds to DKK1, Wnt signaling pathways and the tumor microenvironment are altered, and an anti-tumor effect can be generated. We are testing DKN-01 in ongoing clinical trials in patients with esophagogastric cancer in combination with paclitaxel and in patients with biliary tract cancer in combination with gemcitabine and cisplatin. We have studied DKN-01 as a monotherapy in patients with non-small cell lung cancer. DKN-01-based therapies have generated responses and clinical benefit in these patient populations.
- *TRX518*: A monoclonal antibody targeting the glucocorticoid-induced tumor necrosis factor-related receptor, or GTR, a receptor found on the surface of a wide range of immune cells. TRX518 has been specifically engineered to enhance the immune system's anti-tumor response by activating GTR signaling, or GTR agonism, to activate tumor fighting white blood cells, or

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T effector cells, and decrease the activity of potentially tumor-protective white blood cells, or T regulatory cells, without causing the immune cells to be destroyed. We believe GITR is an ideal immune system agonist target through this two-pronged approach of stimulating an anti-tumor response and reducing immune suppression. We are conducting two clinical trials of TRX518 in patients with advanced solid tumors and have evidence of biomarker modulation and clinical activity.

We intend to apply our extensive experience identifying and developing transformational products to aggressively develop these antibodies and build a pipeline of programs that has the potential to change the practice of cancer medicine.

**Market**

Cancer is the general name for a group of more than 100 diseases in which cells grow and divide out of control. Over 14 million people in the United States have cancer. The National Cancer Institute, or NCI, estimates that approximately 1.6 million people will develop cancer and that nearly 600,000 people will die of cancer this year. According to the NCI, the risk of developing cancer in the United States is 40%, and the risk of dying from cancer is 20%. While progress has been made from the War on Cancer to the Human Genome Project, and despite advances in early detection and new cancer cell targeted treatments, cancer generally remains an uncured disease.

***Esophageal Cancer***

Esophageal and esophageal-gastric junction cancer, or EC, is a malignancy of the upper digestive tract. The American Cancer Society, or ACS, estimates that there are about 17,000 new patients diagnosed in the United States with EC each year. The World Cancer Research Fund, or WCRF, estimates that there are over 450,000 EC patients diagnosed each year worldwide. EC patients have difficulty swallowing and often have pain while swallowing. Substantial weight loss can result from reduced appetite, poor nutrition and having an active cancer. Pain may be severe, occur almost daily, and be worsened by swallowing any form of food. The disruption of normal swallowing can lead to aspiration of food content, nausea, vomiting and an increased risk of pneumonia. The tumor itself may be irritable and bleed, which can either cause spitting up with blood or blood in the bowels. Compression of local structures in the esophagus occurs in advanced disease, leading to problems such as upper airway obstruction. Many people diagnosed with esophageal cancer have late-stage disease, because people usually do not have significant symptoms until half of the inside of the esophagus is obstructed, by which point the tumor is fairly large. In advanced stages, the cancer frequently spreads into the liver or lungs. There are currently no FDA approved therapies for relapsed or recurrent esophageal cancer, and the antibody, ramucirumab, which was only recently approved by the FDA is only approved for relapsed or recurrent tumors at the gastro-esophageal junction. EC patients have few options, and patients have a 5-year survival rate of 18.4%. The frequently-used therapies in patients who have not had many previous courses of treatment have very low, typically less than 15%, objective response rates, defined as patients with a greater than 30% reduction in tumor volume as determined by the Response Evaluation Criteria in Solid Tumors, known as RECIST. Published data has demonstrated that paclitaxel monotherapy generated a response rate of between 5 and 9% in EC patients who had received prior chemotherapy.

***Biliary Tract Cancer***

Biliary tract cancer is a cancer that starts in the bile duct, a thin tube about 4 to 5 inches long that reaches from the liver to the small intestine. The major function of the bile duct is to move a fluid called bile from the liver and gallbladder to the small intestine, where it helps digest the fats in food. The Cholangiocarcinoma Foundation estimates that approximately 6,000 patients will be diagnosed with biliary tract cancer in the United States each year, with publications estimating that nearly 200,000

patients are diagnosed worldwide each year. The majority of biliary tract cancer cases are diagnosed with advanced stage disease with a 5-year survival rate of less than 10%. The standard treatment option for advanced patients is systemic chemotherapy and supportive care. Published data demonstrated that gemcitabine and cisplatin combination chemotherapy in patients with advanced biliary tract cancer generated a clinical benefit rate, representing patients with either an objective response or stable disease as determined by RECIST, of 68.3% to 81.4%, median progression-free survival of 6 to 8 months, and median overall survival of 11.2 to 11.7 months.

### ***Non-Small Cell Lung Cancer***

In the United States, lung cancer is the second most common cancer, after prostate cancer in men and breast cancer in women, and the most common cause of cancer deaths. The ACS projects that approximately 225,000 cancers of the lung and bronchus will be diagnosed in the United States each year, with over 150,000 deaths. The WCRF estimates that there are over 1.8 million lung cancer patients diagnosed each year worldwide. Approximately 80% to 85% of lung cancers are non-small cell lung cancer, or NSCLC, and 10% to 15% are small cell lung cancer. Symptoms of lung cancer do not usually appear until the disease is at an advanced stage. Depending on the stage of the cancer and other factors, treatment options for people with NSCLC can include surgery, radiation, chemotherapy, targeted therapies, and immunotherapy. The 5-year survival rate for people with the least advanced stage of NSCLC, stage IA, is about 49%. As the cancer becomes more advanced and spreads to other parts of the body, it becomes more difficult to treat and the survival rate decreases. NSCLC that has spread, or stage IV NSCLC, has a 5-year survival rate of about 1%.

### **Cancer Therapies and New Targets**

Older, established cancer therapies, or chemotherapies, target all rapidly dividing cells. While chemotherapies can attack and kill cancer cells, these drugs also attack and destroy rapidly dividing non-cancer normal cells and, unfortunately, are associated with unwanted side effects. Even though outcomes can often be improved by giving a cancer patient two or more chemotherapies in combination, physicians and patients desire new drugs with greater efficacy and fewer side effects. Recently, a revolution in the understanding of cancer biology has generated compelling new anti-cancer targets that are based on fundamental mechanisms used by cancer cells to grow, spread, and survive, which are:

- cell signaling pathways that promote tumor growth, and
- evading detection and avoiding destruction by the immune system.

### ***Cancer Cell Signaling***

Cancer cells often hijack proteins that are involved in cell signaling pathways, the complex communication system that governs basic cellular functions and activities, such as cell division, cell movement, cell responses to specific stimuli, and even cell death. By blocking signals that tell cancer cells to grow and divide uncontrollably, to generate new blood vessels, a process referred to as angiogenesis, or to spread to other parts of the body, a process referred to as metastasis, a new generation of cancer therapies is seeking to help stop cancer progression, which could lead to cancer cell death. By focusing on cellular signaling pathways and molecules that are used by cancer cells, these targeted cancer therapies may be more effective than other types of treatment, including chemotherapy, and less harmful to normal cells. Several small molecule and monoclonal antibodies that target cell signaling pathways have now been approved by the FDA as cancer therapies for specific patient populations.



*Cancer Immunotherapy*

The immune system has evolved a dynamic ability to identify and attack cells which pose a danger to the body. Often these dangerous cells are foreign, or non-self, cells, but a person's own cells can become a danger, such as in cancer. Ideally, the immune system identifies cancer cells as dangerous and removes them before they can grow into tumors. However, cancer cells can evade or suppress the body's natural immune response by secreting anti-inflammatory molecules and by using receptors on the cell membrane of either immune system cells or cancer cells known as immune checkpoints. Recently approved cancer therapies known as checkpoint inhibitors, such as nivolumab, pembrolizumab, and atezolizumab, are designed to block checkpoint receptors, such as Programmed Cell Death protein-1, or PD-1, or its ligand, PD-L1, and prevent the cancer cell from evading the natural immune response, thus enabling the immune system to mount an attack on the tumor. While there are several FDA-approved checkpoint inhibitors, there is a consensus in the scientific and medical communities that there remains room for improvement in response rate and efficacy. In many cases, the lack of efficacy has been attributed to an insufficient immune response.

**Our Approach**

Our approach to treating cancer patients seeks to enhance the effectiveness of approved chemotherapies and immune checkpoint inhibitors by:

- altering cell signaling pathways that promote tumor growth and spreading;
- stimulating the immune cells that could attack the tumor; and
- inhibiting immune suppression that would prevent an attack on the tumor.

*Altering cell signaling.* An important set of signaling pathways in cancer cells are known as the canonical and non-canonical Wnt pathways. DKK1 serves as one of the inhibitors of the canonical Wnt signaling pathway and modulates the non-canonical Wnt signaling pathways. Changes in these Wnt pathways can lead to the expression of several cancer-causing genes and factors associated with cell growth, angiogenesis, and metastasis. We believe that a monoclonal antibody that reduces free DKK1 could shift canonical and non-canonical signaling to healthy levels, thereby resulting in a direct anti-tumor effect as well as a local anti-angiogenic effect in the diseased tissue. These mechanisms could enhance or complement the anti-tumor mechanisms used by chemotherapies or other therapies targeted at different cell signaling pathways.

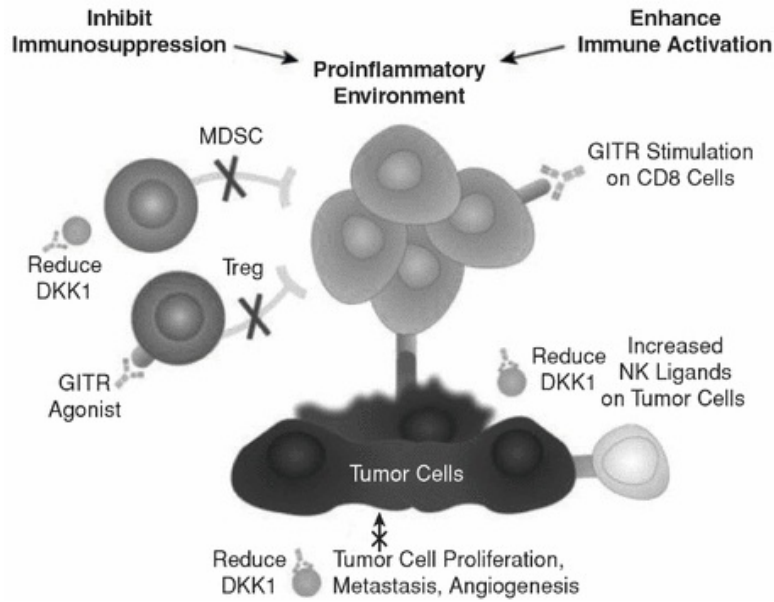
*Stimulating anti-tumor immune cells.* A potential way to enhance an immune response against a tumor is by activating tumor-attacking immune cells directly through specific receptors, such as GITR, known as costimulatory receptors. Monoclonal antibodies that stimulate immune cells through these costimulatory receptors are referred to as agonist antibodies and are designed to induce or augment an immune response that may have been insufficient, suppressed, or non-existent. This strategy is expected to overcome mechanisms that would prevent these immune cells from attacking a tumor. Agonist antibodies that costimulate the immune system have the potential to be combined with chemotherapy or checkpoint inhibitors to generate a more robust anti-tumor immune response.

*Inhibiting immune suppression.* The human immune system has the ability to recognize and protect its own cells and tissues. Certain kinds of white blood cells, such as T regulatory cells and myeloid-derived suppressor cells, serve to prevent other cells from attacking the body. In the case of cancer, these cells may fail to recognize the danger posed by the tumor and suppress the activity of potentially tumor-fighting white blood cells. We believe that using a monoclonal antibody to signal through GITR could inhibit the immunosuppressive activities of T regulatory cells. In addition, cancer cells promote these suppressor cells by producing anti-inflammatory molecules, such as DKK1. We believe that monoclonal antibodies that reduce the levels of anti-inflammatory molecules, such as

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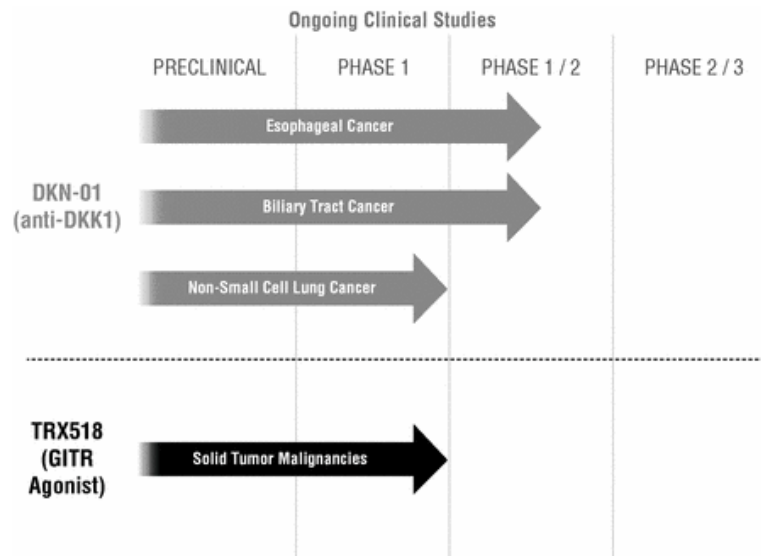
DKK1, in the tumor microenvironment could result in the inhibition of immune suppressor cells and create a pro-inflammatory environment to enhance the immune system activity against the tumor.

By targeting novel pathways and immune cell types, our therapies are designed to be ideal to combine with existing drugs and have the potential to significantly increase the survival and quality of life of cancer patients. The figure below illustrates the biology underlying our approach:



**Our Products, Clinical Programs and Pipeline**

The following table summarizes our current product pipeline.



## **DKN-01**

Dickkopf-related protein 1, or DKK1, is a cell secreted protein that research has found plays a crucial role in embryonic development. DKK1 binds to specific cell surface receptors and affects the signaling of key cellular pathways, known as the canonical and non-canonical Wnt signaling pathways. DKK1 serves as one of the inhibitors of the canonical Wnt signaling pathway and modulates the non-canonical Wnt signaling pathways. Changes in these pathways can lead to the expression of several cancer-causing genes and factors associated with cell growth, angiogenesis, and metastasis. DKK1 also has a role in suppressing the immune system from effectively targeting and clearing the cancer.

Published data indicates that DKK1 expression levels are significantly higher in many cancers, including esophageal cancer, or EC, biliary tract cancer, and non-small cell lung cancer, or NSCLC. In addition, elevated DKK1 expression is associated with worse overall survival for patients with EC, biliary tract cancer and NSCLC. Researchers have shown that when the DKK1 protein is added in certain animal models, the cancer grows larger.

Recent publications have also demonstrated a role for DKK1 in maintaining an environment around a tumor that suppresses the immune system's ability to clear the tumor and to prevent metastasis. DKK1 has been shown to activate the suppressive effects of myeloid-derived suppressor cells, or MDSC, a type of white blood cell that can potently block other immune system cells. Other published data has shown that metastatic tumor cells with stem cell-like features avoid the immune system by overexpressing DKK1 and secreting it out of the cell. Secreted DKK1 can then down-regulate certain molecules on tumor cells known as natural killer cell activating ligands, or NK ligands, that would activate the immune system, causing these cancer cells to remain invisible to and evade the immune system. Through these multiple activities, research has shown that DKK1 helps protect the cancer cells from being targeted by the immune system.

Preclinical studies that we and others have conducted demonstrated that using an anti-DKK1 antibody led to clinical benefits in xenograft cancer models. The anti-DKK1 antibody is believed to shift canonical and non-canonical Wnt signaling to healthy levels, thereby resulting in a direct anti-tumor effect as well as a local anti-angiogenic effect in the diseased tissue. In another model, blocking DKK1 activity using an anti-DKK1 antibody was shown by researchers to impede the suppressive effects of tumor-protecting MDSC and increased the activity of anti-tumor white blood cells in the tumor microenvironment. In these models, researchers demonstrated that an anti-DKK1 antibody allowed the immune system to recognize and attack the cancer cells. We believe that the more selective and local the activity is to the tumor, the more likely a drug will be safe and well tolerated and a potential combination partner to other anti-cancer drugs.

DKN-01 is a high affinity, neutralizing monoclonal antibody targeting DKK1. We have shown that DKN-01 reduces free DKK1 levels and has demonstrated an anti-tumor effect in preclinical models. DKN-01 is currently being tested in clinical trials for patients with EC in combination with paclitaxel, in patients with biliary tract cancer in combination with gemcitabine and cisplatin, and has previously been tested as a monotherapy in patients with NSCLC and in a pilot study in patients with multiple myeloma in combination with lenalidomide and dexamethasone.

### **Phase 1 Monotherapy Studies**

#### *First-in-human study*

Our first-in-human study of DKN-01 was a single ascending dose Phase 1 trial in patients with low bone density. DKN-01 was administered by intravenous infusion at doses from 7 mg to 300 mg and as a subcutaneous injection at a dose of 44 mg. Eight subjects were treated per cohort, five of whom received DKN-01 and three of whom received placebo, for a total of 48 subjects in six cohorts. There

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were no adverse events deemed by the physician to be related to DKN-01, or treatment-related adverse events, and no clinically significant safety signals observed.

### *Advanced Solid Tumors or Multiple Myeloma Study*

We conducted study P100, a two-part dose-finding Phase 1 study, to establish the safety, maximum tolerated dose, and antitumor activity of DKN-01 as a monotherapy for patients with advanced malignancies. Other endpoints were progression free survival, or PFS, overall response rate, or ORR, and overall survival, or OS. Part A of the study was a dose escalation designed to evaluate increasing doses of DKN-01 between 75 mg and 600 mg administered weekly or biweekly in a 28 day cycle. Part B of the study was an expansion cohort designed to evaluate the activity of DKN-01 as a single agent in patients with advanced NSCLC. For Part B, DKN-01 was administered to refractory NSCLC patients at 300 mg on days 1 and 15 of each 28 day cycle.

We enrolled 32 patients in Parts A and B, 24 of whom were patients with NSCLC. DKN-01 was well tolerated with no dose limiting toxicities, or DLTs, or serious adverse events, or SAEs, that were deemed by the physician to be related to DKN-01 treatment. All of the treatment-related adverse events were Grade 1 or Grade 2, the two lowest severity levels. There were no treatment-related SAEs, and no adverse events that emerged or worsened following treatment, but were not deemed to be related to DKN-01 treatment, referred to as treatment-emergent adverse events or TEAEs, leading to study discontinuation. TEAEs were generally those typically observed in cancer patients; and the most frequently reported treatment-related TEAEs were fatigue (25%) and nausea (9.4%).

Monotherapy administration of DKN-01 in patients with refractory NSCLC demonstrated clinical activity, with a clinical benefit rate of 45.9%, including one NSCLC patient (4.2%) with more than a 30% reduction in the size of their tumor, referred to as a partial response or PR. In the Part B group of NSCLC patients who were dosed at a level of 300 mg every two weeks, the clinical benefit rate was 47.4%, including the patient with the partial response (5.3%). Patients with more than 20% growth in the size of their tumor are considered to have progressive disease, or PD. Median PFS in the evaluable Part B NSCLC patients was 2.2 months and median OS was 6.6 months. Data from this study was presented at the American Society of Clinical Oncology, or ASCO, Annual Meeting in 2014.

We believe that DKN-01 may be a targeted treatment for NSCLC and that the clinical profile supports further NSCLC development in combination with other anti-cancer agents, including chemotherapies and immune checkpoint inhibitors.

### **Esophagogastric Cancer**

Published studies and our internal preclinical studies have demonstrated that the expression of DKK1 is more prominent in EC tissues when compared with the adjacent normal esophageal tissues. Our preliminary results indicate that over 85% of the EC patient tissue samples that we evaluated expressed DKK1. We believe that these studies support the hypothesis that DKK1 might be a key regulator in the progression of EC and a potential therapeutic target.

We are conducting study P102, a multi-part Phase 1/2 study of DKN-01 in combination with paclitaxel in advanced EC patients, all of whom have had previous treatment with standard therapies. Many of these subjects have had multiple lines of prior therapy and/or rapidly growing tumors, representing a difficult to treat population. In Part A, we enrolled nine subjects in two cohorts to evaluate 150 mg and 300 mg of DKN-01 dosed every other week along with weekly paclitaxel at the standard dose. In Part B, we enrolled 20 subjects who received 300 mg of DKN-01 in combination with paclitaxel. Part C and Part D each enroll patients with a specific subtype of EC, either adenocarcinoma or squamous cell carcinoma, respectively. Part E may enroll up to 20 gastric cancer patients with specific Wnt pathway alterations. There is also a sub-study of DKN-01 as a monotherapy, without

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paclitaxel, which may enroll up to 40 patients. The study is intended to establish the safety of DKN-01 in combination with paclitaxel and has the secondary endpoints of ORR, PFS, and OS.

We have been collecting the results of our EC study on an ongoing basis, and preliminary data has been presented at the ASCO GI Meeting in January 2017. The data presented at ASCO GI included 44 patients with advanced esophageal and gastroesophageal junction cancers who had received between 1 and 7 prior lines of therapy. We have observed clinical activity of DKN-01 plus paclitaxel in these patients, as 10 of 41 evaluable patients (24.4%) achieved a partial response and 15 patients achieved a best overall response of stable disease (36.6%), representing a total disease control rate of 61%.

Our goal is to identify biomarkers or genetic alterations that could define a patient population more likely to respond to treatment with DKN-01. Four of 19 patients evaluated with genetic testing were found to have activating/stabilizing mutations of beta-catenin, which is a molecule in the Wnt signaling pathway implicated in oncogenesis, metastasis, and immune suppression. Of these 4 patients, 2 achieved partial responses and 1 had prolonged stable disease. One patient has an ongoing response exceeding 23 months, of which the past 12 months have been on DKN-01 monotherapy with continued improvements in the disease.

DKN-01 and paclitaxel appear to be a tolerable combination. There have been no new emerging safety concerns observed to-date in this study. The majority of adverse events were Grade 1 and 2 in severity. There have been no SAEs that were deemed by the investigators to be related to either DKN-01 or paclitaxel. We expect to present additional data from this study at medical conferences in late 2017. We believe that the results from this study support the continued development of DKN-01 in EC patients in combination with other anti-cancer agents, including chemotherapies and immune checkpoint inhibitors.

### **Biliary Tract Cancer**

We have initiated study P103, a three-part Phase 1/2 study of DKN-01 in combination with gemcitabine and cisplatin in patients with advanced biliary tract cancer. Our preliminary results indicate that over 85% of biliary tract cancer patient tissue samples that we analyzed expressed DKK1. Patients enrolled in this study had not received prior therapy to treat their disease. We evaluated two dose levels, 150 mg and 300 mg, of DKN-01 in Part A, and then we selected the 300mg dose for further study in Part B. Part C of this study has been added to enroll an additional 20 patients to confirm the activity of the combination and to enhance biomarker collection and analysis.

Preliminary data from this study were presented at the Annual Meeting of the Cholangiocarcinoma Foundation in February 2017. At the selected 300mg DKN-01 dose level, 7 of 21 evaluable patients (33%) experienced a partial response and 20 patients experienced a partial response or stable disease, representing a disease control rate of 95%. Data presented from the study also showed that DKN-01 in combination with gemcitabine and cisplatin resulted in statistically significant changes in inflammatory and anti-angiogenic biomarkers consistent with the anticipated mechanism of action of DKK1 inhibition. There were no reported DKN-01 related serious adverse events or dose limiting toxicities.

In addition, top-line preliminary PFS data has been obtained from the Part A and Part B patients treated at the 300 mg DKN-01 dose level. The preliminary median PFS of DKN-01 combination therapy was 9.4 months, while PFS for standard of care agents has been reported at six to eight months. Additional data from this study has been submitted for presentation at an upcoming medical meeting.

We believe that the results from this study support the continued development of DKN-01 in biliary tract cancer patients in combination with other anti-cancer agents, including chemotherapies and immune checkpoint inhibitors.

## **Future Studies**

We are planning to conduct multiple future clinical trials that combine DKN-01 with chemotherapy, such as with gemcitabine and cisplatin in biliary tract cancer or paclitaxel in EC, and with other immuno-oncology therapies, such as PD-1/PD-L1 antibodies or TRX518. Because DKN-01's mechanism of action combines cell signaling and enhancing a pro-inflammatory tumor microenvironment, we believe DKN-01 has potential as a targeted cancer treatment in EC, biliary tract cancer, NSCLC, and potentially other tumor types, such as uterine/endometrioid, liver, pancreatic, and prostate cancers and multiple myeloma.

## **TRX518**

The human immune system has the ability to adapt to and attack foreign cells, or non-self cells, and in doing so it recognizes danger with the goal of protecting the body from harm. It has been well established that cancer cells develop mechanisms to suppress the body's natural immune response and evade destruction by immune cells. Activating signals to augment an immune response in cancer, or costimulation, is a strategy that is being explored by using agonist antibodies targeting activating receptors on immune cells. This strategy is expected to overcome suppressive mechanisms that would prevent these immune system cells from attacking a tumor. Agonist antibodies that costimulate the immune system have the potential to be combined with established therapies such as chemotherapy or checkpoint inhibitors to enable the immune system to yield a robust anti-tumor immune response.

We believe glucocorticoid-induced tumor necrosis factor-related receptor, or GITR, is an ideal target for costimulation as it is an activating receptor present on a wide range of naive and activated immune system cells, including CD4+ and CD8+ T effector cells, T regulatory cells, natural killer cells, granulocytes, mast cells and monocytes/macrophages. The expression and activation of GITR has been shown to enhance an antigen-specific inflammatory response. Preclinical studies demonstrated that GITR activation led to robust clinical benefits in multiple animal models. GITR agonist antibodies have been found to be effective in combination with chemotherapies, checkpoint inhibitors, and vaccines in various preclinical cancer and vaccine models.

TRX518 is a high affinity GITR agonist monoclonal antibody that binds to GITR and generates a signal in the target cell. We expect TRX518 binding to GITR to generate a sufficient signal to enhance the activity of anti-tumor immune system cells and impede the activity of immune system cells that protect the tumor. TRX518 was specifically engineered with a modification in its amino acid backbone sequence, or Fc region, to prevent binding to certain complementary receptors on other immune system cells, or Fc receptors, that would lead to the killing of GITR-expressing cells. We believe that depleting GITR-expressing cells would be harmful in that it would limit efficacy and create a theoretical risk of breakthrough autoimmune disease. Our goal in designing TRX518 was to optimize the efficacy and safety profile of the antibody, as our preclinical studies confirmed activity without Fc receptor binding and demonstrated comparable efficacy to Fc receptor binding intact antibodies.

In a recent publication, an Fc inactive GITR agonist antibody was evaluated against an Fc intact GITR agonist antibody, alone and in combination with radiation, in a model of murine glioblastoma. The results demonstrated that the Fc inactive GITR agonist antibody was effective in the model in combination with radiation, whereas the Fc active GITR agonist was not effective, either alone or in combination with radiation. We believe that the removal of Fc function represents an advantage to our GITR agonist antibody and a differentiator from other competing GITR agonist antibodies.

### **Single Ascending Dose Monotherapy**

We are conducting study 001, a Phase 1 study of TRX518 as a monotherapy in adults with refractory solid tumors, initially to evaluate the safety of increasing single doses between 0.0001 mg/kg and 8.0 mg/kg. Exploratory objectives include evaluating for immune system responses to tumor antigens and demonstrating evidence of biological activity. The single dose portion of the study has been completed.

In the study, no maximum tolerated dose was reached for the single administration of TRX518, with few related treatment-emergent adverse events, all Grade 1 and 2, and no reported autoimmune events. We have observed doses where all the GITR receptors have been bound by TRX518, and this binding lasts for at least several days. We believe that binding at this level is essential to generating sufficient signaling and agonist activity. There have been signs of immune system activation and biological activity in some patients, including evidence of T regulatory cell modulation in the blood and in tumors. Initial data from this study was presented at the Society for Immunotherapy of Cancer (SITC) in November 2016. Additional data from this study will be presented at the American Association for Cancer Research 2017 Annual Meeting in April. We believe that the favorable profile and kinetics of TRX518 in this first-in-human, single-dose safety study enabled advancing development to multi-dose studies.

### **Multiple Dose Studies**

We are conducting study 003, a two-part, multiple dose Phase 1 study of TRX518 as a monotherapy in adults with advanced solid tumors. Part A of the study is designed to evaluate the safety of escalating doses of TRX518 between 1.0 mg/kg and 4.0 mg/kg. The initial three cohorts were administered as weekly doses to the patient over a three week cycle. Additional cohorts are evaluating the strategy of using a larger initial dose and lower subsequent doses to patients. Part B is designed to be an expansion cohort of up to 20 patients that will use the preferred dosing strategy identified during Part A. Exploratory objectives include evaluating for objective responses, PFS, and demonstrating evidence of immune system activity.

In study 003 to date, TRX518 have been found to have dose proportional increases in TRX518 exposure. Two of three patients in the 2 mg/kg weekly dosing cohort have had stable disease, one of whom had a reduction in their index lesions, and two of three patients in the 1 mg/kg cohort have had stable disease, one of whom maintained stable disease for eight cycles of therapy receiving 24 doses of TRX518. We are continuing to enroll patients in this study.

We have also amended study 001 to permit the administration of multiple doses of TRX518 to patients in additional cohorts. These multiple dose monotherapy cohorts are open for enrollment.

### **Future Studies**

TRX518 was the first GITR agonist antibody tested in humans. We are planning to conduct multiple future clinical trials that combine TRX518 with chemotherapy or other immuno-therapies, including DKN-01. We believe that the use of TRX518 in immuno-responsive tumors, such as NSCLC, melanoma, renal cell carcinoma, gastric, or bladder cancer, could become an important factor in optimizing outcomes for cancer patients. Additionally, because of its distinctive mechanism of action as apart from other checkpoint inhibitors, we believe TRX518 has the potential to restore immune system activity in previously immune unresponsive tumors.

### **Intellectual Property**

We strive to protect and enhance the proprietary technology, inventions and improvements that are commercially important to our business, including seeking, maintaining and defending patent rights. We

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also rely on confidential know-how that may be important to the development of our business. We protect our confidential know-how as trade secrets and through confidentiality agreements and invention assignment agreements with our employees, consultants, scientific advisors and others. We additionally expect to rely on regulatory protection afforded through data exclusivity as well as patent extensions, where available.

Our commercial success may depend in part on our ability to obtain and maintain patent and other proprietary protection for commercially important technology, inventions and know-how related to our business; to defend and enforce our patents; to preserve the confidentiality of our know-how and trade secrets; and to operate without infringing the valid enforceable patents and proprietary rights of third parties.

Our ability to prevent third parties from making, using, selling, offering to sell or importing competing products to ours, including a competitor to either of DKN-01 or TRX518, depends on the scope of our patents. We have several patents and patent applications relating to each of DKN-01 and TRX518 and their therapeutic uses, and possess substantial know-how relating to the development and commercialization of DKN-01 and TRX518. We cannot be sure that any of our pending patent applications or future patent filings will lead to the issuance of new patents, nor can we be sure that any of our existing patents or any patents that may be granted to us in the future will be adequate to protect our market.

We plan on pursuing in-licensing opportunities to develop, strengthen and maintain our proprietary position in our field. We expect to use trademark protection for our products as they are marketed.

### *Patents*

We exclusively license from Lilly rights under 19 issued patents and 7 pending patent applications, all of which belong to the same patent family. The patents and applications in this patent family are directed to the composition of matter and use of DKN-01, and include (i) one issued U.S. Patent, (ii) issued patents in the following jurisdictions: Australia, Canada, China, Eurasia, Gulf Cooperation Council, India, Israel, Japan, Lebanon, Macao, Mexico, New Zealand, Pakistan, Singapore, South Africa, Taiwan, Ukraine and South Korea and (iii) pending applications in the following jurisdictions: Argentina, Brazil, Europe (2), Hong Kong, Venezuela and Thailand. The standard 20-year term for patents in this family would expire in 2030. The U.S. patent will expire 87 days after the standard term due to patent term adjustment. Patent term extensions for delays in marketing approval may also extend the terms of patents in this family.

We own one U.S. provisional patent application directed to the use of a biomarker in patients receiving DKN-01 therapy. We expect to file a non-provisional patent application claiming the benefit of the pending provisional application in the second half of 2017. Any patents that may issue from such application will expire no earlier than 2037 provided that all maintenance fee payments are timely paid and no terminal disclaimers are filed.

We own 42 patents and 12 pending patent applications relating to TRX518 and uses thereof. The patents and applications primarily fall into two families. The standard 20-year term for U.S. patents in the first family would expire in 2026 and in the second family would expire in 2028 provided that all maintenance fee payments are timely paid and no terminal disclaimers are filed. Patent term extensions for delays in marketing approval may also extend the terms of patents in these two families. The various patent applications and patents covering TRX-518 include claims directed to compositions of matter (antibodies and antigen-binding fragments), pharmaceutical compositions, methods for inducing or enhancing an immune response, methods of treating a subject having a tumor, combination therapies, and uses of antibodies and antigen-binding fragments. Patent applications and patents claiming these subject matters have been filed and/or granted in the following jurisdictions: United States, Australia, Canada, Europe (Austria, Belgium, Denmark, Finland, France, Germany, Ireland,



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Italy, Netherlands, Portugal, Spain, Sweden, Switzerland, United Kingdom), Hong Kong, India and Japan.

*Patent Term*

The base term of a U.S. patent is 20 years from the filing date of the earliest-filed non-provisional patent application from which the patent claims priority. The term of a U.S. patent can be lengthened by patent term adjustment, which compensates the owner of the patent for administrative delays at the USPTO. In some cases, the term of a U.S. patent is shortened by a terminal disclaimer that reduces its term to that of an earlier-expiring patent.

The term of a U.S. patent may be eligible for patent term extension under the Drug Price Competition and Patent Term Restoration Act of 1984, referred to as the Hatch-Waxman Act or Hatch-Waxman Amendment, to account for at least some of the time a product is under development and regulatory review after the patent is granted. With regard to a product for which FDA approval is the first permitted marketing of the active ingredient, the Hatch-Waxman Act allows for extension of protection of one U.S. patent that includes at least one claim covering the composition of matter of an FDA-approved product, an FDA-approved method of treatment using the product, and/or a method of manufacturing the FDA-approved product. The extended protection cannot exceed the shorter of five years beyond the non-extended expiration of the patent or 14 years from the date of the FDA approval of the product. Some foreign jurisdictions, including Europe, have patent extension provisions (e.g., supplementary protection certificates), which allow for extension of the protection of a patent that covers a drug approved by the applicable foreign regulatory agency. In the future, if and when each of DKN-01 or TRX518 receives FDA approval, we expect to apply for patent term extension to extend the protection of one of our U.S. patents covering DKN-01, or its use, and one of our U.S. patents covering TRX518, or its use. We also may pursue extensions in foreign jurisdictions where applicable.

*Lilly License Agreement*

On January 3, 2011, we entered into a license agreement with Lilly, pursuant to which Lilly granted us an exclusive license for certain intellectual property rights relating to pharmaceutically active compounds that may be useful in the treatment of bone healing, cancer and, potentially, other medical conditions. Such license includes a right to sublicense, under certain Lilly intellectual property rights to further develop and commercialize, on a worldwide basis, pharmaceutical products containing such licensed compounds.

Pursuant to the Lilly Agreement, we granted to Lilly 657,614 shares of common stock and agreed to pay Lilly a royalty in the low single digits of net sales of a particular product in the territory during the applicable royalty term, with certain adjustments to be made to the royalty rate in connection with third person intellectual property, sales of competing products, and sales of biosimilar or generic products. We have not yet paid any royalties to Lilly pursuant to this agreement.

The royalty term, with respect to each country in which a product is sold, on a country-by-country and product-by-product basis, begins on first commercial sale of the product in the country and the later of (i) the tenth anniversary of the first date of commercial sale of the product in the country, (ii) expiration of the last-to-expire issued patent included within the patents licensed under the Lilly Agreement having a valid claim covering the sale of the product, and (iii) the expiration of any data exclusivity period for the product in the country.

The term of the Lilly Agreement begins on January 3, 2011 and, unless earlier terminated pursuant to the termination provisions described below, will continue on a country-by-country basis until we have no remaining royalty or other payment obligations in a specific country. Upon expiration in a given country, the licenses granted with respect to such country shall become fully paid up, perpetual and irrevocable.

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Either party may terminate the Lilly Agreement with immediate effect if the other party enters into bankruptcy or takes similar action. We may terminate the Lilly Agreement (i) at any time without cause upon ninety (90) days written notice to Lilly or (ii) upon material breach of the Lilly Agreement by Lilly upon ninety (90) days written notice to Lilly, unless Lilly cures such breach or violation during such ninety (90) day period. Lilly may terminate the agreement (i) upon our material breach of the Lilly Agreement upon ninety (90) days written notice to us, unless we cure such breach or violation during such ninety (90) day period or (ii) if we challenge, or materially assist any third person to challenge, the validity or enforceability of the licensed intellectual property that is the subject of the Lilly Agreement upon thirty (30) days written notice to us, unless we cure such breach or violation during such thirty (30) day period.

If Lilly terminates the Lilly Agreement or if we terminate the Lilly Agreement without cause, (i) all rights under the licensed intellectual property rights will terminate and immediately and automatically revert to Lilly, (ii) any sublicense will be assigned by us to Lilly so that such sublicense becomes a direct license between Lilly and such sublicensee, (iii) subject to certain limitations, we will be required to grant to Lilly an irrevocable, non-exclusive, perpetual, fully paid up license under all patent rights developed or acquired by us during the term of the Lilly Agreement that relate to the Lilly licensed intellectual property, (iv) subject to certain limitations, we will be required to grant to Lilly an irrevocable, non-exclusive, perpetual, fully paid up license to the results of data from all preclinical and clinical studies of any compound or product covered by the Lilly Agreement, (v) subject to certain limitations, we will be required to take all steps necessary to permit Lilly to commence marketing product covered by the Lilly Agreement, and (vi) we will be required to assign or re-assign to Lilly all Lilly patents covered by the Lilly Agreement and that were assigned by Lilly to us. If we terminate the Lilly Agreement for material breach by Lilly or Lilly's bankruptcy, the licenses will remain in full force and effect and we will remain liable for the payment of all royalty obligations under the Lilly Agreement. However, in this case, we may offset against such royalties any damages that we are entitled to for breach of the Lilly Agreement by Lilly.

The Lilly Agreement also contains certain standard representations and warranties and certain standard confidentiality and indemnification provisions.

### *Lonza License Agreement*

On May 28, 2015, we entered into a license agreement with Lonza Sales AG, pursuant to which Lonza granted us a world-wide, non-exclusive license for certain intellectual property rights relating to a gene expression system, solutions of nutrients used in mammalian cell culture and related know-how and patent rights to use, test, develop, manufacture, market, sell offer for sale, distribute, import and export DKN-01. Such license includes a right to sublicense to (i) a competing contract manufacturer solely for the purpose of such manufacturer producing DKN-01 and (ii) our affiliates and strategic partners solely for undertaking commercial activities.

In exchange for the license and sublicense described above, we agreed to pay to Lonza a low single-digit royalty calculated as a percentage of net sales on DKN-01. In addition, in connection with DKN-01 manufactured by Lonza, or a strategic partner of Lonza, we agreed to pay (i) an annual payment to Lonza beginning on the date of initiation of phase 1 clinical trials for DKN-01 and (ii) an increased annual payment to Lonza beginning on the date of initiation of phase 2 clinical trials for DKN-01, for so long as Lonza, or a strategic partner of Lonza, manufactures DKN-01. In connection with DKN-01 manufactured by any other party, we agreed to pay (i) an annual amount to Lonza per sublicense beginning on the commencement date of such sublicense and continuing for so long as the sublicense exists and (ii) a low single-digit royalty calculated as a percentage of net sales of DKN-01. All royalty amounts are subject to certain adjustments if, on a country-by-country basis, the manufacture and/or sale of DKN-01 are not protected by a valid claim. All royalty obligations will expire on a country-by-country basis upon the later of (i) the expiration, revocation or complete

rejection of all valid claims covering product in such country or (ii) ten (10) years from first commercial sale of DKN-01 in such country.

The Lonza Agreement will remain in force in each country of the world until either the expiration of the last valid patent claim or for so long as the know-how is identified and remains secret and substantial, whichever is later. Upon expiration of the Lonza Agreement with respect to DKN-01 in a particular country, the licenses granted under the Lonza Agreement with respect to DKN-01 in that country will become fully paid and royalty free.

Either party may terminate the Lonza Agreement (i) if the other party commits a breach of the Lonza Agreement and such breach is not cured within forty-five (45) days of receiving notice of the breach (or thirty (30) days in the case of payment defaults) or (ii) if the other party is unable to pay its debts and enters into compulsory or voluntary liquidation or enters into a bankruptcy or takes other similar action. We may terminate the Lonza Agreement by giving sixty (60) days written notice to Lonza. Lonza may, at its option, immediately terminate any or all of the licenses granted under the Lonza Agreement if we knowingly oppose any patent application within the patent rights granted or dispute the validity of any patent within under the Lonza Agreement or assist any third party to do so. Termination of the Lonza Agreement will terminate all licenses granted under the Lonza Agreement.

The Lonza Agreement also contains certain standard confidentiality and indemnification provisions.

### **Competition**

The biotechnology and pharmaceutical industries are characterized by continuing technological advancement and significant competition. While we believe that our product candidates, technology, knowledge, experience and scientific resources provide us with competitive advantages, we face competition from major pharmaceutical and biotechnology companies, academic institutions, governmental agencies and public and private research institutions, among others. Any product candidates that we successfully develop and commercialize will compete with existing therapies and new therapies that may become available in the future. Key product features that would affect our ability to effectively compete with other therapeutics include the efficacy, safety and convenience of our products and the ease of use and effectiveness of any companion diagnostics. The level of generic competition and the availability of reimbursement from government and other third-party payors will also significantly affect the pricing and competitiveness of our products. Our competitors also may obtain FDA or other regulatory approval for their products more rapidly than we may obtain approval for ours, which could result in our competitors establishing a strong market position before we are able to enter the market.

Many of the companies against which we may compete have significantly greater financial resources and expertise in research and development, manufacturing, preclinical testing, conducting clinical trials, obtaining regulatory approvals and marketing approved products than we do. Smaller or early-stage companies may also prove to be significant competitors, particularly through collaborative arrangements with large and established companies. For example, Novartis, Merck, and Pfizer are all currently developing or have previously been developing anti-DKK1 monoclonal antibodies. Additionally, Merck, Novartis, Bristol-Myers Squibb, AstraZeneca, and Incyte are all developing a GITR agonist monoclonal antibody. These competitors also compete with us 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, our programs.

### **Manufacturing and Distribution**

We do not have, and we do not currently plan to acquire or develop, the facilities or capabilities to manufacture clinical trial material for use in human clinical trials or finished drug product for commercialization. We depend on third-party contract manufacturers, or CMOs, for the production of clinical trial material for our studies. Our bulk drug substance, or DS, is produced at our CMOs, Patheon Biologics and Lonza, which are required to comply with the FDA's Current Good Manufacturing Practice, or cGMP, regulations. Our finished drug product is produced at a contract fill/ finisher provider, which is also required to comply with cGMP regulations. We have personnel with significant technical, manufacturing, analytical, quality and project management experience to oversee our third-party CMOs and to manage manufacturing and quality data and information for regulatory compliance purposes.

We must manufacture drug product for clinical trial use in compliance with cGMP. The cGMP regulations include requirements relating to organization of personnel, buildings and facilities, equipment, control of components and drug product containers and closures, production and process controls, packaging and labeling controls, holding and distribution, laboratory controls, records and reports, and returned or salvaged products. Our third-party CMOs are also subject to periodic inspections of facilities by the FDA and other authorities, including procedures and operations used in the testing and manufacture of our products to assess our compliance with applicable regulations. Failure to comply with statutory and regulatory requirements subjects a manufacturer to possible legal or regulatory action, including warning letters, the seizure or recall of products, injunctions, consent decrees placing significant restrictions on or suspending manufacturing operations and civil and criminal penalties. These actions could have a material impact on the availability of our products. CMOs often encounter difficulties involving production yields, quality control and quality assurance, as well as shortages of qualified personnel.

We have not yet established a sales, marketing or product distribution infrastructure because our lead candidates are still in early clinical development. We eventually may, however, choose to build (or obtain through strategic acquisition) our own sales and marketing team to commercialize some or all of our products if they receive FDA approval and if it is in our long-term interests. We may also choose to enter into distribution agreements with larger strategic partners with their own robust distribution channels.

### **Government Regulation and Product Approval**

Government authorities in the United States, at the federal, state, and local level, and in other countries, extensively regulate, among other things, the research, development, testing, approval, manufacture, packaging, storage, recordkeeping, labeling, advertising, promotion, distribution, post-approval monitoring and reporting, marketing, import, and export of biopharmaceutical products such as those we are developing. In addition, manufacturers of biopharmaceutical products participating in Medicaid and Medicare are required to comply with mandatory price reporting, discount, and rebate requirements. The processes for obtaining regulatory approvals in the United States and in foreign countries, along with subsequent compliance with applicable statutes and regulations, require the expenditure of substantial time and financial resources. The following is a summary of the primary government regulations applicable to our business.

#### **FDA Regulation**

In the United States, the Food and Drug Administration, or FDA, regulates biologics under the Federal Food, Drug, and Cosmetic Act, or FDCA, the Public Health Services Act, or PHSA, and their implementing regulations. Any product we may develop must be cleared by the FDA before it is

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

- completion of preclinical laboratory tests, animal studies, and formulation studies in compliance with the FDA's GLP regulations;
- submission to the FDA of an Investigational New Drug application, or IND, which must become effective before human clinical trials may begin;
- approval by an Institutional Review Board, or IRB, for each clinical site, or centrally, before each trial may be initiated;
- adequate and well-controlled human clinical trials to establish the safety and efficacy of the proposed product candidates for its intended use, performed in accordance with GCPs;
- development of manufacturing processes to ensure the product candidate's identity, strength, quality, and purity;
- submission to the FDA of a Biologics License Application, or BLA;
- satisfactory completion of a FDA advisory committee review, if applicable;
- satisfactory completion of an FDA inspection of the manufacturing facility or facilities at which the products are produced to assess compliance with cGMPs, and to assure that the facilities, methods, and controls are adequate to preserve the therapeutics' identity, strength, quality, and purity, as well as satisfactory completion of an FDA inspection of selected clinical sites and selected clinical investigators to determine GCP compliance; and
- FDA review and approval of the BLA to permit commercial marketing for particular indications for use.

### *Preclinical Studies and IND Submission*

The testing and approval process of product candidates requires substantial time, effort, and financial resources. Satisfaction of FDA pre-market approval requirements typically takes many years and the actual time required may vary substantially based upon the type, complexity, and novelty of the product or disease. Preclinical studies include laboratory evaluation of chemistry, pharmacology, toxicity, and product formulation, as well as animal studies to assess potential safety and efficacy. Such studies must generally be conducted in accordance with the FDA's GLPs. Prior to commencing the first clinical trial with a product candidate, an IND sponsor must submit the results of the preclinical tests and preclinical literature, together with manufacturing information, analytical data, any available clinical data or literature, and proposed clinical study protocols among other things, to the FDA as part of an IND.

An IND automatically becomes effective 30 days after receipt by the FDA, unless the FDA, within the 30-day time period, notifies the applicant of safety concerns or questions related to one or more proposed clinical trials and places the trial on a clinical hold. In such a case, the IND sponsor and the FDA must resolve any outstanding concerns before the clinical trial can begin. Clinical holds also may be imposed by the FDA at any time before or during trials due to safety concerns or non-compliance. As a result, submission of an IND may not result in FDA authorization to commence a clinical trial. A separate submission to an existing IND must also be made for each successive clinical trial conducted during product development.

### *Clinical Trials*

Clinical trials involve the administration of the investigational product to human subjects under the supervision of qualified investigators in accordance with federal regulations and GCP requirements,

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which include the requirements that all research subjects provide their informed consent in writing for their participation in any clinical trial, as well as review and approval of the study by an IRB. Investigators must also provide certain information to the clinical trial sponsors to allow the sponsors to make certain financial disclosures to the FDA. Clinical trials are conducted under protocols detailing, among other things, the objectives of the trial, the trial procedures, the parameters to be used in monitoring safety, the effectiveness criteria to be evaluated, and a statistical analysis plan. A protocol for each clinical trial, and any subsequent protocol amendments, must be submitted to the FDA as part of the IND. In addition, an IRB at each study site participating in the clinical trial or a central IRB must review and approve the plan for any clinical trial, informed consent forms, and communications to study subjects before a study commences at that site. An IRB considers, among other things, whether the risks to individuals participating in the trials are minimized and are reasonable in relation to anticipated benefits and whether the planned human subject protections are adequate. The IRB must continue to oversee the clinical trial while it is being conducted. Once an IND is in effect, each new clinical protocol and any amendments to the protocol must be submitted to the IND for FDA review, and to the IRB for approval. Progress reports detailing the results of the clinical trials must also be submitted at least annually to the FDA and the IRB and more frequently if serious adverse events or other significant safety information is found.

The FDA may order the temporary, or permanent, discontinuation of a clinical trial at any time, or impose other sanctions, if it believes that the clinical trial either is not being conducted in accordance with FDA requirements or presents an unacceptable risk to the clinical trial patients. An IRB may also require the clinical trial at the site to be halted, either temporarily or permanently, for failure to comply with the IRB's requirements or if the trial poses an unexpected serious harm to subjects, or may impose other conditions. We may also discontinue clinical trials as a result of risks to subjects, a lack of favorable results, or changing business priorities.

Information about certain clinical trials, including a description of the study and study results, must be submitted within specific timeframes to the National Institutes of Health, or NIH, for public dissemination on their [clinicaltrials.gov](http://clinicaltrials.gov) website.

Additionally, some clinical trials are overseen by an independent group of qualified experts organized by the clinical trial sponsor, known as a data safety monitoring board or committee. This group regularly reviews accumulated data and advises the study sponsor regarding the continuing safety of trial subjects, potential trial subjects, and the continuing validity and scientific merit of the clinical trial. The data safety monitoring board receives special access to unblinded data during the clinical trial and may advise the sponsor to halt the clinical trial if it determined there is an unacceptable safety risk for subjects or on other grounds, such as no demonstration of efficacy.

The manufacture of investigational biologics for the conduct of human clinical trials is subject to cGMP requirements. Investigational biologics and active ingredients imported into the United States are also subject to regulation by the FDA relating to their labeling and distribution. Further, the export of investigational products outside of the United States is subject to regulatory requirements of the receiving country as well as U.S. export requirements under the FDCA.

In general, for purposes of BLA approval, human clinical trials are typically conducted in three sequential phases, which may overlap or be combined.

- *Phase 1*—Studies are initially conducted in healthy human volunteers or subjects with the target disease or condition and test the product candidate for safety, dosage tolerance, target engagement, mechanism of action, absorption, metabolism, distribution, and excretion. If possible, Phase 1 trials may also be used to gain an initial indication of product effectiveness.

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- *Phase 2*—Controlled studies are conducted in limited subject populations with a specified disease or condition to evaluate preliminary efficacy, identify optimal dosages, dosage tolerance and schedule, possible adverse effects and safety risks, and expanded evidence of safety.
- *Phase 3*—These adequate and well-controlled clinical trials are undertaken in expanded subject populations, generally at geographically dispersed clinical trial sites, to generate enough data to provide statistically significant evidence of clinical efficacy and safety of the product for approval, to establish the overall risk-benefit profile of the product, and to provide adequate information for the labeling of the product. Typically, two Phase 3 trials are required by the FDA for product approval.

The FDA may also require, or companies may conduct, additional clinical trials for the same indication after a product is approved. These so-called Phase 4 studies may be made a condition to be satisfied after approval. The results of Phase 4 studies can confirm the effectiveness of a product candidate and can provide important safety information.

Phase 1, Phase 2, and Phase 3 clinical trials may not be completed successfully within any specified period, or at all. Regulatory authorities, an IRB, or the sponsor may suspend or discontinue a clinical trial at any time on various grounds, including a finding that the subjects are being exposed to an unacceptable health risk, the clinical trial is not being conducted in accordance with the FDA's or the IRB's requirements, the product has been associated with unexpected serious harm to the subjects, or based on evolving business objectives or competitive climate.

Concurrent with clinical trials, companies usually complete additional animal studies and must also develop additional information about the chemistry and physical characteristics of the product candidate as well as finalize a process for manufacturing the product in commercial quantities in accordance with cGMP requirements. The manufacturing process must be capable of consistently producing quality batches of the product candidate and, among other things, must develop methods for testing the identity, strength, quality, potency, and purity of the final product. Additionally, appropriate packaging must be selected and tested, and stability studies must be conducted to demonstrate that the product candidate does not undergo unacceptable deterioration over its shelf life.

During the development of a new therapeutic, a sponsor may be able to request a Special Protocol Assessment, or SPA, the purpose of which is to reach agreement with the FDA on the Phase 3 clinical trial protocol design and analysis that will form the primary basis of product approval and an efficacy claim as well as preclinical carcinogenicity trials and stability studies. An SPA may only be modified with the agreement of the FDA and the trial sponsor or if the director of the FDA reviewing division determines that a substantial scientific issue essential to determining the safety or efficacy of the product was identified after the testing began. An SPA is intended to provide assurance that, in the case of clinical trials, if the agreed upon clinical trial protocol is followed, the clinical trial endpoints are achieved, and there is a favorable risk-benefit profile, the data may serve as the primary basis for an efficacy claim in support of a BLA. However, SPA agreements are not a guarantee of an approval of a product candidate or any permissible claims about the product candidate. In particular, SPAs are not binding on the FDA if, among other reasons, previously unrecognized public health concerns arise during the performance of the clinical trial, other new scientific concerns regarding the product candidate's safety or efficacy arise, or if the sponsoring company fails to comply with the agreed upon clinical trial protocol.

### *BLA Submission, Review by the FDA, and Marketing Approval*

Assuming successful completion of the required clinical and preclinical testing, the results of product development, including chemistry, manufacture, and controls, non-clinical studies, and clinical trial results, including negative or ambiguous results as well as positive findings, are all submitted to the FDA, along with the proposed labeling, as part of a BLA requesting approval to market the product

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for one or more indications. In most cases, the submission of a BLA is subject to a substantial application user fee. These user fees must be paid at the time of the first submission of the application, even if the application is being submitted on a rolling basis. Fee waivers or reductions are available in certain circumstances. One basis for a waiver of the application user fee is if the applicant employs fewer than 500 employees, including employees of affiliates, the applicant does not have an approved marketing application for a product that has been introduced or delivered for introduction into interstate commerce, and the applicant, including its affiliates, is submitting its first marketing application. Product candidates that are designated as orphan drugs, which are further described below, are also not subject to application user fees unless the application includes an indication other than the orphan indication.

In addition, under the Pediatric Research Equity Act, or PREA, a BLA or supplement to a BLA for a new active ingredient, indication, dosage form, dosage regimen, or route of administration, must contain data that are adequate to assess the safety and effectiveness of the product for the claimed indications in all relevant pediatric subpopulations, and to support dosing and administration for each pediatric subpopulation for which the product is safe and effective. The FDA may, on its own initiative or at the request of the applicant, grant deferrals for submission of some or all pediatric data until after approval of the product for use in adults, or full or partial waivers from the pediatric data requirements.

The FDA also may require submission of a risk evaluation and mitigation strategy, or REMS, to ensure that the benefits of the biologic outweigh the risks. The REMS plan could include medication guides, physician communication plans, and elements to assure safe use, such as restricted distribution methods, patient registries, or other risk minimization tools. An assessment of the REMS must also be conducted at set intervals. Following product approval, a REMS may also be required by the FDA if new safety information is discovered and the FDA determines that a REMS is necessary to ensure that the benefits of the biologic outweigh the risks.

Once the FDA receives an application, it has 60 days to review the BLA to determine if it is substantially complete to permit a substantive review, before it accepts the application for filing. The FDA may request additional information rather than accept a BLA for filing. In this event, the application must be resubmitted with the additional information. The resubmitted application is also subject to review before the FDA accepts it for filing. Once the submission is accepted for filing, the FDA begins an in-depth substantive review.

Under the goals and policies agreed to by the FDA under the Prescription Drug User Fee Act, or PDUFA, the FDA has set the review goal of completing its review of 90% of all applications within ten months from the 60-day filing date for its initial review of an initial BLA. Such deadlines are referred to as the PDUFA date. The PDUFA date is only a goal, thus, the FDA does not always meet its PDUFA dates. The review process and the PDUFA date may also be extended if the FDA requests or the sponsor otherwise provides substantial additional information or clarification regarding the submission.

The FDA may also refer certain applications to an advisory committee. An advisory committee is typically a panel that includes clinicians and other experts, which review, evaluate, and make a recommendation as to whether the application should be approved and under what conditions. The FDA is not bound by the recommendations of an advisory committee, but it considers such recommendations carefully when making decisions.



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The FDA reviews applications to determine, among other things, whether a product is safe, pure and potent and whether the manufacturing methods and controls are adequate to assure and preserve the product's identity, strength, quality, safety, potency, and purity. Before approving a BLA, the FDA typically will inspect the facility or facilities where the product is manufactured, referred to as a Pre-Approval Inspection. The FDA will not approve an application unless it determines that the manufacturing processes and facilities, including contract manufacturers and subcontractors, are in compliance with cGMP requirements and adequate to assure consistent production of the product within required specifications. Additionally, before approving a BLA the FDA will inspect one or more clinical trial sites to assure compliance with GCPs.

The approval process is lengthy and difficult and the FDA may refuse to approve a BLA if the applicable regulatory criteria are not satisfied or may require additional clinical data or other data and information. Even if such data and information are submitted, the FDA may ultimately decide that the BLA does not satisfy the criteria for approval. Data obtained from clinical trials are not always conclusive and the FDA may interpret data differently than an applicant interprets the same data.

After evaluating the BLA and all related information, including the advisory committee recommendation, if any, and inspection reports regarding the manufacturing facilities and clinical trial sites, the FDA may issue an approval letter, or, in some cases, a Complete Response Letter, or CRL. If a CRL is issued, the applicant may either: resubmit the BLA, addressing all of the deficiencies identified in the letter; withdraw the application; or request an opportunity for a hearing. A CRL indicates that the review cycle of the application is complete and the application is not ready for approval and describes all of the specific deficiencies that the FDA identified in the BLA. A CRL generally contains a statement of specific conditions that must be met in order to secure final approval of the BLA, and may require additional clinical or preclinical testing in order for the FDA to reconsider the application. The deficiencies identified may be minor, for example, requiring labeling changes; or major, for example, requiring additional clinical trials. Even with submission of this additional information, the FDA ultimately may decide that the application does not satisfy the regulatory criteria for approval. If and when those conditions have been met to the FDA's satisfaction, the FDA may issue an approval letter. An approval letter authorizes commercial marketing of the product with specific prescribing information for specific indications.

Even if the FDA approves a product, it may limit the approved indications for use of the product, require that contraindications, warnings, or precautions be included in the product labeling, including a boxed warning, require that post-approval studies, including Phase 4 clinical trials, be conducted to further assess a product's safety and efficacy after approval, require testing and surveillance programs to monitor the product after commercialization, or impose other conditions, including distribution restrictions or other risk management mechanisms under a REMS which can materially affect the potential market and profitability of the product. The FDA may also not approve label statements that are necessary for successful commercialization and marketing.

After approval, some types of changes to the approved product, such as adding new indications, manufacturing changes, and additional labeling claims, are subject to further testing requirements and FDA review and approval. The FDA may also withdraw the product approval if compliance with the pre- and post-marketing regulatory standards are not maintained or if problems occur after the product reaches the marketplace. Further, should new safety information arise, additional testing, product labeling, or FDA notification may be required.

### *Biosimilars, Orphan Drugs, and Exclusivity*

The Biologics Price Competition and Innovation Act of 2009, or BPCIA, creates an abbreviated approval pathway for biological products shown to be highly similar to or interchangeable with an FDA-licensed reference biological product. Biosimilarity sufficient to reference a prior FDA-approved

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product requires a high similarity to the reference product notwithstanding minor differences in clinically inactive components, and no clinically meaningful differences between the biological product and the reference product in terms of safety, purity, and potency. Biosimilarity must be shown through analytical studies, animal studies, and at least one clinical trial, absent a waiver by FDA. There must be no difference between the reference product and a biosimilar in conditions of use, route of administration, dosage form, and strength. A biosimilar product may be deemed interchangeable with a prior approved product if it meets the higher hurdle of demonstrating that it can be expected to produce the same clinical results as the reference product and, for products administered multiple times, the biologic and the reference biologic may be switched after one has been previously administered without increasing safety risks or risks of diminished efficacy relative to exclusive use of the reference biologic. Complexities associated with the larger, and often more complex, structures of biological products, as well as the process by which such products are manufactured, pose significant hurdles to implementation which are still being evaluated by the FDA.

A reference biologic is granted 12 years of exclusivity from the time of first licensure of the reference product, and no application for a biosimilar can be submitted for four years from the date of licensure of the reference product. However, certain changes and supplements to an approved BLA, and subsequent applications filed by the same sponsor, manufacturer, licensor, predecessor in interest, or other related entity do not qualify for the twelve year exclusivity period.

The Orphan Drug Act provides incentives for the development of products intended to treat rare diseases or conditions, which generally are diseases or conditions affecting less than 200,000 individuals annually in the United States, or affecting more than 200,000 in the United States and for which there is no reasonable expectation that the cost of developing and making the product available in the United States will be recovered from United States sales. Additionally, sponsors must present a plausible hypothesis for clinical superiority to obtain orphan designation if there is a product already approved by the FDA that is intended for the same indication and that is considered by the FDA to be the same as the already approved product. This hypothesis must be demonstrated to obtain orphan exclusivity. If granted, prior to product approval, Orphan Designation entitles a party to financial incentives such as opportunities for grant funding towards clinical study costs, tax advantages, and user-fee waivers. In addition, if a product receives FDA approval for the indication for which it has orphan designation, the product is generally entitled to orphan exclusivity, which means the FDA may not approve any other application to market the same product for the same indication for a period of seven years, except in limited circumstances, such as a showing of clinical superiority over the product with orphan exclusivity.

### *Special FDA Expedited Review and Approval Programs*

The FDA has various programs, including Fast Track designation, priority review, and breakthrough designation, that are intended to expedite or simplify the process for the development and FDA review of certain products that are intended for the treatment of serious or life threatening diseases or conditions, and demonstrate the potential to address unmet medical needs or present a significant improvement over existing therapy. The purpose of these programs is to provide important new therapeutics to patients earlier than under standard FDA review procedures.

To be eligible for a Fast Track designation, the FDA must determine, based on the request of a sponsor, that a product is intended to treat a serious or life threatening disease or condition and demonstrates the potential to address an unmet medical need. The FDA will determine that a product will fill an unmet medical need if the product will provide a therapy where none exists or provide a therapy that may be potentially superior to existing therapy based on efficacy, safety, or public health factors. If Fast Track designation is obtained, sponsors may be eligible for more frequent development meetings and correspondence with the FDA. In addition, the FDA may initiate review of sections of an application before the application is complete. This "rolling review" is available if the applicant

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provides and the FDA approves a schedule for the remaining information. In some cases, a Fast Track product may be eligible for accelerated approval or priority review.

The FDA may give a priority review designation to products that are intended to treat serious conditions and, if approved, would provide significant improvements in the safety or effectiveness of the treatment, diagnosis, or prevention of serious conditions. A priority review means that the goal for the FDA is to review an application within six months, rather than the standard review of ten months under current PDUFA guidelines, of the 60-day filing date.

Drug or biological products studied for their safety and effectiveness in treating serious or life-threatening illnesses and that provide meaningful therapeutic benefit over existing treatments may receive accelerated approval, which means the FDA may approve the product based upon a surrogate endpoint that is reasonably likely to predict clinical benefit, or on a clinical endpoint that can be measured earlier than irreversible morbidity or mortality, that is reasonably likely to predict an effect on irreversible morbidity or mortality or other clinical benefit, taking into account the severity, rarity, or prevalence of the condition and the availability or lack of alternative treatments. A drug or biologic candidate approved on this basis is subject to rigorous post-marketing compliance requirements, including the completion of Phase 4 or post-approval clinical trials to confirm the effect on the clinical endpoint. Failure to conduct required post-approval studies, or confirm a clinical benefit during post-marketing studies, will allow the FDA to withdraw the drug or biologic from the market on an expedited basis. All promotional materials for drug or biologic candidates approved under accelerated regulations are subject to prior review by the FDA.

Moreover, under the provisions of the Food and Drug Administration Safety and Innovation Act, or FDASIA, enacted in 2012, a sponsor can request designation of a product candidate as a "breakthrough therapy." A breakthrough therapy is defined as a product that is intended, alone or in combination with one or more other products, to treat a serious or life-threatening disease or condition, and preliminary clinical evidence indicates that the product may demonstrate substantial improvement over existing therapies on one or more clinically significant endpoints, such as substantial treatment effects observed early in clinical development. Products designated as breakthrough therapies are eligible for the Fast Track designation features as described above, intensive guidance on an efficient development program beginning as early as Phase 1 trials, and a commitment from the FDA to involve senior managers and experienced review staff in a proactive collaborative, cross-disciplinary review.

Even if a product qualifies for one or more of these programs, the FDA may later decide that the product no longer meets the conditions for qualification or decide that the time period for FDA review or approval will not be shortened.

### *Post-approval Requirements*

Any products manufactured or distributed pursuant to FDA approvals are subject to pervasive and continuing regulation by the FDA, including, among other things, requirements related to manufacturing, recordkeeping, and reporting, including adverse experience reporting, shortage reporting, and periodic reporting, product sampling and distribution, advertising, marketing, promotion, certain electronic records and signatures, and post-approval obligations imposed as a condition of approval, such as Phase 4 clinical trials, REMS, and surveillance to assess safety and effectiveness after commercialization.

After approval, most changes to the approved product, such as adding new indications or other labeling claims are subject to prior FDA review and approval. There also are continuing annual user fee requirements for any marketed products and the establishments at which such products are manufactured, as well as new application fees for supplemental applications with clinical data. In addition, manufacturers and other entities involved in the manufacture and distribution of approved

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therapeutics are required to register their establishments with the FDA and certain state agencies, list their products, and are subject to periodic announced and unannounced inspections by the FDA and these state agencies for compliance with cGMP and other requirements, which impose certain procedural and documentation requirements upon a company and its third-party manufacturers. Manufacturers must continue to expend time, money, and effort in the areas of production and quality-control to maintain compliance with cGMPs. Regulatory authorities may withdraw product approvals or request product recalls if a company fails to comply with regulatory standards, if it encounters problems following initial marketing, or if previously unrecognized problems are subsequently discovered.

Changes to the manufacturing process are strictly regulated and often require prior FDA approval or notification before being implemented. FDA regulations also require investigation and correction of any deviations from cGMP and specifications, and impose reporting and documentation requirements upon the sponsor and any third-party manufacturers that the sponsor may decide to use. Accordingly, manufacturers must continue to expend time, money, and effort in the area of production and quality control to maintain cGMP compliance.

Moreover, the enacted Drug Quality and Security Act, or DQSA, imposes obligations on manufacturers of biopharmaceutical products related to product tracking and tracing. Among the requirements of this legislation, manufacturers are required to provide certain information regarding the products to individuals and entities to which product ownership is transferred, will be required to label products with a product identifier, and are required to keep certain records regarding the product. The transfer of information to subsequent product owners by manufacturers will eventually be required to be done electronically. Manufacturers must also verify that purchasers of the manufacturers' products are appropriately licensed. Further, under this legislation, manufacturers will have product investigation, quarantine, disposition, and notification responsibilities related to counterfeit, diverted, stolen, and intentionally adulterated products that would result in serious adverse health consequences of death to humans, as well as products that are the subject of fraudulent transactions or which are otherwise unfit for distribution such that they would be reasonably likely to result in serious health consequences or death. Similar requirements additionally are and will be imposed through this legislation on other companies within the biopharmaceutical product supply chain, such as distributors and dispensers.

Adverse event reporting and submission of periodic reports, including annual reports and deviation reports, are required following FDA approval of a BLA. Later discovery of previously unknown problems with a product, including adverse events of unanticipated severity or frequency, or with manufacturing processes, or failure to comply with regulatory requirements, may result in significant regulatory actions. Such actions may include refusal to approve pending applications, license suspension or revocation, withdrawal of an approval, imposition of a clinical hold or termination of clinical trials, warning letters, untitled letters, cyber letters, modification of promotional materials or labeling, provision of corrective information, imposition of post-market requirements including the need for additional testing, imposition of distribution or other restrictions under a REMS, product recalls, product seizures or detentions, refusal to allow imports or exports, total or partial suspension of production or distribution, FDA debarment, injunctions, fines, consent decrees, corporate integrity agreements, debarment from receiving government contracts, and new orders under existing contracts, exclusion from participation in federal and state healthcare programs, restitution, disgorgement, or civil or criminal penalties, including fines and imprisonment, and result in adverse publicity, among other adverse consequences.

### **Other Regulation**

In addition to any FDA restrictions on marketing and promotion of drugs and devices, other federal and state laws restrict our business practice including, without limitation, anti-kickback and false claims laws, data privacy and security laws, as well as transparency laws regarding payment or other

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items of value provided to healthcare providers. Future legislative proposals to reform healthcare may also impact us.

We are also governed by other federal, state and local laws of general applicability, such as laws regulating working conditions, employment practices, as well as environmental protection.

**Research and Development Expenses**

Our total research and development expenses were \$23.3 million and \$10.4 million, during the years ended December 31, 2016 and 2015, respectively. See Part II—Item 7—"Management's Discussion and Analysis of Financial Condition and Results of Operations" of this Annual Report on Form 10-K for additional detail regarding our research and development activities.

**Employees**

As of March 30, 2017, we had 22 employees, including 21 full-time employees and 1 part time employee and we also use the services of consultants on a regular basis. None of our employees are represented by labor unions or covered by collective bargaining agreements. We consider our employee relations to be good.

**Web Availability**

We make available free of charge through our website, [www.leaptx.com](http://www.leaptx.com), our Annual Report on Form 10-K, other reports that we file with the Securities and Exchange Commission and any amendments to the reports filed or furnished pursuant to Sections 13(a) and 15(d) of the Exchange Act, as well as certain of our corporate governance policies, including the charters for the audit, compensation and nominating and governance committees of our board of directors and our code of ethics and corporate governance guidelines. We make these reports available as soon as reasonably practicable after they are filed with or furnished to the SEC. The information contained on, or that can be accessed through our website is not a part of or incorporated by reference into this Annual Report on Form 10-K. We will also provide to any person without charge, upon request, a copy of any of the foregoing materials. Any such request must be made in writing to us at: Leap Therapeutics, Inc. c/o Investor Relations, 41 Thorndike Street, Suite B1-1, Cambridge, MA 02141.

**Item 1A. Risk Factors.**

*The following risk factors and other information included in this Annual Report on Form 10-K should be carefully considered. The risks and uncertainties described below are not the only ones we face. Additional risks and uncertainties not presently known to us or that we presently deem less significant may also impair our business operations. Please see the "Special Note Regarding Forward-Looking Statements and Industry Data" at the beginning of this Annual Report on Form 10-K for a discussion of some of the forward-looking statements that are qualified by these risk factors. If any of the following risks occur, our business, financial condition, results of operations and future growth prospects could be materially and adversely affected.*

**Risks Related to Leap's Financial Position and Capital Needs**

*We have incurred significant losses since our inception and anticipate that we will continue to incur losses in the future.*

We are a clinical-stage biopharmaceutical company. Investment in biopharmaceutical product development is highly speculative because it entails substantial upfront capital expenditures and significant risk that our two product candidates, DKN-01 and TRX518, or any other products will fail to gain regulatory approval or become commercially viable. We have only two clinical-stage product candidates, which are at the early stages of clinical development. We do not have any products approved by regulatory authorities for marketing and have not generated any revenue from product sales. We incur significant research, development and other expenses related to our ongoing operations.

As a result, we are not profitable and have incurred losses in every reporting period since our inception in 2011. For the year ended December 31, 2016, we reported a net loss of \$25.6 million, and had an accumulated deficit of \$100.7 million at December 31, 2016.

We expect to continue to incur significant expenses and operating losses for the foreseeable future. We anticipate these losses to increase as we continue the research and development of, and seek regulatory approvals for DKN-01 and TRX518, and we potentially begin to commercialize DKN-01 and TRX518, if they receive regulatory approval. We may encounter unforeseen expenses, difficulties, complications, delays and other unknown factors that may adversely affect our business. The size of our future net losses will depend, in part, on the rate of future growth of our expenses and our ability to generate revenues. If either or both of DKN-01 or TRX518 fails in clinical trials or does not gain regulatory approval, or if approved, fails to achieve market acceptance, we may never become profitable. Even if we achieve profitability in the future, we may not be able to sustain profitability in subsequent periods.

*We currently have no source of product revenue and may never become profitable.*

We have not generated any revenues, and we have no commercial products. Our ability to generate revenue from product sales and achieve profitability will depend upon our ability to successfully gain regulatory approval and commercialize DKN-01 or TRX518 or other product candidates that we may in-license or acquire in the future. Even if we are able to successfully achieve regulatory approval, we do not know when we will generate revenue from product sales, if at all. Our ability to generate revenue from product sales from any product candidates also depends on a number of additional factors, including our ability to:

- successfully complete development activities, including enrollment of study participants and completion of the necessary clinical trials;
- complete and submit new drug applications, or NDAs, or biologics license applications, or BLAs, to the FDA and obtain regulatory approval for indications for which there is a commercial market;

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- complete and submit applications to, and obtain regulatory approval from, foreign regulatory authorities;
- make or have made commercial quantities of our products at acceptable cost levels;
- develop a commercial organization capable of manufacturing, sales, marketing and distribution for any products we intend to sell ourselves in the markets in which we choose to commercialize on our own;
- find suitable partners to help us market, sell and distribute our approved products in other markets; and
- obtain adequate pricing, coverage and reimbursement from third parties, including government and private payors.

In addition, because of the numerous risks and uncertainties associated with product development, including that DKN-01 or TRX518 may not advance through development or achieve the endpoints of applicable clinical trials, we are unable to predict the timing or amount of increased expenses, or when or if we will be able to achieve or maintain profitability. Even if we are able to complete the development and regulatory process for DKN-01 and/or TRX518, we anticipate incurring significant costs associated with commercializing these products, including in building the requisite sales and marketing capabilities to sell such products (which itself may pose financial and operational risks).

Even if we are able to generate revenues from the sale of our products, we may not become profitable and will need to obtain additional funding to continue operations. If we fail to become profitable or are unable to sustain profitability on a continuing basis, and we are not successful in obtaining additional funding, then we may be unable to continue our operations at planned levels.

***We will require additional capital to fund our operations and if we fail to obtain necessary financing, we may be unable to complete the development and potential commercialization of DKN-01 or TRX518 or acquire other products.***

Our operations have consumed substantial amounts of cash since inception. We expect to continue to spend substantial amounts to advance the clinical development of DKN-01 and TRX518 and launch and commercialize these product candidates, if we receive regulatory approval. We will require additional capital for the further development and potential commercialization. If we are unable to raise capital when needed or on attractive terms, we could be forced to delay, reduce or eliminate our research and development programs or any future commercialization efforts.

We believe that our cash and cash equivalents will enable us to fund our operating expenses and capital expenditure requirements for at least the next 12 months. We have based this estimate on assumptions that may prove to be wrong, and we could deploy our available capital resources sooner than we currently expect. Our future funding requirements, both near and long-term, will depend on many factors, including, but not limited to the:

- initiation, progress, timing, costs and results of pre-clinical studies and clinical trials for our product candidates;
- costs and timing of additional clinical trial and commercial manufacturing activities;
- clinical development plans we establish for DKN-01, TRX518, and any other future product candidates;
- number and characteristics of any new product candidates that we in-license and develop;

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- outcome, timing and cost of regulatory review by the FDA and comparable foreign regulatory authorities, including the potential for the FDA or comparable foreign regulatory authorities to require that we perform more studies than those that we currently expect;
- costs of filing, prosecuting, defending and enforcing any patent claims and maintaining and enforcing other intellectual property rights;
- effect of competing product candidates and market developments; and
- costs and timing of establishing sales, marketing and distribution capabilities for any product candidates for which we may receive regulatory approval.

If we are unable to fund our operations or otherwise capitalize on our business opportunities due to a lack of capital, our ability to become profitable will be compromised.

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

Until we can generate substantial revenue from product sales, if ever, we expect to seek additional capital through a combination of private and public equity offerings, debt financings, strategic collaborations and alliances and licensing arrangements. To the extent that we raise additional capital through the sale of equity or convertible debt securities, the ownership interests of existing stockholders will be diluted, and the terms may include liquidation or other preferences that adversely affect the rights of existing stockholders. Debt financing, if available, may involve agreements that include liens or other restrictive covenants limiting our ability to take important actions, such as incurring additional debt, making capital expenditures or declaring dividends. If we are unable to raise additional funds through equity or debt financing when needed, we may be required to delay, limit, reduce or terminate our product development or commercialization efforts or grant rights to develop and market our product candidates that we would otherwise prefer to develop and market ourselves. If we raise additional funds through strategic collaborations and alliances or licensing arrangements with third parties, we may have to relinquish valuable rights to our product candidates in particular countries, or grant licenses on terms that are not favorable to us.

### ***Future utilization of net operating loss carryforwards may be limited.***

As of December 31, 2016, we had federal and state net operating loss carryforwards of \$53.7 million and \$35.7 million, respectively, which begin to expire in 2031. We may be able to utilize our net operating loss carryforwards to reduce future federal and state income tax liabilities. However, these net operating losses are subject to various limitations under Internal Revenue Code ("IRC") Section 382. In accordance with Section 382 of the Internal Revenue Code of 1986, as amended, a change in equity ownership of greater than 50% of the Company within a three-year period can result in an annual limitation on the Company's ability to utilize its net operating loss carryforwards that were created during tax periods prior to the change in ownership. A change in ownership may result from the issuance of shares of the Company's common stock pursuant to conversion of the Notes or any other event that would result in the issuance of common or preferred shares of the Company, among other events.

### ***We rely on a Research & Development Incentive program in Australia, which could be amended or changed.***

We have also financed our business operations through R&D Incentive income. The research and development tax incentive is one of the key elements of Australian Government's support for Australia's innovation system and if eligible, provides the recipient with a refundable tax offset for research and development activities. For the year ended December 31, 2016 we recorded research and development incentive income receivable of \$3.1 million. There have been recent proposals to change



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the structure of the innovation and research and development funding landscape in Australia which may impact the research and development incentive income receivable for the 2017 financial year. For the 2017 financial year, the refundable research and development rate will be 43.5% of eligible expenses rather than the 45% rate of our 2016 fiscal year. There are also proposals to cap the total refundable payments to Australian \$2 million on an annual basis. There can be no assurance that we will continue to qualify and be eligible for such incentives or that the Australian Government will continue to provide incentives, offset, grants and rebates on similar terms or at all.

***A large majority of the Company's shares are held by a few stockholders, some of whom are affiliated with members of the Company's management and our board of directors. As these principal stockholders substantially control the Company's corporate actions, our other stockholders may face difficulty in exerting any influence over matters not supported by these principal stockholders.***

The Company's principal stockholders include HealthCare Ventures VIII, L.P., HealthCare Ventures IX, L.P. and HealthCare Ventures Strategic Fund, L.P. (the "Funds") and Eli Lilly and Company. Each of Christopher Mirabelli, our Chief Executive Officer, Douglas Onsi, our Chief Financial Officer, Augustine Lawlor, our Chief Operating Officer, John Littlechild, a director, and James Cavanaugh, a director, are affiliated with holders and may be deemed to have an indirect beneficial ownership interest in the stock owned by the Funds. As of March 24, 2017, these principal stockholders collectively owned approximately 59% of the Company's outstanding shares of common stock. These stockholders, acting individually or as a group, may be able to exert control over matters such as electing directors, amending the Company's certificate of incorporation or bylaws, and approving mergers or other business combinations or transactions. In addition, because of the percentage of ownership and voting concentration in these principal stockholders, elections of the Company's board of directors may be within the control of these stockholders. While all of the Company's stockholders are entitled to vote on matters submitted to the Company's stockholders for approval, the concentration of shares and voting control presently lies with these principal stockholders. As such, it would be difficult for stockholders to propose and have approved proposals not supported by these principal stockholders. There can be no assurance that matters voted upon by the Company's officers and directors in their capacity as stockholders will be viewed favorably by all stockholders of the Company's company. The stock ownership of the Company's principal stockholders may discourage a potential acquirer from seeking to acquire shares of the Company's common stock which, in turn, could reduce the Company's stock price or prevent the Company's stockholders from realizing a premium over the Company's stock price.

#### **Risks Related to Our Business and Industry**

***Clinical testing is expensive and can take many years to complete, and its outcome is inherently uncertain. Failure can occur at any time during the clinical trial process.***

The results of preclinical studies, preliminary study results, and early clinical trials of our product candidates may not be predictive of the results of later-stage clinical trials or the ultimately completed trial. For instance, while we have preliminary study results for our clinical studies of DKN-01 in esophageal cancer and biliary tract cancer, as well as our two clinical studies of TRX518, these studies are still ongoing and the ultimate study results may be different than the preliminary ones we have seen to date. Moreover, while we have seen preliminary favorable results in individual study subjects, these results may not be representative of the ultimate study population. Finally, the clinical trials conducted to date for DKN-01 and TRX518 are relatively small, open-label, uncontrolled studies. Preliminary and final results from such studies may not be representative of study results that are found in larger, controlled, blinded, and more long term studies.

Product candidates in later stages of clinical trials may fail to show the desired safety and efficacy traits despite having progressed through preclinical studies and initial clinical trials. Preclinical studies

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may also reveal unfavorable product candidate characteristics, including safety concerns. In some instances, there can be significant variability in safety or efficacy results between different clinical trials of the same product candidate due to numerous factors, including changes in trial procedures set forth in protocols, the impact of an active comparator arm, differences in the size and type of the patient populations, changes in and adherence to the clinical trial protocols, changes in medical prescribing practices, and the rate of dropout among clinical trial participants.

Our future clinical trial results may not be successful. A number of companies in the biopharmaceutical industry have suffered significant setbacks in advanced clinical trials, notwithstanding promising results in earlier trials. Moreover, should there be a flaw in a clinical trial, it may not become apparent until the clinical trial is well advanced. Further, because we currently plan to develop our product candidates for use with established oncology products, the design, implementation, and interpretation of the clinical trials necessary for marketing approval may be more complex than if we were developing our product candidates alone.

We may also experience numerous unforeseen events during, or as a result of, clinical trials that could delay or adversely affect our existing or future development programs, including:

- we may have delays in identifying and adding new investigators or clinical trial sites, we may experience delays in reaching, or fail to reach, agreement on acceptable clinical trial contracts or clinical trial protocols with prospective trial sites and our CROs or we may experience a withdrawal of clinical trial sites;
- the number of patients required for clinical trials of our product candidates may be larger than we anticipate, enrollment in these clinical trials may be slower than we anticipate or participants may drop out of these clinical trials at a higher rate than we anticipate;
- clinical trials of our product candidates may produce negative or inconclusive results, or our studies may fail to reach the necessary level of statistical significance, and we may decide to conduct additional clinical trials or abandon product development programs;
- we may not be able to demonstrate that a product candidate provides an advantage over current standards of care or current or future competitive therapies in development.
- the cost of clinical trials of our product candidates may be greater than we anticipate or we may have insufficient funds for a clinical trial;
- the supply or quality of the clinical trial material of our product candidates may be insufficient or inadequate to conduct clinical trials; and
- there may be changes to the therapeutics or their regulatory status which we are administering in combination with our product candidates or changes to standard of care, which require that we change our study design, or otherwise halt, discontinue or delay our clinical studies. This occurred for a multiple myeloma study that we were conducting. In that case, the standard of care changed such that we were no longer able to recruit study subjects under the study protocol.

***The regulatory approval processes of the FDA and comparable foreign authorities are lengthy, time consuming and inherently unpredictable, especially for an early-stage company such as ours. If we are not able to obtain, or if there are delays in obtaining, required regulatory approvals, we will not be able to commercialize our product candidates as expected, and our ability to generate revenue will be materially impaired.***

Because we are at the early stages of the clinical and regulatory development of our product candidates, the time required to obtain approval for them from the FDA and comparable foreign authorities is unpredictable but typically takes many years following the commencement of clinical trials and depends upon numerous factors, including the substantial discretion of the regulatory authorities.

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In addition, approval policies, regulations, or the type and amount of clinical data necessary to gain approval may change during the course of a product candidate's clinical development and may vary among jurisdictions. These may require us to amend our clinical trial protocols, conduct additional studies that require regulatory or institutional review board, or IRB, approval, or otherwise cause delays in the approval or rejection of an application. We have not obtained regulatory approval for any product candidate and it is possible that none of our existing product candidates or any product candidates we may seek to develop in the future, will ever obtain regulatory approval. Moreover, we have only completed early studies and enrolled limited numbers of patients for both DKN-01 and TRX518. Both DKN-01 and TRX518 will require additional preclinical and clinical development, as well as additional manufacturing development before we will be able to submit marketing applications to FDA. Moreover, should FDA determine that a companion diagnostic device is required for use of our product candidates or should we decide to pursue the development of a companion diagnostic device for the use of our product candidates, further development work would be required for such a device, including, possibly the approval of an Investigational Device Exemption for the study of such a device from FDA, compliance with FDA's device regulations, and either FDA clearance or approval of the device for commercial use. Such development would potentially take additional time and be subject to the risk of FDA non-approval or clearance of the diagnostic. Any delay in obtaining or failure to obtain required approvals could materially adversely affect our ability or that of any of our future collaborators to generate revenue from the particular product candidate, which likely would result in significant harm to our financial position and adversely impact our stock price.

Our product candidates and the activities associated with their development and commercialization, including their design, testing, manufacture, safety, efficacy, recordkeeping, labeling, storage, approval, advertising, marketing, promotion, sale, and distribution, are subject to comprehensive regulation by the FDA and other regulatory agencies in the United States and by the EMA, and similar regulatory authorities outside the United States and Europe. Failure to obtain marketing approval for a product candidate will prevent us from commercializing the product candidate. We have no experience in filing and supporting the applications necessary to gain marketing approvals and expect to rely on third-party clinical research organizations, or CROs, and consultants to assist us in this process. Securing marketing approval requires the submission of extensive preclinical and clinical data and supporting information to regulatory authorities for each therapeutic indication to establish the product candidate's safety, purity, and potency for that indication. Securing marketing approval also requires the submission of information about the product manufacturing process to, and inspection of manufacturing facilities and clinical trial sites by, the regulatory authorities.

We may also experience numerous unforeseen events during, or as a result of, clinical trials that could delay or prevent our ability to receive marketing approval or commercialize our product candidates, including:

- regulators or IRBs may not authorize us or our investigators to commence a clinical trial or to conduct a clinical trial at a prospective trial site, we may fail to reach an agreement with regulators or IRBs regarding the scope, design, or implementation of our clinical trials or regulators or IRBs may require that we modify or amend our clinical trial protocols;
- our third-party contractors may fail to comply with regulatory requirements, standard operating procedures or the clinical trial protocol, or meet their contractual obligations to us in a timely manner, or at all, or we may be required to engage in additional clinical trial site monitoring or manufacturing activities;

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- we, the regulators, or IRBs may require that we or our investigators suspend or terminate clinical research for various reasons, including noncompliance with regulatory requirements or a finding that the participants are being exposed to unacceptable health risks, undesirable side effects, or other unexpected characteristics of the product candidate, or due to findings of undesirable effects caused by a chemically or mechanistically similar therapeutic or therapeutic candidate;
- changes in or the enactment of additional statutes or regulations;
- there may be changes in marketing approval or regulatory review policies during the development period rendering our data insufficient to obtain marketing approval;
- we may decide, or regulators may require us, to conduct additional clinical trials, analyses, reports, data, or preclinical trials, or we may abandon product development programs;
- there may be regulatory questions or disagreements regarding interpretations of data and results, or new information may emerge regarding our product candidates, the FDA or comparable foreign regulatory authorities may disagree with our study design or our interpretation of data from preclinical studies and clinical trials or find that a product candidate's benefits do not outweigh its safety risks;
- the FDA or comparable regulatory authorities may disagree with our intended indications;
- the FDA or comparable foreign regulatory authorities may fail to approve or subsequently find fault with the manufacturing processes or our manufacturing facilities for clinical and future commercial supplies;
- the data collected from clinical trials of our product candidates or any additional product candidate may not be sufficient to the satisfaction of the FDA or comparable foreign regulatory authorities to support the submission of a BLA, or other comparable submission in foreign jurisdictions or to obtain regulatory approval in the United States or elsewhere; and
- the FDA or comparable regulatory authorities may take longer than we anticipate to make a decision on our product candidates.

Regulatory authorities have substantial discretion in the approval process and may refuse to accept any application or may decide that our data are insufficient for approval and require additional preclinical, clinical or other studies. In addition, varying interpretations of the data obtained from preclinical and clinical testing could delay, limit or prevent marketing approval of a product candidate. The number and types of preclinical studies and clinical trials that will be required for regulatory approval also varies depending on the product candidate, the disease or condition that the product candidate is designed to address, and the regulations applicable to any particular product candidate.

Approval policies, regulations or the type and amount of clinical data necessary to gain approval may change during the course of a product candidate's clinical development and may vary among jurisdictions, and there may be varying interpretations of data obtained from preclinical studies or clinical trials, either of which may cause delays or limitations in the approval or the decision not to approve an application. It is possible that neither of our product candidates nor any product candidates we may seek to develop in the future will ever obtain the appropriate regulatory approvals necessary for us or any future collaborators to commence product sales.

Finally, even if we were to obtain approval, regulatory authorities may approve any of our product candidates for fewer or more limited indications or uses than we request, may contain significant safety warnings, including black box warnings, contraindications, and precautions, may grant approval contingent on the performance of costly post-marketing clinical trials, surveillance, or other requirements, including risk evaluation and mitigation strategies, or REMS, to monitor the safety or

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efficacy of the product, or may approve a product candidate with a label that does not include the labeling claims necessary or desirable for the successful commercialization of that product candidate. Any of these scenarios could compromise the commercial prospects for our product candidates.

If we experience delays in obtaining approval, if we fail to obtain approval of a product candidate or if the label for a product candidate does not include the labeling claims necessary or desirable for the successful commercialization of that product candidate, the commercial prospects for such product candidate may be harmed and our ability to generate revenues from that product candidate will be materially impaired.

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

We may not be able to initiate or continue conducting clinical trials for our product candidates if we are unable to locate and enroll a sufficient number of eligible patients to participate in these trials as required by the FDA or similar regulatory authorities outside the United States. Some of our competitors have ongoing clinical trials for product candidates that treat the same indications or use the same mechanism of action as our product candidates, and patients who would otherwise be eligible for our clinical trials may instead enroll in clinical trials of our competitors' product candidates. Patient enrollment is affected by other factors including:

- the size and nature of the patient population;
- the severity of the disease under investigation;
- the eligibility criteria for, and design of, the clinical trial in question, including factors such as frequency of required assessments, length of the study and ongoing monitoring requirements;
- the perceived risks and benefits of the product candidate under study, including the potential advantages or disadvantages of the product candidate being studied in relation to other available therapies;
- competition in recruiting and enrolling patients in clinical trials;
- the efforts to facilitate timely enrollment in clinical trials;
- the patient referral practices of physicians;
- effectiveness of publicity created by clinical trial sites regarding the trial;
- patients' ability to comply with the specific instructions related to the trial protocol, proper documentation, and use of the biologic product;
- our inability to obtain or maintain patient informed consents;
- the risk that enrolled patients will drop out before completion or not return for post-treatment follow-up;
- the ability to monitor patients adequately during and after treatment; and
- the proximity and availability of clinical trial sites for prospective patients.

Our inability to enroll a sufficient number of patients for our clinical trials would result in significant delays and could require us to abandon one or more clinical trials altogether.

Enrollment delays in our clinical trials may result in increased development costs for our product candidates, or the inability to complete development of our product candidates, which would materially impair our ability to generate revenues, limit our ability to obtain additional financing and cause the value of our company to decline.

***The FDA may determine that any of our current or future product candidates have undesirable side effects that could delay or prevent their regulatory approval or commercialization.***

Undesirable side effects caused by our product candidates could cause us, IRBs, and other reviewing entities or regulatory authorities to interrupt, delay, or halt clinical trials and could result in a more restrictive label or the delay or denial of regulatory approval by the FDA or other comparable foreign authorities. For example, if concerns are raised regarding the safety of a new therapeutic as a result of undesirable side effects identified during clinical or preclinical testing, the FDA may order us to cease further development, decline to approve a product candidate or issue a letter requesting additional data or information prior to making a final decision regarding whether or not to approve the biologic. FDA requests for additional data or information can result in substantial delays in the approval of a new biologic.

Undesirable side effects caused by any of our current or future product candidates could also result in denial of regulatory approval by the FDA or other comparable foreign authorities for any or all targeted indications or the inclusion of unfavorable information in our product labeling, such as limitations on the indicated uses for which the products may be marketed or distributed, a label with significant safety warnings, including boxed warnings, contraindications, and precautions, a label without statements necessary or desirable for successful commercialization, or may result in requirements for costly post-marketing testing and surveillance, or other requirements, including REMS, to monitor the safety or efficacy of the products, and in turn prevent us from commercializing and generating revenues from the sale of our current or future product candidates.

If any of our product candidates is associated with serious adverse events or undesirable side effects or have properties that are unexpected, we may need to abandon development or limit development of that product candidate to certain uses or subpopulations in which the undesirable side effects or other characteristics are less prevalent, less severe or more acceptable from a risk-benefit perspective. The therapeutic-related side effects could affect patient recruitment or the ability of enrolled patients to complete the trial or result in potential product liability claims. Any of these occurrences may significantly harm our business, financial condition, results of operations, and prospects.

***Failure to obtain marketing approval in international jurisdictions would prevent our product candidates from being marketed abroad.***

In order to market and sell our products in the European Union and other jurisdictions, we or our third-party collaborators must obtain separate marketing approvals and comply with numerous and varying regulatory requirements. The approval procedure varies among countries and can involve additional testing, in some cases involving clinical trials involving subjects from the country. The time required to obtain approval may differ substantially from that required to obtain FDA approval. The regulatory approval process outside the United States generally includes all of the risks associated with obtaining FDA approval. In addition, in many countries outside the United States, it is required that the product be approved for reimbursement before the product can be approved for sale in that country. We or these third parties may not obtain approvals from regulatory authorities outside the United States on a timely basis, if at all. Approval by the FDA does not ensure approval by regulatory authorities in other countries or jurisdictions, and approval by one regulatory authority outside the United States does not ensure approval by regulatory authorities in other countries or jurisdictions or by the FDA. However, the failure to obtain approval in one jurisdiction may compromise our ability to obtain approval elsewhere. We may not be able to file for marketing approvals and may not receive necessary approvals to commercialize our products in any market.

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***Even if our product candidates receive regulatory approval, we will be subject to ongoing obligations and continued regulatory review, which may result in significant additional expense. Additionally, any of our product candidates, if approved, could be subject to labeling and other restrictions and market withdrawal and we may be subject to penalties if we fail to comply with regulatory requirements or experience unanticipated problems with our products.***

Any product candidate for which we obtain marketing approval will be subject to extensive and ongoing requirements of and review by the FDA and other regulatory authorities, including requirements related to the manufacturing processes, post-approval clinical data, labeling, packaging, distribution, adverse event reporting, storage, recordkeeping, export, import, advertising, marketing, and promotional activities for such product. These requirements further include submissions of safety and other post-marketing information, including manufacturing deviations and reports, registration and listing requirements, the payment of annual fees for our product candidates, if approved, and the establishments at which they are manufactured, continued compliance with cGMP requirements relating to manufacturing, quality control, quality assurance, and corresponding maintenance of records and documents, requirements regarding the distribution of samples to physicians and recordkeeping, and good clinical practices, or GCPs, for any clinical trials that we conduct post-approval.

Even if marketing approval of a product candidate is granted, the approval may be subject to limitations on the indicated uses and populations for which the product may be marketed or to the conditions of approval, including significant safety warnings, including boxed warnings, contraindications, and precautions that are not desirable for successful commercialization and any requirement to implement a REMS that render the approved product not commercially viable or other post-market requirements or restrictions. Moreover, the FDA and comparable foreign regulatory authorities will continue to closely monitor the safety profile of any product even after approval. If the FDA or comparable foreign regulatory authorities become aware of new safety information after approval of any of our product candidates, they may withdraw approval, require labeling changes or establishment of a REMS or similar strategy, impose significant restrictions on a product's indicated uses or marketing, or impose ongoing requirements for potentially costly post-approval studies or post-market surveillance. Any such restrictions could limit sales of the product.

We and any of our collaborators, including our contract manufacturers, could be subject to periodic unannounced inspections by the FDA to monitor and ensure compliance with cGMPs. Application holders must further notify the FDA, and depending on the nature of the change, obtain FDA pre-approval for product and manufacturing changes. Application fees may apply to certain changes.

In addition, later discovery of previously unknown adverse events or that the product is less effective than previously thought or other problems with our products, manufacturers or manufacturing processes, or failure to comply with regulatory requirements both before and after approval, may yield various results, including:

- restrictions on manufacturing or distribution, or marketing of such products;
- restrictions on the labeling, including required additional warnings, such as black box warnings, contraindications, precautions, and restrictions on the approved indication or use;
- modifications to promotional pieces;
- requirements to conduct post-marketing studies or clinical trials;
- clinical holds or termination of clinical trials;
- requirements to establish or modify a REMS or a comparable foreign authority may require that we establish or modify a similar strategy, that may, for instance, require us to create a Medication Guide outlining the risks of the previously unidentified side effects for distribution

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to patients, or restrict distribution of the product, if and when approved, and impose burdensome implementation requirements on us;

- changes to the way the biologic is administered;
- liability for harm caused to patients or subjects;
- reputational harm;
- the product becoming less competitive;
- warning, untitled, or cyber letters;
- suspension of marketing or withdrawal of the products from the market;
- regulatory authority issuance of safety alerts, Dear Healthcare Provider letters, press releases, or other communications containing warnings or other safety information about the biologic;
- refusal to approve pending applications or supplements to approved applications that we submit;
- recalls of products;
- fines, restitution or disgorgement of profits or revenues;
- suspension or withdrawal of marketing approvals;
- refusal to permit the import or export of our products;
- product seizure or detention;
- FDA debarment, debarment from government contracts, and refusal of future orders under existing contracts, exclusion from federal healthcare programs, consent decrees, or corporate integrity agreements; or
- injunctions or the imposition of civil or criminal penalties, including imprisonment.

Any of these events could prevent us from achieving or maintaining market acceptance of the particular product candidate, if approved, or could substantially increase the costs and expenses of commercializing such product, which in turn could delay or prevent us from generating significant revenues from its sale. Any of these events could further have other material and adverse effects on our operations and business and could adversely impact our stock price and could significantly harm our business, financial condition, results of operations, and prospects.

### ***Laws, regulatory policies, and medical practices could change in ways that are not favorable to us.***

The FDA's policies may change and additional government regulations may be enacted that could prevent, limit or delay regulatory approval of our product candidates, that could limit the marketability of our product candidates, or that could impose additional regulatory obligations on us if our product candidates are approved. Changes in medical practice and standard of care may also impact the marketability of our product candidates. For instance, because we are currently planning to develop our product candidates for use with other cancer therapies, should there be a change to the regulatory status of the other therapy or should the standard of care change, the marketability of our product candidates would be impacted.

If we are slow or unable to adapt to changes in existing requirements, standards of care, or the adoption of new requirements or policies, or if we are not able to maintain regulatory compliance, we may lose any marketing approval that we may have obtained and be subject to regulatory enforcement action.



Should any of the above actions take place, they could adversely affect our ability to achieve or sustain profitability. Further, the cost of compliance with post-approval regulations may have a negative effect on our operating results and financial condition.

#### **Risks Related to the Development and Commercialization of Our Product Candidates**

***The therapeutic safety and efficacy of DKN-01 and TRX518 is unproven, and we may not be able to successfully develop and commercialize DKN-01 or TRX518.***

DKN-01 and TRX518 are novel monoclonal antibodies and their potential benefit as a therapeutic cancer drug is unproven. Our ability to generate revenues from the sales of our products, which we do not expect will occur in the short term, if ever, will depend on successful development and commercialization after approval, if achieved, which is subject to many potential risks. DKN-01 or TRX518 may interact with human biological systems in unforeseen, ineffective or harmful ways. If either DKN-01 or TRX518 is associated with undesirable side effects or has characteristics that are unexpected, we may need to abandon its development or limit development to certain uses or subpopulations in which the undesirable side effects or other characteristics are less prevalent, less severe or more acceptable from a risk-benefit perspective. Many compounds that initially showed promise in early stage testing for treating cancer have later been found to be ineffective in later stage studies or cause side effects that prevented further development of the compound. As a result of these and other risks described herein that are inherent in the development of novel therapeutic agents, we may never successfully develop, enter into or maintain third party licensing or collaboration transactions with respect to, or successfully commercialize DKN-01 or TRX518, in which case we will not achieve profitability and the value of our stock may decline.

***The results of pre-clinical studies or early clinical trials are not necessarily predictive of future results, and DKN-01 or TRX518 may not have favorable results in later clinical trials or receive regulatory approval.***

Success in pre-clinical studies and early clinical trials does not ensure that later clinical trials will generate adequate data to demonstrate the efficacy and safety of DKN-01 or TRX518. A number of companies in the pharmaceutical and biotechnology industries, including those with greater resources and experience than we have, have suffered significant setbacks in clinical trials, even after seeing promising results in earlier clinical trials. Despite the results reported in earlier preclinical and clinical trials for DKN-01 and TRX518, we do not know whether the clinical trials we may conduct will demonstrate adequate efficacy and safety to result in regulatory approval to market DKN-01 or TRX518 in any particular jurisdiction. If our clinical trials do not produce favorable results, our ability to achieve regulatory approval for DKN-01 or TRX518 will be adversely impacted and the value of our stock may decline.

***Our future success is dependent primarily on the regulatory approval and commercialization of DKN-01 and TRX518, which are currently undergoing early stage clinical trials.***

We do not have any products that have gained regulatory approval. Currently, our only clinical-stage product candidates are DKN-01 and TRX518. As a result, our business is substantially dependent on our ability to obtain regulatory approval for, and, if approved, to successfully commercialize DKN-01 or TRX518 or other products in a timely manner. We cannot commercialize these products in the U.S. without first obtaining regulatory approval from the FDA; similarly, we cannot commercialize these products outside of the U.S. without obtaining regulatory approval from comparable foreign regulatory authorities. Before obtaining regulatory approvals for the commercial sale of these products for a target indication, we must demonstrate with substantial evidence gathered in pre-clinical studies and well-controlled clinical trials, that these products are safe and effective for use for that target indication and that the manufacturing facilities, processes and controls are adequate. Even if these products were to successfully obtain approval from the FDA and comparable foreign regulatory

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authorities, any approval might contain significant limitations related to use restrictions for specified age groups, warnings, precautions or contraindications, or may be subject to burdensome post-approval study or risk management requirements. If we are unable to obtain regulatory approval in one or more jurisdictions, or any approval contains significant limitations, we may not be able to obtain sufficient funding or generate sufficient revenue to continue the development of any other product candidate that we may discover, in-license, develop or acquire in the future. Furthermore, even if we obtain regulatory approval for our products, we will still need to develop a commercial organization or strategy, establish commercially viable pricing and obtain approval for adequate reimbursement from third-party and government payors. If we are unable to successfully commercialize our products, we may not be able to earn sufficient revenues to continue our business.

***Our commercial success depends upon attaining significant market acceptance of DKN-01 or TRX518, if approved, among physicians, patients, healthcare payors and the major operators of cancer clinics.***

Even if we obtain regulatory approval for DKN-01 or TRX518, DKN-01 or TRX518 may not gain market acceptance among physicians, healthcare payors, patients or the medical community. Market acceptance of DKN-01 or TRX518, if we receive approval, depends on a number of factors, including the:

- efficacy and safety of DKN-01 or TRX518 each as demonstrated in clinical trials and post-marketing experience;
- clinical indications for which DKN-01 or TRX518 is approved;
- acceptance by physicians, major operators of cancer clinics and patients of DKN-01 or TRX518 as a safe and effective treatment;
- potential and perceived advantages of DKN-01 or TRX518 over alternative treatments;
- product labeling or product insert requirements of the FDA or other regulatory authorities;
- timing of market introduction of DKN-01 or TRX518 as well as competitive products;
- cost of treatment in relation to alternative treatments;
- availability of coverage and adequate reimbursement and pricing by third-party payors and government authorities;
- relative convenience and ease of administration; and
- effectiveness of our sales and marketing efforts.

Moreover, if DKN-01 or TRX518 is approved but fails to achieve market acceptance among physicians, patients, or healthcare payors, we may not be able to generate significant revenues, which would compromise our ability to become profitable.

***If we are unable to establish effective marketing and sales capabilities or enter into agreements with third parties to market and sell our product candidates, if they are approved, we may be unable to generate product revenues.***

We currently do not have a commercial infrastructure for the marketing, sale, and distribution of pharmaceutical products. If approved, in order to commercialize our products, we must build our marketing, sales, and distribution capabilities or make arrangements with third parties to perform these services. We may not be successful in doing so. Should we decide to develop our own marketing capabilities, we will incur substantial expenses prior to product launch or even approval in order to recruit a sales force and develop a marketing and sales infrastructure. If a commercial launch is delayed as a result of FDA requirements or other reasons, we would incur these expenses prior to

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being able to realize any revenue from sales of our product candidates. Even if we are able to effectively hire a sales force and develop a marketing and sales infrastructure, our sales force and marketing teams may not be successful in commercializing our current or future product candidates.

We have no prior experience in the marketing, sale, and distribution of pharmaceutical products, and there are significant risks involved in the building and managing of a commercial infrastructure. The establishment and development of commercial capabilities, including compliance plans, to market any products we may develop will be expensive and time consuming and could delay any product launch, and we may not be able to successfully develop this capability. We, or our future collaborators, will have to compete with other pharmaceutical and biotechnology companies to recruit, hire, train, manage, and retain marketing and sales personnel.

We may also or alternatively decide to collaborate with a third-party marketing and sales organization to commercialize any approved product candidates, in which event, our ability to generate product revenue may be reduced. To the extent we rely on third parties to commercialize any products for which we obtain regulatory approval, we may receive less revenue than if we commercialized these products ourselves. In addition, we would have less control over the sales efforts of any other third parties involved in our commercialization efforts, and could be held liable if they failed to comply with applicable legal or regulatory requirements.

***Even if we are able to commercialize DKN-01 or TRX518, DKN-01 or TRX518 may not receive coverage and adequate reimbursement from third-party payors, which could harm our business.***

Our ability to commercialize DKN-01 or TRX518 successfully will depend, in part, on the extent to which coverage and adequate reimbursement for DKN-01 or TRX518 and related treatments will be available from government health administration authorities, private health insurers and other organizations. Government authorities and third-party payors, such as private health insurers and health maintenance organizations, determine which medications they will cover and establish reimbursement levels. We cannot be sure that coverage and adequate reimbursement will be available for DKN-01 or TRX518 and, if reimbursement is available, what the level of reimbursement will be. Coverage and reimbursement may impact the demand for, or the price of, DKN-01 or TRX518, if we obtain marketing approval. If reimbursement is not available or is available only at limited levels, we may not be able to successfully commercialize DKN-01 or TRX518, if we obtain marketing approval.

There may be significant delays in obtaining coverage and reimbursement for newly approved drugs, and coverage may be more limited than the purposes for which the drug is approved by the FDA or comparable foreign regulatory authorities. Moreover, eligibility for coverage and reimbursement does not imply that any drug will be paid for in all cases or at a rate that covers our costs, including research, development, manufacture, sale and distribution. Third-party payors often rely upon Medicare coverage policy and payment limitations in setting their own reimbursement policies. Our inability to obtain coverage and profitable reimbursement rates from both government-funded and private payors for any approved products that we develop could have a material adverse effect on our operating results, our ability to raise capital needed to commercialize products and our overall financial condition.

***We face substantial competition, which may result in others discovering, developing or commercializing products before, or more successfully than, we do.***

The development and commercialization of new drug products is highly competitive, especially in the oncology space in which we operate. We face competition with respect to DKN-01 and TRX518, and will face competition with respect to any other product candidates that we may seek to develop or commercialize in the future, from major pharmaceutical companies, specialty pharmaceutical companies and biotechnology companies worldwide. There are a number of large pharmaceutical and

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biotechnology companies that currently market and sell products or are pursuing the development of products for the treatment of cancer. Some of these competitive products and therapies are based on scientific approaches that are the same as or similar to our approach for DKN-01 or TRX518, and others are based on entirely different approaches. For example, there are several companies developing product candidates that target the same cancer pathways that we are targeting or that are testing product candidates in the same cancer indications that we are testing. For example, Novartis AG, or Novartis, Merck & Co., or Merck, and Pfizer, Inc. are all currently developing or have previously been developing anti-DKK1 monoclonal antibodies. Additionally, Merck, Novartis, Bristol-Myers Squibb Company, AstraZeneca PLC, and Incyte Corporation, are all developing a GITR agonist monoclonal antibody.

More established companies may have a competitive advantage over us due to their greater size, cash flows and institutional experience. Compared to us, many of our competitors may have significantly greater financial, technical and human resources. As a result of these factors, our competitors may obtain regulatory approval of their products before we are able to, which may limit our ability to develop or commercialize DKN-01 or TRX518. Our competitors may also develop drugs that are safer, more effective, more widely used and cheaper than ours, and may also be more successful than us in manufacturing and marketing their products. These appreciable advantages could render DKN-01 or TRX518 non-competitive before we can recover the expenses of development and commercialization.

### ***Our product candidates may face biosimilar competition sooner than anticipated.***

The enactment of the Biologics Price Competition and Innovation Act of 2009, or BPCIA, as part of the Affordable Care Act, or ACA, created an abbreviated pathway for the approval of biosimilar and interchangeable biological products. The abbreviated regulatory pathway establishes legal authority for the FDA to review and approve biosimilar biologics, including the possible designation of a biosimilar as "interchangeable" based on its similarity to an existing brand product. Under the BPCIA, an application for a biosimilar product cannot be approved by the FDA until 12 years after the original branded product was approved under a BLA.

We believe our product candidates approved as a biological product under a BLA should qualify for the BPCIA's 12-year period of exclusivity. However, this period of regulatory exclusivity does not apply to companies pursuing regulatory approval via their own traditional BLA, rather than via the abbreviated pathway. Moreover, the extent to which a biosimilar, once approved, will be substituted for any one of our reference products in a way that is similar to traditional generic substitution for non-biological products is not yet clear, and will depend on a number of marketplace and regulatory factors that are still developing.

The law is complex and is still being interpreted and implemented by the FDA. As a result, its ultimate impact, implementation, and meaning are subject to uncertainty. While it is uncertain when such processes intended to implement the BPCIA may be fully adopted by the FDA, any such processes could have a material adverse effect on the future commercial prospects for our biological products. Future proposed budgets, international trade agreements and other arrangements or proposals may also affect periods of exclusivity in the future.

### ***We face potential product liability exposure, and if successful claims are brought against us, we may incur substantial liability for our current or future product candidates and may have to limit their commercialization.***

The use of our current or future product candidates in clinical trials, and the sale of any of our product candidates for which we obtain regulatory approval, exposes us to the risk of product liability claims. We face inherent risk of product liability related to the testing of our product candidates in

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human clinical trials and will face an even greater risk if we commercially sell any product candidates that we may develop. Product liability claims might be brought against us by consumers, healthcare providers or others using, administering or selling our products. If we cannot successfully defend ourselves against these claims, we will incur substantial liabilities or be required to limit commercialization of our product candidates. Even successful defense would require significant financial and management resources.

While we currently carry insurance that we believe is appropriate for a company at our stage of development, our insurance coverage may not reimburse us or may not be sufficient to reimburse us for any expenses or losses we may suffer. Moreover, insurance coverage is becoming increasingly expensive, and, in the future, we may not be able to maintain insurance coverage at a reasonable cost or in sufficient amounts to protect us against losses due to liability. On occasion, large judgments have been awarded in class action lawsuits based on therapeutics that had unanticipated side effects. A successful product liability claim or series of claims brought against us could cause our stock price to fall and, if judgments exceed our insurance coverage, could decrease our cash and adversely affect our business and our prospects.

***Laws and regulations governing international operations may preclude us from developing, manufacturing and selling product candidates outside of the U.S. and require us to develop and implement costly compliance programs.***

As we seek to expand our operations outside of the U.S., we must comply with numerous laws and regulations in each jurisdiction in which we plan to operate. The creation and implementation of international business practices compliance programs is costly and such programs are difficult to enforce, particularly where reliance on third parties is required.

The Foreign Corrupt Practices Act, or FCPA, prohibits any U.S. individual or business from paying, offering, authorizing payment or offering of anything of value, directly or indirectly, to any foreign official, political party or candidate for the purpose of influencing any act or decision of the foreign entity in order to assist the individual or business in obtaining or retaining business. The FCPA also obligates companies whose securities are listed in the U.S. to comply with certain accounting provisions requiring such companies to maintain books and records that accurately and fairly reflect all transactions of the corporation, including international subsidiaries, and to devise and maintain an adequate system of internal accounting controls for international operations. The anti-bribery provisions of the FCPA are enforced primarily by the Department of Justice, or DOJ. The Securities and Exchange Commission, or the Commission, is involved with enforcement of the books and records provisions of the FCPA.

Compliance with the FCPA is expensive and difficult, particularly in countries in which corruption is a recognized problem. In addition, the FCPA presents particular challenges in the pharmaceutical industry, because, in many countries, hospitals are operated by the government, and doctors and other hospital employees are considered foreign officials. Certain payments to hospitals in connection with clinical trials and other work have been deemed to be improper payments to government officials and have led to FCPA enforcement actions.

Various laws, regulations and executive orders also restrict the use and dissemination outside of the U.S., or the sharing with certain non-U.S. nationals, of information classified for national security purposes, as well as certain products and technical data relating to those products. Our presence outside of the U.S. will require us to dedicate additional resources to comply with these laws, and these laws may preclude us from developing, manufacturing, or selling DKN-01 or TRX518 outside of the U.S., which could increase our development costs and limit our growth potential.

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The failure to comply with laws governing international business practices may result in substantial penalties, including suspension or debarment from government contracting. Violation of the FCPA can result in significant civil and criminal penalties. Indictment alone under the FCPA can lead to suspension of the right to do business with the U.S. government until the pending claims are resolved. Conviction of a violation of the FCPA can result in long-term disqualification as a government contractor. The termination of a government contract or relationship as a result of our failure to satisfy any of our obligations under laws governing international business practices, which would have a negative impact on our business and harm our reputation and ability to procure government contracts. The Commission also may suspend or bar issuers from trading securities on U.S. exchanges for violations of the FCPA's accounting provisions.

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

Healthcare providers, physicians and third-party payors will play a primary role in the recommendation and prescription of any product candidates for which we obtain marketing approval. Our future arrangements with third-party payors and customers may expose us to broadly applicable fraud and abuse and other healthcare laws and regulations that may affect the business or financial arrangements and relationships through which we would market, sell and distribute our products. Federal and state healthcare laws and regulations pertaining to fraud and abuse and patients' rights are and will be applicable to our business. Restrictions under applicable federal and state healthcare laws and regulations that may affect our operations (including our marketing, promotion, educational programs, pricing, and relationships with healthcare providers or other entities, among other things) and expose us to areas of risk include the following: (i) the federal healthcare Anti-Kickback Statute; (ii) federal civil and criminal false claims laws and civil monetary penalty laws; (iii) the federal Health Insurance Portability and Accountability Act of 1996, or HIPAA; (iv) HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act, or HITECH; (v) the federal physician sunshine requirements under the Affordable Care Act; and (vi) analogous state and foreign laws and regulations, such as state anti-kickback and false claims laws and state and foreign laws governing the privacy and security of health information in specified circumstances.

Efforts to ensure that our business arrangements with third parties are compliant with applicable healthcare laws and regulations will involve the expenditure of appropriate, and possibly significant, resources. Nonetheless, it is possible that governmental authorities will conclude that our business practices may not comply with current or future statutes, regulations or case law involving applicable fraud and abuse or other healthcare laws and regulations. If our operations are found to be in violation of any of these laws or any other governmental regulations that may apply to us, we may be subject to significant civil, criminal and administrative penalties, damages, fines, imprisonment, exclusion from government funded healthcare programs, such as Medicare and Medicaid, and the curtailment or restructuring of our operations. If any physicians or other healthcare providers or entities with whom we expect to do business are found to not be in compliance with applicable laws, they may be subject to criminal, civil or administrative sanctions, including exclusions from government funded healthcare programs.

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

As of March 30, 2017, we had 21 full-time employees and one part-time employee, of whom four hold Ph.D. degrees and one holds an M.D. degree. We will need additional managerial, operational, sales, marketing, financial and other resources. Future growth would impose significant added responsibilities on members of management, including:

- identifying, recruiting, maintaining, motivating and integrating additional employees;

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- improving our managerial, development, operational and finance systems; and
- expanding our facilities.

Because of the specialized scientific and managerial nature of our business, we rely heavily on our ability to attract and retain qualified scientific, technical and managerial personnel. The competition for qualified personnel in the pharmaceutical field is intense and as a result, we may be unable to continue to attract and retain qualified personnel necessary for the development of our business. As our operations expand, we will also need to manage additional relationships with various strategic partners, suppliers and other third parties. Our future financial performance and our ability to develop and commercialize DKN-01 or TRX518, if approved, and to compete effectively will depend, in part, on our ability to manage future growth effectively. Our failure to accomplish any of these tasks could prevent us from successfully growing our company.

***We may acquire other assets, form collaborations or make investments in other companies or technologies, that could harm our operating results, dilute our stockholders' ownership, increase our debt or cause us to incur significant expense.***

As part of our business strategy, we may pursue acquisitions of assets, including pre-clinical or clinical stage product candidates, or enter into strategic alliances and collaborations to expand our existing programs and operations. We may not identify or complete these transactions in a timely manner, on a cost-effective basis, or at all, and we may not realize the anticipated benefits of any such transaction, any of which could have a detrimental effect on our financial condition, results of operations and cash flows. We may not be able to find suitable acquisition candidates, and if we make any acquisitions, we may not be able to integrate these acquisitions successfully into our existing business and we may incur additional debt or assume unknown or contingent liabilities in connection therewith. Integration of an acquired company or assets may also disrupt ongoing operations, require the hiring of additional personnel and the implementation of additional internal systems and infrastructure, and require management resources that would otherwise focus on developing our existing business. We may not be able to find suitable strategic alliance or collaboration partners or identify other investment opportunities, and we may experience losses related to any such investments.

To finance any acquisitions or collaborations, we may choose to issue debt or shares of our common stock as consideration. Any such issuance of shares would dilute the ownership of our stockholders. If the price of our common stock is low or volatile, we may not be able to acquire other assets or companies or fund a transaction using our stock as consideration. Alternatively, it may be necessary for us to raise additional funds for acquisitions through public or private financings. Additional funds may not be available on terms that are favorable to us, or at all.

### **Risks Related to Our Dependence on Third Parties**

***We rely, and expect to continue to rely, on third parties to conduct, supervise, and monitor our preclinical studies and clinical trials, and those third parties may not perform satisfactorily, including failing to meet deadlines for the completion of such trials or failing to comply with regulatory requirements.***

We rely on third-party contract research organizations, or CROs, to conduct, supervise, and monitor our preclinical and clinical trials for our product candidates. We expect to continue to rely on third parties, such as CROs, clinical data management organizations, medical institutions, and clinical investigators, to conduct our preclinical studies and clinical trials. While we have agreements governing their activities, we have limited influence over their actual performance and control only certain aspects of their activities. The failure of these third parties to successfully carry out their contractual duties or meet expected deadlines could substantially harm our business, because we may be delayed in completing or unable to complete the clinical trials required to support future approval of our product candidates, or we may not obtain marketing approval for or commercialize our product candidates in a

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timely manner or at all. Moreover, these agreements might terminate for a variety of reasons, including a failure to perform by the third parties. If we need to enter into alternative arrangements, then that could delay our product development activities and adversely affect our business.

Our reliance on these third parties for development activities reduces our control over these activities. Nevertheless, we are responsible for ensuring that each of our studies is conducted in accordance with the applicable protocol, legal, regulatory, and scientific standards, and our reliance on the CROs does not relieve us of our regulatory responsibilities. For example, we will remain responsible for ensuring that each of our clinical trials is conducted in accordance with the general investigational plan and protocols for the trial and for ensuring that our preclinical trials are conducted in accordance with GLPs, as appropriate. Moreover, the FDA and comparable foreign regulatory authorities require us to comply with standards, commonly referred to as GCPs, for conducting, recording, and reporting the results of clinical trials to assure that data and reported results are credible and accurate and that the rights, integrity, and confidentiality of trial participants are protected. Regulatory authorities enforce these requirements through periodic inspections of trial sponsors, clinical investigators, and trial sites. If we or any of our CROs fail to comply with applicable GCPs or other regulatory requirements, we or our CROs may be subject to enforcement or other legal actions, the clinical data generated in our clinical trials may be deemed unreliable and the FDA or comparable foreign regulatory authorities may require us to perform additional clinical trials.

In addition, we will be required to report certain financial interests of our third-party investigators if these relationships exceed certain financial thresholds or meet other criteria. The FDA or comparable foreign regulatory authorities may question the integrity of the data from those clinical trials conducted by investigators who may have conflicts of interest.

We cannot assure you that, upon inspection by a given regulatory authority, such regulatory authority will determine that any of our clinical trials complies with GCP regulations. In addition, our clinical trials must be conducted with product candidates that were produced under cGMP regulations. Our failure to comply with these regulations may require us to repeat clinical trials, which would delay the regulatory approval process. We also are required to register certain clinical trials and post the results of certain completed clinical trials on a government-sponsored database, ClinicalTrials.gov, within specified timeframes. Failure to do so can result in enforcement actions and adverse publicity.

Our CROs may also have relationships with other entities, some of which may be our competitors, for whom they may also be conducting clinical trials or other therapeutic development activities that could harm our competitive position. In addition, our CROs are not our employees, and except for remedies available to us under our agreements with such CROs, we cannot control whether or not they devote sufficient time and resources to our ongoing clinical, non-clinical, and pre-clinical programs. If these third parties do not successfully carry out their contractual duties, meet expected deadlines or conduct our pre-clinical studies or clinical trials in accordance with regulatory requirements or our stated protocols, 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 our protocols, regulatory requirements or for other reasons, our trials may be repeated, extended, delayed, or terminated and we may not be able to obtain, or may be delayed in obtaining, marketing approvals for our product candidates and will not be able to, or may be delayed in our efforts to, successfully commercialize our product candidates, or we or they may be subject to regulatory enforcement actions. As a result, our results of operations and the commercial prospects for our product candidates would be harmed, our costs could increase, and our ability to generate revenues could be delayed. To the extent we are unable to successfully identify and manage the performance of third-party service providers in the future, our business may be materially and adversely affected.

If any of our relationships with these third-party CROs terminate, we may not be able to enter into arrangements with alternative CROs or to do so on commercially reasonable terms. Switching or



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adding additional CROs involves additional cost and requires management time and focus. In addition, there is a natural transition period when a new CRO commences work. As a result, delays could occur, which could compromise our ability to meet our desired development timelines. Though we carefully manage our relationships with our CROs, there can be no assurance that we will not encounter similar challenges or delays in the future or that these delays or challenges will not have a material adverse impact on our business, financial condition and prospects, and results of operations.

***If the contract manufacturers upon whom we rely fail to produce our product candidates or components in the volumes that we require on a timely basis, or to comply with stringent regulations applicable to biopharmaceutical manufacturers, we may face delays in the development and commercialization of, or be unable to meet demand for, our product candidates and may lose potential revenues.***

We do not manufacture any of our product candidates, and we do not currently plan to develop any capacity to do so. We utilize third-party contract manufacturing organizations, or CMOs, to manufacture the clinical trial material of DKN-01 and TRX518 and expect to do so for commercial products, if approved. We do not have any long-term commitments from our CMOs for clinical trial material or guaranteed prices for our product candidates. Any delays in obtaining adequate supplies with respect to our product candidates will delay the development or commercialization of our product candidates.

Our product candidates compete with other products and product candidates for access to contract manufacturing facilities. There are a limited number of CMOs that operate under cGMP regulations and that are both capable of manufacturing for us and willing to do so. If our existing CMOs, or any new third party CMOs that we engage in the future to manufacture our product candidates for our clinical trials, should cease to continue to do so for any reason, we likely would experience delays in obtaining sufficient quantities of our product candidates for us to advance our clinical trials while we identify and qualify replacement suppliers. Further, even if we do establish such collaborations or arrangements, our CMOs may breach, terminate, or not renew these agreements. We may not succeed in our efforts to establish sufficient manufacturing relationships or other alternative arrangements to meet our needs for any of our existing or future product candidates. If for any reason we are unable to obtain adequate supplies of our product candidates, it will be more difficult for us to conduct clinical trials, develop our product candidates and operate our business.

Any problems or delays we experience in preparing for commercial-scale manufacturing of a product candidate or component may result in a delay in FDA approval of the product candidate or may impair our ability to manufacture commercial quantities or such quantities at an acceptable cost, which could result in the delay, prevention, or impairment of clinical development and commercialization of our product candidates and could adversely affect our business. Furthermore, if our commercial CMOs fail to deliver the required commercial quantities of our product candidates on a timely basis and at commercially reasonable prices, we would likely be unable to meet demand for our products and we would lose potential revenues.

The manufacture of pharmaceutical products requires significant expertise and capital investment, including the development of advanced manufacturing techniques and process controls. Manufacturers of therapeutics often encounter difficulties in production, particularly in scaling up initial production. These problems include difficulties with production costs and yields, quality control, including stability of the product candidate and quality assurance testing, shortages of qualified personnel, and compliance with strictly enforced federal, state, and foreign regulations. Our CMOs may not perform as agreed or may have a failure of a manufacturing campaign. Any changes or deviations in a manufacturing process may result in the failure of the product to meet the specifications. If our CMOs were to encounter any of these difficulties, our ability to provide product candidates to patients in our clinical trials and for commercial use, if approved, would be jeopardized. Reliance on third-party CMOs

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entails exposure to risks to which we would not be subject if we manufactured the product candidate ourselves, including:

- inability to negotiate manufacturing agreements with CMOs under commercially reasonable terms;
- reduced day-to-day control over the manufacturing process for our product candidates as a result of using third-party CMOs for all aspects of manufacturing activities;
- reduced control over the protection of our trade secrets and know-how from misappropriation or inadvertent disclosure;
- termination or nonrenewal of manufacturing agreements with third parties in a manner or at a time that may be costly or damaging to us or result in delays in the development or commercialization of our product candidates; and
- disruptions to the operations of our third-party CMOs caused by conditions unrelated to our business or operations, including the bankruptcy of the CMO.

In addition, all CMOs of our product candidates and therapeutic substances must comply with cGMP requirements enforced by the FDA that are applicable to both finished product and their active components used both for clinical and commercial supply, through its facilities inspection program. Our CMOs must be approved by the FDA pursuant to inspections that will be conducted after we submit our marketing applications to the agency. Our CMOs will also be subject to continuing FDA and other regulatory authority inspections should we receive marketing approval. Further, we, in cooperation with our CMOs, must supply all necessary chemistry, manufacturing, and control documentation in support of a BLA on a timely basis. The cGMP requirements include quality control, quality assurance, and the maintenance of records and documentation. Manufacturers of our product candidates and therapeutic substances may be unable to comply with our specifications, these cGMP requirements and with other FDA, state, and foreign regulatory requirements. Poor control of production processes can lead to the introduction of adventitious agents or other contaminants, or to inadvertent changes in the properties or stability of product candidates that may not be detectable in final product testing. If our CMOs cannot successfully manufacture material that conforms to our specifications and the strict regulatory requirements of the FDA or other regulatory authorities, they will not be able to secure or maintain regulatory approval for their manufacturing facilities. Any such deviations may also require remedial measures that may be costly and/or time-consuming for us or a third party to implement and that may include the temporary or permanent suspension of a clinical trial or commercial sales or the temporary or permanent closure of a facility. Any such remedial measures imposed upon us or third parties with whom we contract could materially harm our business.

While we are ultimately responsible for the manufacture of our product candidates and therapeutic substances, other than through our contractual arrangements, we have little control over our CMOs' compliance with these regulations and standards. If the FDA or a comparable foreign regulatory authority does not approve these facilities for the manufacture of our product candidates or if it withdraws any such approval in the future, we may need to find alternative manufacturing facilities, which would significantly impact our ability to develop, obtain regulatory approval for or market our product candidates, if approved. A failure to comply with these requirements may result in regulatory enforcement actions against our CMOs or us, including fines and civil and criminal penalties, including imprisonment, suspension or restrictions of production, suspension, injunctions, delay or denial of product approval or supplements to approved products, clinical holds or termination of clinical studies, warning or untitled letters, regulatory authority communications warning the public about safety issues with the biologic, refusal to permit the import or export of the products, product seizure, detention, or recall, operating restrictions, suits under the civil False Claims Act, corporate integrity agreements, consent decrees, or withdrawal of product approval. If the safety of any quantities supplied is

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compromised due to our CMOs' failure to adhere to applicable laws or for other reasons, we may not be able to obtain regulatory approval for or successfully commercialize our product candidates.

Any failure or refusal to supply sufficient quantities of our product candidates would delay, prevent or impair our clinical development or commercialization efforts. Any change in our CMO could be costly because the commercial terms of any new arrangement could be less favorable and because the expenses relating to the transfer of necessary technology and processes could be significant. There are significant requirements prior to receiving FDA approval for the transfer of manufacturing process for a therapeutic antibody product to a new manufacturing facility.

We also rely on third parties to store and distribute our product candidates for the clinical trials that we conduct. Any performance failure on the part of our distributors could delay clinical development of our product candidates, producing additional losses.

***Any collaboration arrangements that we may enter into in the future may not be successful, which could adversely affect our ability to develop and commercialize our product candidates.***

For our current or future product candidates, we may in the future determine to collaborate with other pharmaceutical and biotechnology companies for their development and potential commercialization. We face significant competition in seeking appropriate collaborators. Our ability to reach a definitive agreement for collaboration will depend, among other things, upon our assessment of the collaborator's resources and expertise, the terms and conditions of the proposed collaboration and the proposed collaborator's evaluation of a number of factors. Our future collaboration arrangements, if any, may not be successful, and the success of them will depend heavily on the efforts and activities of our collaborators. Collaborators generally have significant discretion in determining the efforts and resources that they will apply to these collaboration arrangements. Disagreements between parties to a collaboration arrangement regarding clinical development and commercialization matters can lead to delays in the development process or commercializing the applicable product candidate and, in some cases, termination of the collaboration arrangement. We may not identify or complete any collaboration in a timely manner, on a cost-effective basis, or at all, and we may not realize the anticipated benefits of any such transaction, any of which could have a detrimental effect on our financial condition, results of operations and cash flows.

#### **Risks Related to Legal and Compliance Matters**

***If we fail to comply with federal and state healthcare laws, including fraud and abuse and health and other information privacy and security laws, we could face substantial penalties and our business, financial condition, results of operations, and prospects could be adversely affected.***

As a biopharmaceutical company, we are subject to many federal and state healthcare laws, including those described in the Government Regulation and Product Approval section. If we or our operations are found to be in violation of any federal or state healthcare law, or any other governmental regulations that apply to us, we may be subject to penalties, including civil, criminal, and administrative penalties, damages, fines, disgorgement, debarment from government contracts, and refusal of orders under existing contracts, exclusion from participation in U.S. federal or state health care programs, corporate integrity agreements, and the curtailment or restructuring of our operations, any of which could materially adversely affect our ability to operate our business and our financial results. If any of the physicians or other healthcare providers or entities with whom we expect to do business, including our collaborators, is found not to be in compliance with applicable laws, it may be subject to criminal, civil or administrative sanctions, including but not limited to, exclusions from participation in government healthcare programs, which could also materially affect our business.

Although an effective compliance program can mitigate the risk of investigation and prosecution for violations of these laws, the risks cannot be entirely eliminated. Moreover, achieving and sustaining

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compliance with applicable federal and state privacy, security, and fraud laws may prove costly. Any action against us for violation of these laws, even if we successfully defend against it, could cause us to incur significant legal expenses and divert our management's attention from the operation of our business.

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

We are exposed to the risk of fraud or other misconduct. Misconduct by employees, independent contractors, consultants, commercial partners, principal investigators, or CROs could include intentional, reckless, negligent, or unintentional failures to comply with FDA regulations, comply with applicable fraud and abuse laws, provide accurate information to the FDA, report financial information or data accurately or disclose unauthorized activities to us. This misconduct could also involve the improper use or misrepresentation of information obtained in the course of clinical trials, which could result in regulatory sanctions and serious harm to our reputation. It is not always possible to identify and deter this type of misconduct, and the precautions we take to detect and prevent this activity may not be effective in controlling unknown or unmanaged risks or losses or in protecting us from governmental investigations or other actions or lawsuits stemming from a failure to be in compliance with such laws or regulations. If any such actions are instituted against us, and we are not successful in defending ourselves or asserting our rights, those actions could have a significant impact on our business, financial condition, and results of operations, including the imposition of significant fines or other sanctions.

#### **Risks Related to Our Intellectual Property**

***If we are unable to protect our intellectual property rights or if our intellectual property rights are inadequate to protect our technology and product candidates, our competitive position could be harmed.***

Our commercial success will depend in large part on our ability to obtain and maintain patent and other intellectual property protection in the U.S. and other countries with respect to our proprietary technology and products. We rely on patent, copyright and trademark laws, and confidentiality, licensing and other agreements with employees and third parties, all of which offer only limited protection. We seek to protect our proprietary position by filing and prosecuting patent applications in the U.S. and abroad related to our novel technologies and products that are important to our business.

The patent positions of biotechnology and pharmaceutical companies generally are highly uncertain, involve complex legal and factual questions and have in recent years been the subject of much litigation. As a result, the issuance, scope, validity, enforceability and commercial value of our patents, including those patent rights licensed to us by third parties, are highly uncertain. The steps we or our licensors have taken to protect our proprietary rights may not be adequate to preclude misappropriation of our proprietary information or infringement of our intellectual property rights, both inside and outside the U.S. Further, the examination process may require us or our licensors to narrow the claims for our pending patent applications and those of our licensor, which may limit the scope of patent protection that may be obtained if these applications issue. The rights already granted under any of our currently issued patents or those licensed to us and those that may be granted under future issued patents may not provide us with the proprietary protection or competitive advantages we are seeking. If we or our licensors are unable to obtain and maintain patent protection for our technology and products, or if the scope of the patent protection obtained is not sufficient, our competitors could develop and commercialize technology and products similar or superior to ours, and our ability to successfully commercialize our technology and products may be adversely affected. It is also possible that we or our licensors will fail to identify patentable aspects of inventions made in the

course of our development and commercialization activities before it is too late to obtain patent protection on them.

With respect to patent rights, we do not know whether any of the pending patent applications for any of our compounds will result in the issuance of patents that protect our technology or products, or if any of our or our licensors' issued patents will effectively prevent others from commercializing competitive technologies and products. Patents in the field of therapeutic monoclonal antibodies are frequently limited in scope based on the sequence of amino acids that form the antibody. A portion of our intellectual property portfolio is limited by the amino acid sequence of our product candidates. Other competing companies may have therapeutic antibodies to the same target as our product candidates that have a different amino acid sequence and as a result may not be determined to infringe on patents which are limited by amino acid sequence. Even for those patent applications which are defined by the target of a therapeutic antibody and not limited by an amino acid sequence, we cannot be certain that other companies with antibodies to these targets have not reported unanticipated findings or can otherwise avoid or overcome the claims in our intellectual property.

Our pending applications cannot be enforced against third parties practicing the technology claimed in such applications unless and until a patent issues from such applications. Because the issuance of a patent is not conclusive as to its inventorship, scope, validity or enforceability, issued patents that we own or have licensed from third parties may be challenged in the courts or patent offices in the U.S. and abroad. Such challenges may result in the loss of patent protection, the narrowing of claims in such patents or the invalidity or unenforceability of such patents, which could limit our ability to stop others from using or commercializing similar or identical technology and products, or limit the duration of the patent protection for our technology and products. Protecting against the unauthorized use of our or our licensors' patented technology, trademarks and other intellectual property rights is expensive, difficult and may in some cases not be possible. In some cases, it may be difficult or impossible to detect third-party infringement or misappropriation of our intellectual property rights, even in relation to issued patent claims, and proving any such infringement may be even more difficult.

***Our granted European patents for (i) TRX518 and its uses and (ii) TRX518 in combination with a chemotherapeutics agent for treating cancer, each of which is of significant value to us, have been challenged in European Patent Office Opposition proceedings, and successful challenges could limit our future revenues.***

A patent covering TRX518 and its uses was granted to us by the European Patent Office. Three oppositions to this patent were filed by two major pharmaceutical companies and an individual, possibly on behalf of a major pharmaceutical company. Opposition proceedings took place in 2016, and the Opposition Division of the European Patent Office that heard the case issued an interlocutory decision indicating that our patent should be maintained with modified claims that are narrower than the claims as originally granted. Nonetheless, we believe that the claims deemed allowable by the Opposition Division still sufficiently cover TRX518 and its uses. Nonetheless, we have filed an appeal of the decision of the Opposition Division seeking to obtain broader claims that more closely reflect the claims as granted in the patent. We cannot assure you that our appeal will have any success. Should the decision of the Opposition Division stand in whole or in part, our ability to prevent competition in Europe or to license our intellectual property may be more limited or of lower value than under the broader claims we were originally granted, which could have an adverse effect on our business, financial condition and results of operations. In addition, the cost of the opposition appeal and any further proceedings could be material.

In 2016, a patent covering the use of TRX518 in combination with a chemotherapeutic agent for treating cancer was granted to us by the European Patent Office. In March 2017, notices of opposition to this patent were filed by ten different entities, including several major pharmaceutical companies. We intend to vigorously defend the patent as granted through opposition proceedings. We cannot

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assure you that our appeal will have any success and, if not successful, our ability to prevent competition in Europe or to license our intellectual property may be more limited, which could have an adverse effect on our business, financial condition and results of operations. In addition, the cost of the opposition appeal and any further proceedings could be material.

***Third parties may initiate legal proceedings alleging that we are infringing their intellectual property rights, the outcome of which would be uncertain and could harm our business.***

Our commercial success depends upon our ability to develop, manufacture, market and sell DKN-01 or TRX518. We may become party to, or threatened with, future adversarial proceedings or litigation regarding intellectual property rights with respect to DKN-01 and/or TRX518, including interference or derivation proceedings before the U.S. Patent and Trademark Office. Third parties may assert infringement claims against us based on existing patents or patents that may be granted in the future. If we are found to infringe a third party's intellectual property rights, we could be required to obtain a license from such third party to continue commercializing DKN-01 and/or TRX518. However, we may not be able to obtain any required license on commercially reasonable terms or at all. Under certain circumstances, we could be forced, including by court order, to cease commercializing DKN-01 or TRX518. In addition, in any such proceeding or litigation, we could be found liable for monetary damages. A finding of infringement could prevent us from commercializing DKN-01 or TRX518 or force us to cease some of our business operations, which could materially harm our business. Any claims by third parties that we have misappropriated their confidential information or trade secrets could have a similar negative impact on our business.

While DKN-01 and TRX518 are in pre-clinical studies and clinical trials, we believe that the use of DKN-01 and TRX518 in these preclinical studies and clinical trials falls within the scope of the exemptions provided by 35 U.S.C. Section 271(e) in the U.S., which exempts from patent infringement liability activities reasonably related to the development and submission of information to the FDA. As DKN-01 or TRX518 progresses toward commercialization, the possibility of a patent infringement claim against us increases. We attempt to ensure that DKN-01 and TRX518, the methods we employ to manufacture them, as well as the methods for their use we intend to promote, do not infringe other parties' patents and other proprietary rights. There can be no assurance they do not, however, and competitors or other parties may assert that we infringe their proprietary rights in any event.

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

Filing, prosecuting and defending patents on DKN-01 or TRX518 and any future product candidates throughout the world could be prohibitively expensive, and our or our licensors' intellectual property rights in some countries outside the U.S. can be less extensive than those in the U.S. In addition, the laws and practices of some foreign countries do not protect intellectual property rights to the same extent as federal and state laws in the U.S. Consequently, we and our licensors may not be able to prevent third parties from practicing our and our licensors' inventions in all countries outside the U.S., or from selling or importing products made using our and our licensors' inventions in and into the U.S. or other jurisdictions. Competitors may use our technologies in jurisdictions where we have not obtained patent protection to develop their own products, and may export otherwise infringing products to territories where we or our licensors have patent protection, but where enforcement is not as strong as that in the U.S. These products may compete with our products in jurisdictions where we do not have any issued patents and our patent claims or other intellectual property rights may not be effective or sufficient to prevent them from so competing.

Many companies have encountered significant problems in protecting and defending intellectual property rights in certain foreign jurisdictions. The legal systems of certain countries, particularly certain developing countries, do not favor the enforcement of patents and other intellectual property protection, particularly those relating to biopharmaceuticals, which could make it difficult for us to stop

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the infringement of our or our licensors' patents or marketing of competing products in violation of our proprietary rights generally in those countries. Proceedings to enforce our patent rights in foreign jurisdictions could result in substantial cost and divert our efforts and attention from other aspects of our business, could put our and our licensors' patents at risk of being invalidated or interpreted narrowly and our and our licensors' patent applications at risk of not issuing and could provoke third parties to assert claims against us or our licensors. We or our licensors may not prevail in any lawsuits that we or our licensors initiate and the damages or other remedies awarded, if any, may not be commercially meaningful.

The laws of certain foreign countries may not protect our rights to the same extent as the laws of the U.S., and these foreign laws may also be subject to change. For example, methods of treatment and manufacturing processes may not be patentable in certain jurisdictions, and the requirements for patentability may differ in certain countries, particularly developing countries. Furthermore, generic drug manufacturers or other competitors may challenge the scope, validity or enforceability of our or our licensors' patents, requiring us or our licensors to engage in complex, lengthy and costly litigation or other proceedings. Generic drug or biosimilar manufacturers may develop, seek approval for, and launch generic or biosimilar versions of our products. Many countries, including some European Union countries, India, Japan and China, have compulsory licensing laws under which a patent owner may be compelled under certain circumstances to grant licenses to third parties. In those countries, we and our licensors may have limited remedies if patents are infringed or if we or our licensors are compelled to grant a license to a third party, which could materially diminish the value of those patents. This could limit our potential revenue opportunities in those countries. Accordingly, our and our licensors' efforts to enforce intellectual property rights around the world may be inadequate to obtain a significant commercial advantage from the intellectual property that we own or license.

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

Periodic maintenance fees on any issued patent are due to be paid to the USPTO and foreign patent agencies in several stages over the lifetime of the patent. The USPTO and various foreign governmental patent agencies require compliance with a number of procedural, documentary, fee payment and other similar provisions during the patent application process. While an inadvertent lapse can in many cases be cured by payment of a late fee or by other means in accordance with the applicable rules, there are situations in which noncompliance can result in abandonment or lapse of the patent or patent application, resulting in partial or complete loss of patent rights in the relevant jurisdiction. Non-compliance events that could result in abandonment or lapse of a patent or patent application include, but are not limited to, failure to respond to official actions within prescribed time limits, non-payment of fees and failure to properly legalize and submit formal documents. If we or our licensors fail to maintain the patents and patent applications covering our product candidates, our competitive position would be adversely affected.

***We may become involved in lawsuits to protect or enforce our intellectual property, which could be expensive, time consuming and unsuccessful and have a material adverse effect on the success of our business.***

Competitors may infringe our patents or misappropriate or otherwise violate our intellectual property rights. To counter infringement or unauthorized use, litigation may be necessary in the future to enforce or defend our intellectual property rights, to protect our trade secrets or to determine the validity and scope of our own intellectual property rights or the proprietary rights of others. Also, third parties may initiate legal proceedings against us or our licensors to challenge the validity or scope of intellectual property rights we own or control. These proceedings can be expensive and time

consuming. Many of our current and potential competitors have the ability to dedicate substantially greater resources to defend their intellectual property rights than we can. Accordingly, despite our efforts, we may not be able to prevent third parties from infringing upon or misappropriating our intellectual property. Litigation could result in substantial costs and diversion of management resources, which could harm our business and financial results. In addition, in an infringement proceeding, a court may decide that a patent owned by or licensed to us is invalid or unenforceable, or may refuse to stop the other party from using the technology at issue on the grounds that our patents do not cover the technology in question, or other grounds. An adverse result in any litigation proceeding could put one or more of our patents at risk of being invalidated, held unenforceable or interpreted narrowly. Furthermore, because of the substantial amount of discovery required in connection with intellectual property litigation, there is a risk that some of our confidential information could be compromised by disclosure during this type of litigation. 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 shares of our common stock.

### **Risks Related to Our Being a Public Company**

***We are an "emerging growth company" and we intend to take advantage of reduced disclosure and governance requirements applicable to emerging growth companies, which could result in our common stock being less attractive to investors.***

We are an "emerging growth company," as defined in the JOBS Act, and we intend to take advantage of certain exemptions from various reporting requirements that are applicable to other public companies that are not emerging growth companies including, but not limited to, not being required to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act, reduced disclosure obligations regarding executive compensation in our periodic reports and proxy statements, and exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and stockholder approval of any golden parachute payments not previously approved. We cannot predict if investors will find our common stock less attractive because we will rely on these exemptions. If some investors find our common stock less attractive as a result, there may be a less active trading market for our common stock, our stock price may be more volatile and it may be difficult for us to raise additional capital as and when we need it. If we are unable to raise additional capital as and when we need it, our financial condition and results of operations may be materially and adversely affected.

We may take advantage of these reporting exemptions until we are no longer an emerging growth company, which in certain circumstances could be for up to five years. We will remain an "emerging growth company" until the earliest of (a) the last day of the first fiscal year in which our annual gross revenues exceed \$1.0 billion, (b) the date that we become a "large accelerated filer" as defined in Rule 12b-2 under the Securities Exchange Act of 1934, as amended, or the Exchange Act, which would occur if the market value of our shares that are held by non-affiliates exceeds \$700 million as of the last business day of our most recently completed second fiscal quarter, (c) the date on which we have issued more than \$1.0 billion in nonconvertible debt during the preceding three-year period and (d) the last day of our fiscal year containing the fifth anniversary of the date on which shares of our common stock became publicly traded in the U.S.

***If we fail to maintain an effective system of internal control over financial reporting in the future, we may not be able to accurately report our financial condition, results of operations or cash flows, which may adversely affect investor confidence in us and, as a result, the value of our common stock.***

The Sarbanes-Oxley Act requires, among other things, that we maintain effective internal controls for financial reporting and disclosure controls and procedures. Beginning with our annual report in



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2018, we will be required, under Section 404 of the Sarbanes-Oxley Act, to furnish a report by management on, among other things, the effectiveness of our internal control over financial reporting. This assessment will need to include disclosure of any material weaknesses identified by our management in our internal control over financial reporting. A material weakness is a deficiency, or combination of deficiencies, in internal control over financial reporting that results in more than a reasonable possibility that a material misstatement of annual or interim financial statements will not be prevented or detected on a timely basis. Section 404 of the Sarbanes-Oxley Act also generally requires an attestation from our independent registered public accounting firm on the effectiveness of our internal control over financial reporting. However, for as long as we remain an emerging growth company as defined in the JOBS Act, we intend to take advantage of the exemption permitting us not to comply with the independent registered public accounting firm attestation requirement.

Our compliance with Section 404 will require that we incur substantial accounting expense and expend significant management efforts. We currently do not have an internal audit group, and we will need to hire additional accounting and financial staff with appropriate public company experience and technical accounting knowledge, and compile the system and process documentation necessary to perform the evaluation needed to comply with Section 404. We may not be able to complete our evaluation, testing and any required remediation in a timely fashion. During the evaluation and testing process, if we identify one or more material weaknesses in our internal control over financial reporting, we will be unable to assert that our internal control over financial reporting is effective. We cannot assure you that there will not be material weaknesses or significant deficiencies in our internal control over financial reporting in the future. Any failure to maintain internal control over financial reporting could severely inhibit our ability to accurately report our financial condition, results of operations or cash flows. If we are unable to conclude that our internal control over financial reporting is effective, or if our independent registered public accounting firm determines we have a material weakness or significant deficiency in our internal control over financial reporting once that firm begins its Section 404 reviews, we could lose investor confidence in the accuracy and completeness of our financial reports, the market price of our common stock could decline, and we could be subject to sanctions or investigations by the NASDAQ stock market, the Commission or other regulatory authorities. Failure to remedy any material weakness in our internal control over financial reporting, or to implement or maintain other effective control systems required of public companies, could also restrict our future access to the capital markets.

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

We are subject to the periodic reporting requirements of the Exchange Act. Our disclosure controls and procedures are designed to reasonably assure that information required to be disclosed by us in reports we file or submit under the Exchange Act is accumulated and communicated to management, recorded, processed, summarized and reported within the time periods specified in the rules and forms of the Commission. We believe that any disclosure controls and procedures or internal controls and procedures, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met.

These inherent limitations include the realities that judgments in decision-making can be faulty, and that breakdowns can occur because of simple error or mistake. Additionally, controls can be circumvented by the individual acts of some persons, by collusion of two or more people or by an unauthorized override of the controls. Accordingly, because of the inherent limitations in our control system, misstatements or insufficient disclosures due to error or fraud may occur and not be detected.

***We incur significant costs as a result of operating as a public company, and our management is required to devote substantial time to compliance initiatives.***

As a public company, we incur significant legal, accounting and other expenses, and these expenses may increase even more after we are no longer an "emerging growth company." Our management and other personnel need to devote a substantial amount of time to these compliance initiatives. Moreover, we expect these rules and regulations to substantially increase our legal and financial compliance costs and to make some activities more time-consuming and costly. We estimate that we will incur approximately \$1.0 to \$1.5 million in incremental costs per year associated with being a publicly traded company, although it is possible that our actual incremental costs will be higher than we currently estimate. The increased costs increase our net loss.

**Risks Related to our Common Stock**

***Because we do not anticipate paying any cash dividends on our capital stock in the foreseeable future, capital appreciation, if any, will be your sole source of gain.***

We have never declared or paid cash dividends on our capital stock. We currently intend to retain all of our future earnings, if any, to finance the growth and development of our business. As a result, capital appreciation, if any, of our common stock will be your sole source of gain for the foreseeable future.

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

Sales of a substantial number of shares of our common stock in the public market could occur at any time. These sales, or the perception in the market that the holders of a large number of shares intend to sell shares, could reduce the market price of our common stock. Holders of an aggregate of 6,007,947 shares of our common stock have rights, subject to certain conditions, to require us to file registration statements covering their shares or to include their shares in registration statements that we may file for ourselves or other stockholders. We also have registered all shares of common stock that we may issue under our equity compensation plans on Form S-8. These shares can be freely sold in the public market upon issuance, subject to volume limitations applicable to affiliates under Rule 144 under the Securities Act.

***Future sales and issuances of our common stock or rights to purchase common stock, including pursuant to our equity incentive plans, could result in additional dilution of the percentage ownership of our stockholders and could cause our stock price to fall.***

We expect that significant additional capital will be needed in the future to continue our planned operations. To raise capital, we may sell substantial amounts of common stock or securities convertible into or exchangeable for common stock. These future issuances of common stock or common stock-related securities, together with the exercise of stock options, warrants outstanding or granted in the future and any additional shares issued in connection with acquisitions, if any, may result in material dilution to our investors. Such sales may also result in material dilution to our existing stockholders, and new investors could gain rights, preferences and privileges senior to those of holders of our common stock.

Pursuant to our equity incentive plans, our compensation committee is authorized to grant equity-based incentive awards to our directors, executive officers and other employees and service providers. Shares currently available for future grant under our Amended and Restated 2012 Equity Incentive Plan and our 2016 Equity Incentive Plan represent a significant number of shares of Leap common stock and could represent significant dilution to our existing stockholders. Future equity incentive

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grants and issuances of common stock under our 2016 Equity Incentive Plan may have an adverse effect on the market price of our common stock.

***Some provisions of our charter documents and Delaware law may have anti-takeover effects that could discourage an acquisition of us by others, even if an acquisition would be beneficial to our stockholders and may prevent attempts by our stockholders to replace or remove our current management.***

Provisions in our certificate of incorporation and bylaws, as well as provisions of Delaware law, could make it more difficult for a third party to acquire us or increase the cost of acquiring us, even if doing so would benefit our stockholders, or remove our current management. These include provisions that:

- permit our board of directors to issue up to 10 million shares of preferred stock, with any rights, preferences and privileges as it may designate;
- provide that all vacancies on our board of directors, including as a result of newly created directorships, may, except as otherwise required by law, be filled by the affirmative vote of a majority of directors then in office, even if less than a quorum;
- establish a classified board of directors such that only one of three classes of directors is elected each year;
- provide that directors can only be removed for cause;
- require that any action to be taken by our stockholders must be effected at a duly called annual or special meeting of stockholders and not be taken by written consent;
- provide that stockholders seeking to present proposals before a meeting of stockholders or to nominate candidates for election as directors at a meeting of stockholders must provide advance notice in writing, and also specify requirements as to the form and content of a stockholder's notice;
- require that the amendment of certain provisions of our certificate of incorporation relating to anti-takeover measures may only be approved by a vote of 66<sup>2</sup>/3% (or, in certain limited circumstances, 75%) of our outstanding capital stock;
- not provide for cumulative voting rights, thereby allowing the holders of a majority of the shares of common stock entitled to vote in any election of directors to elect all of the directors standing for election; and
- provide that special meetings of our stockholders may be called only by the board of directors or by such person or persons designated by a majority of the board of directors to call such meetings.

These provisions may frustrate or prevent any attempts by our stockholders to replace or remove our current management by making it more difficult for stockholders to replace members of our board of directors, who are responsible for appointing the members of our management. Because we are incorporated in Delaware, we are governed by the provisions of Section 203 of the Delaware General Corporation Law, which may discourage, delay or prevent someone from acquiring us or merging with us whether or not it is desired by or beneficial to our stockholders. Under Delaware law, a corporation may not, in general, engage in a business combination with any holder of 15% or more of its capital stock unless the holder has held the stock for three years or, among other things, the board of directors has approved the transaction. Any provision of our certificate of incorporation or bylaws or Delaware law that has the effect of delaying or deterring a change in control could limit the opportunity for our stockholders to receive a premium for their shares of our common stock, and could also affect the price that some investors are willing to pay for our common stock.

**Item 1B. Unresolved Staff Comments.**

Not applicable.

**Item 2. Properties.**

We have leased our principal offices in Cambridge, Massachusetts covering approximately 7,667 square feet of space. We assumed this lease effective January 1, 2017, from HealthCare Ventures LLC pursuant to an Assignment and Assumption Agreement, dated as of January 1, 2017. This lease expires on April 30, 2019.

**Item 3. Legal Proceedings.**

From time to time we may become involved in legal proceedings or be subject to claims that arise in the ordinary course of business. As of the date of this report, and other than as described in the following paragraph, we are not currently a party to any material legal proceedings.

A patent covering TRX518 and its uses was granted to us by the European Patent Office. Three notices of opposition to this patent were filed by two major pharmaceutical companies and an individual, possibly on behalf of a major pharmaceutical company. At the conclusion of the opposition proceedings in 2016, the Opposition Division of the European Patent Office that heard the case issued an interlocutory decision indicating that our patent should be maintained with modified claims that differ from the claims as originally granted. These claims cover the TRX518 antibody and uses of TRX518 in a method of enhancing an immune response in a subject. In July 2016, we filed an appeal of the decision of the Opposition Division seeking to obtain broader claims that more closely reflect the claims as granted in the patent. The Board of Appeal has not scheduled a date for the appeal hearing. We are vigorously appealing the decision of the Opposition Division of the European Patent Office.

In 2016, a patent covering the use of TRX518 in combination with a chemotherapeutic agent for treating cancer was granted to us by the European Patent Office. In March 2017, notices of opposition to this patent were filed by ten different entities, including several major pharmaceutical companies. We intend to vigorously defend the patent as granted through opposition proceedings.

On October 16, 2015, we filed a trademark application (Serial No. 86/790,294) for LEAP THERAPEUTICS with the United States Patent and Trademark Office. The application was published for opposition on March 22, 2016. On September 19, 2016, Intrexon Corporation opposed the application by filing a notice of opposition with the Trademark Trial and Appeal Board, or TTAB. In its opposition, Intrexon argues that our LEAP THERAPEUTICS mark is confusingly similar to two trademark registrations Intrexon owns for the mark LEAP (Reg. Nos. 4407212 and 4637542). We filed our answer to the opposition and are vigorously defending Leap's right to use and register its trademark. The opposition is limited to determining whether the application should be permitted to proceed to registration.

Regardless of outcome, litigation or other legal proceedings 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

Our common stock, par value \$0.001 per share, has been publicly traded on the NASDAQ Global Market under the symbol "LPTX" since January 24, 2017. Prior to that time, including fiscal year 2016, the period covered by this Annual Report on Form 10-K, there was no public market for our common stock.

On March 29, 2017, the last reported sale price for our common stock on the Nasdaq Global Market was \$8.30 per share.

#### Holdings

As of March 30, 2017, there were approximately 19 holders of record of our common stock. The actual number of stockholders is greater than this number of record holders, and includes stockholders who are beneficial owners, but whose shares are held in street name by brokers and other nominees. This number of holders of record also does not include stockholders whose shares may be held in trust by other entities.

#### Dividends

We have never declared or paid cash dividends on our common stock, and we do not expect to pay any cash dividends on our common stock in the foreseeable future. We currently intend to retain our future earnings, if any, to fund the development and growth of our business. Payment of future dividends, if any, on our common stock will be at the discretion of our Board of Directors after taking into account various factors, including our financial condition, operating results, anticipated cash needs, and plans for expansion.

#### Securities Authorized to Issuance Under Equity Compensation Plans

Information about securities authorized to issuance under our equity compensation plans is incorporated herein by reference to Item 12 of Part III of this Annual Report on Form 10-K.

#### Recent Sales of Unregistered Securities

Set forth below is information regarding securities issued and options granted by us during the year ended December 31, 2016 that were not registered under the Securities Act of 1933, as amended, or the Securities Act. Also included is the consideration, if any, received by us for any such shares, options and warrants and information relating to the section of the Securities Act, or rule of the SEC, under which exemption from registration was claimed.

#### *Issuances of securities*

Leap issued a convertible promissory note to HealthCare Ventures VIII, L.P., HealthCare Ventures IX, L.P. and HealthCare Strategic Fund, L.P. The interest rate on the note is eight percent (8%) per annum, commencing to accrue with respect to any principal amount outstanding on the applicable drawdown date of such principal amount per its terms. The note may be amended by the written consent of Leap and the payees thereunder.

The note was originally issued by Leap to the payees on September 1, 2015, in the original principal amount of up to \$1,500,000, but was thereafter amended on November 2, 2015, December 15, 2015, February 12, 2016, April 28, 2016, June 1, 2016, August 30, 2016, October 13, 2016, and

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January 5, 2017 such that the maximum principal amount available to Leap under the note is \$31,000,000 and HealthCare Ventures Strategic Fund, L.P. is an additional payee party thereunder. The following table sets forth the drawdowns that have been made by Leap under the note:

<u>Payee</u>	<u>Drawdown date</u>	<u>Amount</u>
HealthCare Ventures VIII, L.P	September 1, 2015	\$ 300,000.00
HealthCare Ventures VIII, L.P	September 23, 2015	\$ 500,000.00
HealthCare Ventures VIII, L.P	October 19, 2015	\$ 700,000.00
HealthCare Ventures VIII, L.P	November 2, 2015	\$ 600,000.00
HealthCare Ventures VIII, L.P	December 17, 2015	\$ 1,000,000.00
HealthCare Ventures VIII, L.P	January 8, 2016	\$ 1,900,000.00
HealthCare Ventures IX, L.P	February 16, 2016	\$ 1,000,000.00
HealthCare Ventures VIII, L.P	March 1, 2016	\$ 1,000,000.00
HealthCare Ventures VIII, L.P	March 31, 2016	\$ 3,000,000.00
HealthCare Ventures VIII, L.P	April 28, 2016	\$ 300,000.00
HealthCare Ventures VIII, L.P	May 12, 2016	\$ 1,700,000.00
HealthCare Ventures VIII, L.P	June 13, 2016	\$ 2,000,000.00
HealthCare Ventures VIII, L.P	June 29, 2016	\$ 2,000,000.00
HealthCare Ventures VIII, L.P	August 3, 2016	\$ 3,000,000.00
HealthCare Ventures VIII, L.P	September 1, 2016	\$ 3,000,000.00
HealthCare Ventures Strategic Fund, L.P	October 13, 2016	\$ 2,000,000.00
HealthCare Ventures IX, L.P	November 15, 2016	\$ 1,750,000.00
HealthCare Ventures Strategic Fund, L.P	November 15, 2016	\$ 250,000.00
HealthCare Ventures IX, L.P	December 12, 2016	\$ 2,800,000.00
HealthCare Ventures Strategic Fund, L.P	December 12, 2016	\$ 200,000.00
HealthCare Ventures IX, L.P	January 13, 2017	\$ 750,000.00
<b>TOTAL</b>		<b>\$ 29,750,000.00</b>

No underwriters were involved in the foregoing sales of securities. The securities were issued to investors in reliance upon the exemption from the registration requirements of the Securities Act, as set forth in Section 4(a)(2) under the Securities Act, including in some cases, Regulation D promulgated thereunder, relative to transactions by an issuer not involving any public offering, to the extent an exemption from such registration was required. All purchasers of shares of capital stock described above represented to us in connection with their purchase that they were accredited investors and were acquiring the shares for their own account for investment purposes only and not with a view to, or for sale in connection with, any distribution thereof. The purchasers received written disclosures that the securities had not been registered under the Securities Act and that any resale must be made pursuant to a registration statement or an available exemption from such registration.

Immediately prior to the consummation of the merger with MacroCure in January 2017, the note converted into 1,950,768 shares of Leap common stock.

**Stock options**

During 2016 we issued no options and no options were exercised under our 2012 Equity Incentive Plan.

In connection with the consummation of the merger we adopted our Amended and Restated 2012 Equity Incentive Plan and our 2016 Equity Incentive Plan. The Amended and Restated 2012 Equity Incentive Plan amended and restated 2012 Equity Incentive Plan in its entirety.

## Purchases of Equity Securities

We did not purchase any of our registered equity securities during the period covered by this Annual Report on Form 10-K.

### Item 6. Selected Financial Data.

Not applicable.

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

*You should read the following discussion and analysis of our financial condition and results of operations together with our financial statements and related notes appearing elsewhere in this Annual Report on Form 10-K. In addition to historical information, this discussion and analysis contains forward-looking statements that involve risks, uncertainties and assumptions. Our actual results may differ materially from those anticipated in these forward-looking statements as a result of certain factors. We discuss factors that we believe could cause or contribute to these differences below and elsewhere in this report, including those set forth under Item 1A. "Risk Factors" and under "Cautionary Note Regarding Forward-Looking Statements" in this Annual Report.*

#### Overview

We were incorporated in the state of Delaware as Dekkun Corporation on January 3, 2011 and changed our name to HealthCare Pharmaceuticals, Inc. effective May 29, 2014, and then to Leap Therapeutics, Inc. effective November 16, 2015. During 2015, HealthCare Pharmaceuticals Pty Ltd. ("HCP Australia") was formed and is our wholly owned subsidiary.

On December 10, 2015, we entered into a merger agreement with GTR Inc. ("GTR"), an entity under common control, whereby a wholly owned subsidiary was merged with GTR and the surviving name of the wholly owned subsidiary was GTR Inc. The GTR merger was accounted for as a combination of entities under common control. As a result, the assets and liabilities of GTR that were transferred to us were measured at their carrying amounts. The accompanying consolidated financial statements reflect the retrospective application of the GTR merger transaction as if the GTR merger had occurred on January 1, 2015. The historical results of us and GTR since January 1, 2015 have been combined at their historical carrying amounts, and all share and option disclosures have been retroactively adjusted to reflect the exchange of shares and options in the merger transaction.

On August 29, 2016, we entered into a definitive merger agreement with Macrocare Ltd. ("Macrocare"), a publicly held, clinical-stage biotechnology company based in Petach Tikva, Israel, and M-Co Merger Sub Ltd. ("Merger Sub"), a wholly owned subsidiary of Leap which provided for the merger of Macrocare with and into Merger Sub, with Macrocare continuing after the merger as a wholly owned subsidiary of the Company. Pursuant to the Merger Agreement, the existing equity holders of Leap invested an additional \$10.0 million at the closing of the transaction. On January 23, 2017, we issued 3,257,368 shares of our common stock in exchange for 100% of the outstanding ordinary shares of Macrocare upon consummation of the merger.

We are a biopharmaceutical company acquiring and developing novel therapeutics at the leading edge of cancer biology. Our approach is designed to target compelling tumor-promoting and immuno-oncology pathways to generate durable clinical benefit and enhanced outcomes for patients. Our programs are monoclonal antibodies that target key cellular pathways that enable cancer to grow and spread and specific mechanisms that activate the body's immune system to identify and attack cancer. Our two clinical stage programs are:

- *DKN-01*: A monoclonal antibody targeting Dickkopf-related protein 1, or DKK1, a protein that regulates important cell signaling pathways, known as the Wnt pathways, and influences the

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immune environment around tumor cells. When DKN-01 binds to DKK1, Wnt signaling pathways and the tumor microenvironment are altered, and an anti-tumor effect can be generated. We are testing DKN-01 in ongoing clinical trials in patients with esophagogastric cancer in combination with paclitaxel and in patients with biliary tract cancer in combination with gemcitabine and cisplatin. We have studied DKN-01 as a monotherapy in patients with non-small cell lung cancer. DKN-01-based therapies have generated responses and clinical benefit in these patient populations.

- TRX518: A monoclonal antibody targeting the glucocorticoid-induced tumor necrosis factor-related receptor, or GITR, a receptor found on the surface of a wide range of immune cells. TRX518 has been specifically engineered to enhance the immune system's anti-tumor response by activating GITR signaling, or GITR agonism, to activate tumor fighting white blood cells, or T effector cells, and decrease the activity of potentially tumor-protective white blood cells, or T regulatory cells, without causing the immune cells to be destroyed. We believe GITR is an ideal immune system agonist target through this two-pronged approach of stimulating an anti-tumor response and reducing immune suppression. We are conducting two clinical trials of TRX518 in patients with advanced solid tumors and have evidence of biomarker modulation and clinical activity.

We intend to apply our extensive experience identifying and developing transformational products to aggressively develop these antibodies and build a pipeline of programs that has the potential to change the practice of cancer medicine.

We have devoted substantially all of our resources to development efforts relating to our product candidates, including manufacturing and conducting clinical trials of our product candidates, providing general and administrative support for these operations and protecting our intellectual property. We do not have any products approved for sale and have not generated any revenue from product sales. We have funded our operations primarily through proceeds from our sales preferred stock and proceeds from the issuance of notes payable—related party.

We have incurred net losses in each year since our inception in 2011. Our net loss was \$25.6 million for the year ended December 31, 2016 and \$12.1 million for the year ended December 31, 2015. As of December 31, 2016, we had an accumulated deficit of approximately \$100.7 million. Our net losses have resulted primarily from costs incurred in connection with our research and development programs and from general and administrative costs associated with our operations. We expect to continue to incur significant expenses and have increasing operating losses for at least the next several years.

We anticipate that our expenses will increase substantially as we:

- continue the development of our product candidates, DKN-01, including the completion of Phase 1/2 clinical trial activities and TRX518, including the completion of Phase 1 clinical trial activities;
- seek to obtain regulatory approvals for DKN-01 and TRX518;
- outsource the manufacturing of DKN-01 and TRX518 for clinical trials and any indications for which we receive regulatory approval;
- contract with third parties for the sales, marketing and distribution of DKN-01 and TRX518 for any indications for which we receive regulatory approval;
- maintain, expand and protect our intellectual property portfolio;
- continue our research and development efforts;



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- add operational, financial and management information systems and personnel, including personnel to support our product development efforts; and
- operate as a public company.

We do not expect to generate revenue from product sales unless and until we successfully complete development and obtain marketing approval for one or more of our product candidates, which we expect will take a number of years and is subject to significant uncertainty. Accordingly, we will need to raise additional capital prior to the commercialization of DKN-01, TRX518 or any other product candidate. Until such time, if ever, as we can generate substantial revenue from product sales, we expect to finance our operating activities through a combination of equity offerings, debt financings, government or other third-party funding, commercialization, marketing and distribution arrangements and other collaborations, strategic alliances and licensing arrangements. However, we may be unable to raise additional funds or enter into such other arrangements when needed on favorable terms or at all. Our failure to raise capital or enter into such other arrangements as and when needed would have a negative impact on our financial condition and our ability to develop our product candidates.

As of December 31, 2016, we had cash and cash equivalents of \$0.8 million. We believe our existing cash and cash equivalents as of December 31, 2016, together with the \$10.0 million equity investment by existing shareholders and the \$21.2 million in cash and cash equivalents acquired upon closing the merger with MacroCure on January 23, 2017 and the anticipated receipt of \$3.1 million of research and development tax incentive payments related to our Australian subsidiary, will enable us to fund our operating expenses and capital expenditure requirements through at least the end of March 2018. See "—Liquidity and Capital Resources."

### **Financial Overview**

#### *Research and Development Expenses*

Our research and development activities have included conducting nonclinical studies and clinical trials, manufacturing development efforts and activities related to regulatory filings for DKN-01 and TRX518. We recognize research and development expenses as they are incurred. Our research and development expenses consist primarily of:

- salaries and related overhead expenses for personnel in research and development functions, including costs related to stock-based compensation;
- fees paid to consultants and CROs for our nonclinical and clinical trials, and other related clinical trial fees, including but not limited to laboratory work, clinical trial database management, clinical trial material management and statistical compilation and analysis;
- costs related to acquiring and manufacturing clinical trial materials; and
- costs related to compliance with regulatory requirements.

We plan to increase our research and development expenses for the foreseeable future as we continue the development of DKN-01, TRX518 and any other product candidates, subject to the availability of additional funding.

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Our direct research and development expenses are tracked on a program-by-program basis and consist primarily of internal and external costs, such as employee costs, including salaries and stock-based compensation, other internal costs, fees paid to consultants, central laboratories, contractors and CROs in connection with our clinical and preclinical trial development activities. We use internal resources to manage our clinical and preclinical trial development activities and perform data analysis for such activities.

We participate, through our subsidiary in Australia, in the Australian government's R&D Incentive program, such that 45% of our eligible research and development expenses are reimbursed by the Australian government as a refundable tax offset and such incentives are reflected as other income.

The table below summarizes our research and development expenses incurred by development program and the R&D Incentive income for the years ended December 31, 2016 and 2015:

	Year Ended December 31,	
	2016	2015
	(in thousands)	
Direct research and development by program:		
DKN-01 program	\$ 13,679	\$ 9,079
TRX518 program	9,613	1,332
Total research and development expenses	<u>\$ 23,292</u>	<u>\$ 10,411</u>
Australian research and development incentives	<u>\$ 3,129</u>	<u>\$ —</u>

The successful development of our clinical product candidates is highly uncertain. At this time, we cannot reasonably estimate the nature, timing or costs of the efforts that will be necessary to complete the remainder of the development of any of our product candidates or the period, if any, in which material net cash inflows from these product candidates may commence. This is due to the numerous risks and uncertainties associated with developing drugs, including the uncertainty of:

- the scope, rate of progress and expense of our ongoing, as well as any additional, clinical trials and other research and development activities;
- future clinical trial results; and
- the timing and receipt of any regulatory approvals.

A change in the outcome of any of these variables with respect to the development of a product candidate could result in a significant change in the costs and timing associated with the development of that product candidate. For example, if the FDA or another regulatory authority were to require us to conduct clinical trials beyond those that we currently anticipate will be required for the completion of clinical development of a product candidate, 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.

***General and Administrative Expenses***

General and administrative expenses consist primarily of salaries and related costs, including stock-based compensation, for personnel in executive, finance and administrative functions. General and administrative expenses also include direct and allocated facility-related costs as well as professional fees for legal, patent, consulting, accounting and audit services.

We anticipate that our general and administrative expenses will increase in the future as we increase our headcount to support our continued research activities and development of our product candidates. We also anticipate that we will incur increased accounting, audit, legal, regulatory,

compliance, director and officer insurance costs as well as investor and public relations expenses associated with being a public company.

***Interest income***

Interest income consists primarily of interest income earned on cash and cash equivalents. Our interest income has not been significant due to nominal cash and investment balances and low interest earned on invested balances.

***Interest expense—related party***

Interest expense consists of interest accrued on notes payable—related party that we issued during 2016 and 2015, the outstanding amounts of which were due on March 31, 2017. On January 20, 2017, prior and subject to the consummation of our merger with Macrocare, all of our notes payable and accrued interest were converted into 1,950,768 shares of common stock.

***Research and development incentive income***

Research and development incentive income includes payments under the R&D Incentive program from the government of Australia. The R&D Incentive is one of the key elements of the Australian Government's support for Australia's innovation system. It was developed to assist businesses to recover some of the costs of undertaking research and development. The research and development tax incentive provides a tax offset to eligible companies that engage in research and development activities.

Companies engaged in research and development may be eligible for either:

- a 45% refundable tax offset for entities with an aggregated turnover of less than A\$20 million per annum, (the legislative rate for the tax year commencing July, 1 2016 will be reduced to 43.5%), or
- a 40% non-refundable tax offset for all other entities (the legislative rate for the tax year commencing July, 1 2016 will be reduced to 38.5%).

We recognize as income the amount we expect to be reimbursed for qualified expenses.

***Foreign currency translation adjustment***

Foreign currency translation adjustment consists of gains (losses) due to the revaluation of foreign currency transactions attributable to changes in foreign currency exchange rates associated with our Australian subsidiary.

***Income taxes***

Since our inception, we have not recorded any U.S. federal, state or foreign income tax benefits for the net losses we have incurred in each year, due to our uncertainty of realizing a benefit from those items. As of December 31, 2016, we had federal and state net operating loss carryforwards of \$53.7 million and \$35.7 million, respectively, which begin to expire in 2031. We may be able to utilize our net operating loss carryforwards to reduce future federal and state income tax liabilities. However, these net operating losses are subject to various limitations under Internal Revenue Code ("IRC") Section 382, which limits the use of net operating loss carryforwards to the extent there has been an ownership change of more than 50 percentage points. In addition, the net operating loss carryforwards are subject to examination by the taxing authorities and could be adjusted or disallowed due to such exams. Although we have not undergone an IRC Section 382 analysis, it is possible that the utilization of our net operating loss carryforwards may be limited.

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As of December 31, 2016, we also had federal and state research and development tax credit carryforwards of \$1.3 million and \$0.2 million, respectively, which begin to expire in 2031 and 2030, respectively.

There is no provision for income taxes in the United States because we have historically incurred operating losses and maintain a full valuation allowance against our deferred tax assets.

### **Critical Accounting Policies and Significant Judgments and Estimates**

Our management's discussion and analysis of our financial condition and results of operations is based on our consolidated financial statements, which we have prepared in accordance with GAAP. The preparation of these consolidated financial statements requires us to make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the consolidated financial statements, as well as the reported expenses during the reporting periods. We evaluate these estimates and judgments on an ongoing basis. We base our estimates on historical experience and on various other factors that we believe are reasonable under the circumstances, the results of which form the basis for making judgments about the carrying value of assets and liabilities that are not readily apparent from other sources. Our actual results may differ from these estimates under different assumptions or conditions.

While our significant accounting policies are more fully described in Note 2 to our consolidated financial statements appearing elsewhere in this report, we believe that the following accounting policies are the most critical for fully understanding and evaluating our financial condition and results of operations.

#### ***Accrued Research and Development Expenses***

As part of the process of preparing consolidated financial statements, we are required to estimate accrued research and development expenses. This process involves communicating with our applicable personnel to identify services that have been performed on our behalf and estimating the level of service performed and the associated cost incurred for the service when we have not yet been invoiced or otherwise notified of actual cost. The majority of our service providers invoice us monthly for services performed. We make estimates of our accrued research and development expenses as of each balance sheet date in our consolidated financial statements based on facts and circumstances known to us. We periodically confirm the accuracy of our estimates with selected service providers and make adjustments, if necessary. To date, we have not adjusted our estimate at any particular balance sheet date by any material amount. Examples of estimated accrued research and development expenses include:

- fees paid to CROs for management of our clinical trial activities;
- fees paid to investigative sites in connection with clinical trials;
- fees paid to contract manufacturers in connection with the production of clinical trial supplies; and
- professional services and fees.

We base our expenses related to clinical trials on our estimates of the services received and efforts expended pursuant to contracts with multiple research institutions and CROs that conduct and manage 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. 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 and the level of effort to be expended in each period. If we do not accurately identify costs

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that we have begun to incur or if we underestimate or overestimate the level of services performed or the costs of these services, our actual expenses could differ from our estimates.

***Stock-Based Compensation***

We have issued options to purchase our common stock. We account for stock based compensation in accordance with ASC 718, Compensation—Stock Compensation. ASC 718 establishes accounting for stock-based awards exchanged for employee services. Under the fair value recognition provisions of ASC 718, stock-based compensation cost is measured at the grant date based on the fair value of the award and is recognized as expense over the requisite service or vesting period. Determining the appropriate fair value model and calculating the fair value of stock-based payment awards require the use of highly subjective assumptions, including the expected life of the stock-based payment awards and stock price volatility.

We estimate the grant date fair value of stock options and the related compensation expense, using the Black-Scholes option valuation model. This option valuation model requires the input of subjective assumptions including: (1) expected life (estimated period of time outstanding) of the options granted, (2) volatility, (3) risk-free rate and (4) dividends. In general, the assumptions used in calculating the fair value of stock-based payment awards represent management's best estimates, but the estimates involve inherent uncertainties and the application of management judgment. As a result, if factors change and we use different assumptions, our stock-based compensation expense could be materially different in the future.

***JOBS Act***

We are an "emerging growth company", or EGC, as defined in the Jumpstart Our Business Startups Act of 2012 (the "JOBS Act"). The JOBS Act, permits an "emerging growth company" such as us to take advantage of an extended transition period to comply with new or revised accounting standards applicable to public companies until those standards would otherwise apply to private companies. We have elected to use the extended transition period for complying with new or revised accounting standards under Section 102(b)(1) of the JOBS Act. This election allows us to delay the adoption of new or revised accounting standards that have different effective dates for public and private companies until those standards apply to private companies. As a result of this election, our financial statements may not be comparable to companies that comply with public company effective dates.

We will remain an EGC until the earliest of: (i) the last day of the fiscal year in which we have total annual gross revenues of \$1 billion or more; (ii) the last day of the fiscal year following the fifth anniversary of the date of the completion of our initial public offering; (iii) the date on which we have issued more than \$1 billion in nonconvertible debt during the previous three years; and (iv) the date on which we are deemed to be a large accelerated filer under the rules of the SEC.

**Results of Operations***Comparison of the Years Ended December 31, 2016 and 2015*

The following tables summarizes our results of operations for the years ended December 31, 2016 and 2015:

	Year Ended December 31,		Increase (Decrease)
	2016	2015	
	(in thousands)		
<b>Operating expenses:</b>			
Research and development	\$ 23,292	\$ 10,411	\$ 12,881
General and administrative	4,229	1,511	2,718
Total operating expenses	<u>27,521</u>	<u>11,922</u>	<u>15,599</u>
Loss from operations	(27,521)	(11,922)	(15,599)
Interest income	2	1	1
Interest expense—related party	(1,233)	(129)	(1,104)
Australian research and development incentives	3,129	—	3,129
Other income (expense), net	(9)	—	(9)
Net loss	<u>\$ (25,632)</u>	<u>\$ (12,050)</u>	<u>\$ (13,582)</u>

*Research and Development Expenses*

	Year Ended December 31,		Increase (Decrease)
	2016	2015	
	(in thousands)		
<b>Direct research and development by program:</b>			
DKN-01 program	\$ 13,679	\$ 9,079	\$ 4,600
TRX518 program	9,613	1,332	8,281
Total research and development expenses	<u>\$ 23,292</u>	<u>\$ 10,411</u>	<u>\$ 12,881</u>
Australian research and development incentives	<u>\$ 3,129</u>	<u>\$ —</u>	<u>\$ 3,129</u>

Research and development expenses were \$23.3 million for the year ended December 31, 2016, compared to \$10.4 million for the year ended December 31, 2015. The increase of \$12.8 million was primarily due to an increase of \$11.8 million associated with manufacturing of clinical trial material for DKN-01 and TRX518 in 2016 as well as an increase of \$2.2 million associated with clinical research, and \$1.6 million in compensation related expenses. These increases are partially offset by a decrease of \$2.8 million in licensing fees that were incurred during the year ended December 31, 2015 in connection with the licensing agreement with Eli Lilly.

*General and Administrative Expenses*

General and administrative expenses were \$4.2 million for the year ended December 31, 2016, compared to \$1.5 million for the year ended December 31, 2015. The increase of \$2.7 million in general and administrative expenses was primarily due to an increase of \$1.4 million associated with payroll related expenses due to an increase in headcount related to executives for the year ended December 31, 2016 and an increase of \$1.3 million in legal, audit and consulting fees associated with corporate and business development activities.

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### *Interest Income*

We recorded an immaterial amount of interest income for both the years ended December 31, 2016 and 2015.

### *Interest Expense—Related Party*

We recorded interest expense—related party of \$1.2 million for the year ended December 31, 2016, compared to \$0.1 million for the year ended December 31, 2015. The increase in interest expense—related party is due primarily to incremental borrowings of \$25.9 million under our notes payable—related party during the year ended December 31, 2016.

### *Australian Research and Development Incentives*

We recorded R&D incentive income of \$3.1 million for the year ended December 31, 2016, based upon the applicable percentage of eligible research and development activities under the Australian Incentive Program, which expenses included the cost of manufacturing of clinical trial material. We did not record any R&D incentive income for the year ended December 31, 2015.

The R&D incentive receivable has been recorded as "Research and development incentive receivable" in the consolidated balance sheets.

## **Liquidity and Capital Resources**

Since our inception, we have incurred significant operating losses. We have not yet commercialized any of our product candidates, which are in various phases of clinical trials, and we do not expect to generate revenue from sales of any product for several years, if at all. We have funded our operations to date with proceeds from the sale of preferred stock and notes payable—related party.

As of December 31, 2016, we had cash and cash equivalents of \$0.8 million. During the years ended December 31, 2016 and 2015, we issued \$25.9 million and \$5.0 million, respectively, of notes payable—related party. The notes have a stated annual interest rate of 8%, and the outstanding principal balance and accrued interest were payable on March 31, 2017. In January 2017, all of the outstanding notes and related accrued interest were converted into shares of our common stock in connection with the closing of the merger with Macrocare.

We expect that our cash and cash equivalents of \$0.8 million at December 31, 2016, together with (i) the \$21.2 million in cash and cash equivalents held by Macrocare Ltd. at the closing of the merger, (ii) the \$10.0 million in equity invested in Leap by HealthCare Ventures in connection the closing of the merger, and (iii) the receipt of \$3.1 million of research and development tax incentive payments from the Commonwealth of Australia as a result of the 2016 research and development activities of our Australian subsidiary, HealthCare Pharmaceuticals Pty. Ltd., will be sufficient to fund our operating expenses for at least the next 12 months from issuance of the financial statements included in this Annual Report on Form 10-K. In addition, we will seek additional funding through public or private equity financings or government programs and will seek funding or development program cost-sharing through collaboration agreements or licenses with larger pharmaceutical or biotechnology companies. If we do not obtain additional funding or development program cost-sharing, we would be forced to delay, reduce or eliminate certain clinical trials or research and development programs, reduce or eliminate discretionary operating expenses, and delay company and pipeline expansion, which would adversely affect our business prospects. The inability to obtain funding, as and when needed, would have a negative impact on Leap's financial condition and our ability to pursue our business strategies.

[Table of Contents](#)**Cash Flows**

The following table summarizes our sources and uses of cash for each of the periods presented:

	Year Ended December 31,	
	2016	2015
	(in thousands)	
Cash used in operating activities	\$ (25,337)	\$ (8,102)
Cash used in investing activities	(144)	—
Cash provided by financing activities	25,618	8,270
Effect of exchange rate changes on cash and cash equivalents	251	(1)
Net increase in cash and cash equivalents	<u>\$ 388</u>	<u>\$ 167</u>

*Operating activities.* Net cash used in operating activities for the year ended December 31, 2016 was primarily related to our net loss from the operation of our business of \$25.6 million and net changes in working capital, including increases in research and development incentive receivable and prepaid expenses and other assets of \$3.1 million and \$0.2 million, respectively, partially offset by an increase in accounts payable and accrued expenses of \$2.3 million and noncash interest expense of \$1.2 million. The increases in accounts payable and accrued expenses were due to increased spending on our research and development programs as well as the timing of vendor invoicing and payments.

Net cash used in operating activities for the year ended December 31, 2015 was primarily related to our net loss from the operation of our business of \$12.1 million including expenses incurred for the development of DKN-01 and TRX518, partially offset by changes in working capital, including a \$1.0 million increase in accrued expenses and noncash charges, including \$2.7 million of research and development expense recognized for the issuance of shares of our Series A convertible preferred stock.

*Investing Activities.* Net cash used in investing activities during the year ended December 31, 2016 was related to purchases of equipment. We did not use any cash for investing activities during the year ended December 31, 2015.

*Financing Activities.* Net cash provided by financing activities for the year ended December 31, 2016 consisted of \$25.9 million in proceeds from notes payable—related party, partially offset by payments of \$0.3 million for deferred offering costs.

Net cash provided by financing activities for the year ended December 31, 2015 consisted of \$5.0 million from the issuance of notes payable—related party, \$1.9 million in net proceeds received from the issuance of Series B preferred stock and \$1.9 million in net proceeds received from the issuance of Series C preferred stock, partially offset by \$0.6 million in repayments on notes payable—related party.

**Capital Requirements**

We expect our expenses to increase substantially in connection with our ongoing activities, particularly as we advance the preclinical activities and clinical trials of our product candidates in development. In addition, we expect to incur additional costs associated with operating as a public company.

Our expenses will also increase as we:

- pursue the clinical development of our most advanced product candidates, DKN-01 and TRX518;
- seek to identify and develop additional product candidates;



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- maintain, expand and protect our intellectual property portfolio;
- expand our operational, financial and management systems and increase personnel, including personnel to support our clinical development, manufacturing and commercialization efforts and our operations as a public company; and
- increase our product liability and clinical trial insurance coverage as we initiate our clinical trials and commercialization efforts.

Additional funding may not be available at the time needed on commercially reasonable terms, if at all.

**Contractual Obligations and Commitments**

The following table summarizes our contractual obligations as of December 31, 2016 and the effects that such obligations are expected to have on our liquidity and cash flows in future periods:

	Payments due by period				
	Total	Less than 1 year	1 - 3 years (in thousands)	3 - 5 years	More than 5 Years
Notes Payable-Related Party, including accrued Interest(1)	\$ 30,274	30,274	\$ —	\$ —	\$ —
Research commitments(2)	4,467	4,467	—	—	—
<b>Total</b>	<b>\$ 34,741</b>	<b>\$ 34,741</b>	<b>\$ —</b>	<b>\$ —</b>	<b>\$ —</b>

- (1) Represents principal and accrued interest due to a related party for convertible promissory notes executed through December 31, 2016. The principal balance and accrued interest were payable on March 31, 2017. In January 2017, all of the outstanding notes and related accrued interest were converted into shares of our common stock in connection with the closing of the merger with Macrocare.
- (2) Represents noncancellable commitments under manufacturing agreements with vendors to manufacture TRX518 and DKN-01 for use in clinical trials.

Pursuant to the Lilly Agreement, we agreed to pay Lilly a royalty in the low single digits of net sales of a particular product in the territory during the applicable royalty term. As the product candidate has not been approved for sale, we have not yet paid any royalties to Lilly pursuant to this agreement and do not know whether or when royalties may ultimately become payable.

Pursuant to the Lonza Agreement, we agreed to pay Lonza a royalty in the low single digits of net sales of a particular product in the territory during the applicable royalty term. As the product candidate has not been approved for sale, we have not yet paid any royalties to Lonza pursuant to this agreement and do not know whether or when royalties may ultimately become payable.

On January 23, 2017, in connection with our merger with Macrocare, we entered into a royalty agreement with Leap Shareholder Royalty Vehicle, LLC, a special purpose vehicle formed for the specific purpose of entering into the royalty agreement. Pursuant to the royalty agreement, we agreed to pay to the special purpose vehicle (i) 5% of our net sales of products incorporating its TRX518 compound and (ii) 2% of our net sales of products incorporating its DKN-01 compound. As these product candidates have not been approved for sale, we have not yet paid any royalties to the special purpose vehicle pursuant to this agreement and do not know whether or when royalties may ultimately become payable.

### **Off-Balance Sheet Arrangements**

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

### **Recently Issued Accounting Pronouncements**

We have reviewed all recently issued standards and have determined that, other than as disclosed in Note 2 to our consolidated financial statements included in this Annual Report on Form 10-K, such standards will not have a material impact on our financial statements or do not otherwise apply to our operations.

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

Market risk represents the risk of loss that may impact our financial position due to adverse changes in financial market prices and rates. Our market risk exposure is primarily the result of fluctuations in interest rates and foreign exchange rates.

#### *Interest Rate Risk*

We are exposed to interest rate risk in the ordinary course of our business. Our cash and cash equivalents are held in highly liquid, readily available checking and money market accounts. As a result, these amounts are not materially affected by changes in interest rates.

As of December 31, 2016, we had outstanding \$30.3 million of notes payable—related party and accrued interest. The notes bore interest at a fixed rate equal to 8.0% per annum. In January 2017, all of the outstanding notes and related accrued interest were converted into shares of our common stock in connection with the closing of the merger with Macrocare.

#### *Foreign Currency Exchange Risk*

All of our employees and the majority of our major operations are currently located in the United States. We contract for manufacturing operations outside the United States through contract manufacturing organizations. The functional currency of our foreign subsidiary in Australia is the Australian dollar, and the R&D Tax Incentive payment is received from the Australian government in Australian dollars, although the majority of the Australian subsidiary's contracts are denominated in U.S. dollars. We have engaged in contracts with contractors or other vendors in a currency other than the U.S. dollar, including our services agreement with Lonza Sales AG which is denominated in British pounds. As a result, we are subject to foreign currency risks with respect to the Australian dollar and the British pound which could have the effect of increasing our expenses or reducing the amounts collected under the R&D Tax Incentive from the amounts recorded at the time of the transaction.

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

Our financial statements required by this Item, together with the report of our independent registered public accounting firm, appear on pages F-1 through F-26 of this Annual Report on Form 10-K and are incorporated herein by reference.

### **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**

We maintain disclosure controls and procedures that are designed to ensure that information required to be disclosed in the reports that we file or submit under the Securities and Exchange Act of 1934 is (1) recorded, processed, summarized, and reported within the time periods specified in the SEC's rules and forms and (2) accumulated and communicated to our management, including our President and Chief Executive Officer, who is our principal executive officer, and Chief Financial Officer, who is also our principal financial and accounting officer, as appropriate, to allow timely decisions regarding required disclosure.

As of December 31, 2016, our management, with the participation of our principal executive officer and principal financial and accounting officer, evaluated the effectiveness of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Securities and Exchange Act of 1934). Our management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving their objectives, and management necessarily applies its judgment in evaluating the cost-benefit relationship of possible controls and procedures. Our principal executive officer and principal financial and accounting officer have concluded based upon the evaluation described above that, as of December 31, 2016, our disclosure controls and procedures were effective at the reasonable assurance level.

**Management's Report on Internal Control over Financial Reporting**

This Annual Report on Form 10-K does not include a report of management's assessment regarding internal control over financial reporting or an attestation report of our independent registered public accounting firm due to a transition period established by rules of the SEC for newly public companies.

**Changes in Internal Control over Financial Reporting**

There were no changes to our internal control over financial reporting that occurred 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

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

The following table sets forth the names, ages (as of March 30, 2017) and positions of the directors and executive officers of Leap as of the effective time of the merger:

Name		Positions
Christopher K. Mirabelli	62	Chairman, Chief Executive Officer and President
Augustine Lawlor	60	Chief Operating Officer
Douglas E. Onsi	48	Chief Financial Officer, General Counsel, Treasurer and Secretary
<b>Non-Employee Directors</b>		
Dr. James Cavanaugh(2)(3)	80	Director
Dr. Thomas Dietz(1)(2)	53	Director
Dr. William Li	54	Director
Mr. John Littlechild(1)(2)	65	Director
Dr. Joseph Loscalzo(3)	65	Director
Mr. Nissim Mashiach	56	Director

- (1) Member of the Compensation Committee.
- (2) Member of the Audit Committee.
- (3) Member of the Governance and Nominating Committee.

#### Executive Officers

**Christopher K. Mirabelli, Ph.D.** Dr. Mirabelli, age 62, has served as the Chairman of our Board of Directors since 2016 and has also served as our President and Chief Executive Officer since our inception in 2011. Dr. Mirabelli has been a managing director of HealthCare Ventures LLC since 2000. From December 1999 to May 2000, Dr. Mirabelli served as president of pharmaceutical research and development and member of the board of directors of Millennium Pharmaceuticals, Inc., following its merger with LeukoSite Inc., where Dr. Mirabelli had been serving as president, chief executive officer and chairman of the board of directors since 1993. He was a co-founder of Ionis Pharmaceuticals, Inc. (NASDAQ: IONS), where he held several positions including senior vice president of research, from 1989 until 1993. Dr. Mirabelli started his career at SmithKline and French Laboratories (now part of GlaxoSmithKline Plc) R&D Division. He is a member of the board of advisors of the Blavatnik Biomedical Accelerator Fund at Harvard Medical School and the Boston Biomedical Innovation Center. Dr. Mirabelli is a member of the Board of Trustees of Guilford College. He received his Ph.D. in molecular pharmacology from Baylor College of Medicine and a B.S. degree in biology from State University of New York at Fredonia. We believe that Dr. Mirabelli's experience with Leap from serving as our President, Chief Executive Officer and Chairman, leadership in a number of biopharmaceutical companies, combined with his venture capital industry experience and technical background, make him qualified to serve as a member of our Board of Directors and its chair.

**Augustine Lawlor.** Mr. Lawlor, age 60, has served as our Chief Operating Officer since 2015. Mr. Lawlor has been a managing director of HealthCare Ventures LLC since 2000, including serving as the chief executive officer of GITR, Inc. prior to its merger into Leap. Prior to joining HealthCare Ventures, Mr. Lawlor served as Chief Operating Officer of LeukoSite Inc., a biotechnology company, from 1997 to 1999. Before joining LeukoSite, Mr. Lawlor served as Chief Financial Officer and Vice President of Corporate Development of Alpha-Beta Technology, Inc., a biotechnology company. He was also previously Chief Financial Officer and Vice President, Business Development, of BioSurface

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Technologies Corporation, a biofilm company. Mr. Lawlor serves on the Board of Directors of Cardiovascular Systems, Inc. and Catalyst Biosciences, Inc., each a publicly-traded biopharmaceutical company, and a number of private companies. He received a B.A. from the University of New Hampshire and a master's degree in management from Yale University.

**Douglas E. Onsi.** Mr. Onsi, age 48, has served as our Chief Financial Officer, Treasurer and Secretary since our inception in 2011. Mr. Onsi has been at HealthCare Ventures since 2007, including serving as a managing director since 2009 and the chief executive officer of Tensha Therapeutics, Inc. which was sold to Roche Holdings, Inc. in 2016. Prior to joining HealthCare Ventures, Mr. Onsi was at Genzyme Corporation, or Genzyme, where he served in roles as Vice President, Campath Product Operations and Portfolio Management, Oncology from 2005 to 2007 and as Vice President, Business Development from 2004 to 2005. Prior to Genzyme, he was Chief Financial Officer of Tolerx, Inc., a venture capital funded biotechnology company, from 2001 to 2004. Before joining Tolerx, Inc., he was in business development at LeukoSite, a publicly traded biopharmaceutical company that was acquired by Millennium Pharmaceuticals, Inc. He began his career as an attorney at Bingham Dana LLP. Mr. Onsi currently serves as a member of the board of directors of Vaxxas Pty Ltd., a privately-held biotechnology company. He received a Juris Doctor degree from the University of Michigan Law School and a B.S. in biological sciences from Cornell University.

### **Non-Employee Directors**

**Thomas Dietz, Ph.D.** Dr. Dietz, age 53, has served as a member of our Board of Directors since 2016. Dr. Dietz is currently chairman and CEO of Waypoint Holdings, LLC, a diversified financial-holdings and services company. Previously, Dr. Dietz was co-CEO and then CEO and a director of Pacific Growth Equities, LLC, a San Francisco-based investment bank and institutional brokerage firm from 2004 to 2009, when the firm was acquired by Wedbush Securities. Dr. Dietz served as head of the investment banking division at Wedbush until November 2010. Prior to taking the CEO role at Pacific Growth, Dr. Dietz served as the company's director of equities research and was an award-winning biotechnology and biopharmaceutical analyst. He joined Pacific Growth in 1993. Previously, he was a member of the research faculty in the Department of Medicine, University of California, San Francisco and the VA Medical Center. Dr. Dietz is currently Chairman of Eiger Biopharmaceuticals, Inc. (EIGR:Nasdaq) and privately held AgBiome, LLC. He also serves as a director of Paratek Pharmaceuticals (PRTK:Nasdaq) and several other private companies. Dr. Dietz previously served as a director of Transcept Pharmaceuticals, Inc. (TSPT: Nasdaq) Dr. Dietz holds a Ph.D. in molecular biology and biochemistry from Washington University, St. Louis, and was a National Science Foundation Post-Doctoral Fellow. We believe that Dr. Dietz's experience with Leap, combined with his business, financial and leadership expertise and financial industry background, make him qualified to serve as a member of our Board of Directors.

**John Littlechild.** Mr. Littlechild, age 65, has served as a member of our Board of Directors since 2016. Mr. Littlechild has been a managing director of HealthCare Ventures since 1992. He has been in the venture capital industry since 1980 when he joined Citicorp Venture Capital in London. He subsequently joined the Advent Group, opening the London office of Advent U.K. and becoming an early general partner of Advent International in Boston. Prior to his career in venture capital, he held marketing and financial management positions with Rank Xerox and ICI. Mr. Littlechild holds a B.Sc. in Engineering from the University of Manchester and an MBA from Manchester Business School. We believe that Mr. Littlechild's experience with our Company, combined with his venture capital industry experience and technical background, make him qualified to serve as a member of our Board of Directors.

**James Cavanaugh, Ph.D.** Dr. Cavanaugh, age 80, has served as a member of our Board of Directors since 2016. Dr. Cavanaugh has been a managing director of HealthCare Ventures since 1989. He was previously President of SmithKline & French Laboratories-U.S., the domestic pharmaceutical division

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of SmithKline Beckman Corporation. Dr. Cavanaugh had been president of SmithKline Beckman's clinical laboratory business and President of Allergan International. He has been a board member of a number of private and public pharmaceutical and biotechnology companies and was Chairman of The Shire Pharmaceutical Group, plc. He served as staff assistant to President Nixon for Health Affairs and then deputy director of the president's Domestic Council. Under President Ford, he was a deputy assistant to the President for domestic affairs and deputy chief of the White House. He has served as deputy assistant secretary for health and scientific affairs in the United States Department of Health, Education and Welfare, special assistant to the Surgeon General, United States Public Health Services, and director, Office of Comprehensive Health Planning. He began his career as a member of the faculty of the Graduate College and the College of Medicine at the University of Iowa where he received his Master's and Doctorate degrees. We believe that Dr. Cavanaugh's experience with working in government, combined with his clinical and pharmaceutical industrial experience and background, make him qualified to serve as a member of our Board of Directors.

**Joseph Loscalzo, MD, Ph.D.** Dr. Joseph Loscalzo, age 65, has served as a member of our Board of Directors since 2016. He is currently the Hersey Professor of the Theory and Practice of Medicine at Harvard Medical School, Chairman of the Department of Medicine and Physician-in-Chief at Brigham and Women's Hospital. In 1994, Dr. Loscalzo joined the faculty of Boston University, first as Chief of Cardiology and, in 1997, Wade Professor and Chair of Medicine, Professor of Biochemistry, and Director of the Whitaker Cardiovascular Institute. In 2005, he returned to Harvard Medical School and Brigham and Women's Hospital, where he had previously worked. He has served on several NIH study sections and editorial boards, and has chaired the Gordon Conference on Thrombolysis. He is an editor-at-large of the New England Journal of Medicine, former Chair of the Cardiovascular Board of the American Board of Internal Medicine, former Chair of the Research Committee of the American Heart Association, former Chair of the Scientific Board of the Stanley J. Samoff Society of Fellows for Research in Cardiovascular Sciences, and former Chair of the Board of Scientific Counselors of the National Heart, Lung, and Blood Institute of the National Institutes of Health. He is past Editor-in-Chief of *Circulation*, a current senior editor of *Harrison's Principles of Internal Medicine*, a former member of the Advisory Council of the National Heart, Lung, and Blood Institute, and a former member of the Council of Councils of the National Institutes of Health. Dr. Loscalzo has been a visiting professor at many institutions, holds two honorary degrees, has authored or co-authored more than 900 scientific publications, has authored or edited 30 books, and holds 33 patents for his work in the field of nitric oxide. He is also the recipient of many grants from the NIH and industry for his work in the areas of vascular biology, thrombosis, and atherosclerosis over the past thirty years and has won numerous awards. Dr. Loscalzo received his AB degree, *summa cum laude*, his PhD in biochemistry, and his MD from the University of Pennsylvania and completed his clinical training at Brigham and Women's Hospital and Harvard Medical School, where he served as Resident and Chief Resident in medicine and Fellow in cardiovascular medicine. Dr. Loscalzo is currently a consultant for both Boston Consulting Group and Momenta Pharmaceuticals, Inc., is a scientific advisory board member at Broadview Ventures, Inc., Sanofi S.A., DZZOM, The Network Medicine Company and Applied Biomath, LLC, and is a member of the board of directors of Ionis Pharmaceuticals Inc. (IONS: Nasdaq). We believe that Dr. Loscalzo's vast experience as a cardiovascular scientist, clinician, and teacher and background in science and medicine, make him qualified to serve as a member of our Board of Directors.

**Nissim Mashiach.** Mr. Mashiach, age 56, has served as a member of our Board of Directors since January 2017. He served as the President and Chief Executive Officer of MacroCure, Ltd. from June 2012 until its merger with Leap in January 2017. He is also currently a member of the board of directors at Chemomab Ltd. He also previously served as General Manager at Ethicon, a Johnson & Johnson company, from 2009 to 2012. Prior to then, he served as President and Chief Operating Officer at Omrix Biopharmaceuticals, Inc., a public company acquired by Johnson & Johnson in 2008. Prior to Omrix, Mr. Mashiach held leadership positions at several pharmaceutical companies. He holds

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an MBA from the University of Manchester, England, an MPharmSc from the Hebrew University, Jerusalem, Israel, and a BSc, Chemical Engineering from the Technion-Israel Institute of Technology, Haifa, Israel. We believe that Mr. Mashiach's experience with working with a number of biopharmaceutical companies, combined with his pharmaceutical industry experience and background, make him qualified to serve as a member of our Board of Directors.

**William Li, M.D.** Dr. Li, age 54, has served as a member of our Board of Directors since January 2017. In December 2003, Dr. Li joined the DOBI Medical Systems board of directors. Dr. Li is a co-founder of the Angiogenesis Foundation in Cambridge, Massachusetts, of which he has been the President since April 2000 and Medical Director since December 1994. Dr. Li has extensive expertise in the field of angiogenesis and its therapeutic development and clinical applications. He trained with Dr. Judah Folkman, who pioneered the field of angiogenesis research. Through the Angiogenesis Foundation, Dr. Li has worked in association with the National Institutes of Health, and other major governmental and academic institutions, and industry leaders on angiogenesis-related programs. Dr. Li received his M.D. degree from University of Pittsburgh School of Medicine. He completed his clinical training in internal medicine at the Massachusetts General Hospital in Boston. Dr. Li has also served on the faculties of Harvard Medical School, Tufts University School of Veterinary Medicine and Dartmouth Medical School. We believe that Dr. Li's experience with working with companies and foundation in the cancer field, combined with his medical training and background, make him qualified to serve as a member of our Board of Directors.

### **Family Relationships**

There are no understandings, or agreements pursuant to which any director or executive officer was elected or appointed. There are no family relationships among any of our directors or executive officers.

### **Board Composition**

Our board of directors currently consists of seven members divided into three classes with staggered three-year terms. In addition, our Third Amended and Restated Certificate of Incorporation and Amended and Restated Bylaws each of which became effective upon consummation of the merger with MacroCure on January 23, 2017, provide that a director may be removed only for cause and only by the affirmative vote of the holders of at least two-thirds of the votes that all our stockholders would be entitled to cast in an annual election of directors. Any vacancy on our board of directors, including a vacancy resulting from an enlargement of our board of directors, may be filled only by vote of a majority of our directors then in office. Furthermore, the authorized number of directors may be changed only by a resolution of our board of directors.

*Staggered Board.* At each annual meeting of the stockholders, a class of directors will be elected for a three-year term to succeed the directors of the same class whose terms are then expiring. The terms of the directors will expire upon the election and qualification of successor directors at the annual meeting of stockholders to be held during the years 2018 for Class I directors, 2019 for Class II directors, and 2020 for Class III directors.

- Our Class I directors are James Cavanaugh and John Littlechild;
- Our Class II directors are William Li and Thomas Dietz; and
- Our Class III directors are Nissim Mashiach, Joseph Loscalzo and Christopher Mirabelli.

Our Third Amended and Restated Certificate of Incorporation and Amended and Restated Bylaws provide that the number of our directors shall be fixed from time to time by a resolution of the majority of our board of directors. Any additional directorships resulting from an increase in the

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number of directors will be distributed among the three classes so that, as nearly as possible, each class shall consist of one third of the board of directors.

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

### **Board Committees**

Our board of directors has a standing audit committee, compensation committee and nominating and corporate governance committee. A description of each committee is below. A discussion regarding our directors independence appears in Item 13 of Part III of this Annual Report on Form 10-K. The members of our audit committee are James Cavanaugh, Thomas Dietz, and John Littlechild, with Thomas Dietz serving as chairman.

#### *Audit Committee*

The members of our audit committee are James Cavanaugh, Ph.D., Thomas Dietz, Ph.D., and John Littlechild, with Thomas Dietz, Ph.D., serving as chairman. The financial literacy requirements of the Commission require that each member of our audit committee be able to read and understand fundamental financial statements. In addition, at least one member of our audit committee must be qualified as an audit committee financial expert, as defined in Item 407(d)(5) of Regulation S-K promulgated under the Securities Act, and have financial sophistication in accordance with the NASDAQ stock market rules. Our board of directors has determined that Thomas Dietz, Ph.D., qualifies as an audit committee financial expert.

Our Audit committee functions pursuant to a written charter adopted by our Board of directors, pursuant to which the audit committee is granted the responsibility and authority necessary to comply with Rule 10A-3 of the Exchange Act.

The primary purpose of our audit committee is to assist the board of directors in the oversight of the integrity of our accounting and financial reporting process, the audits of our financial statements, and our compliance with legal and regulatory requirements. The functions of our audit committee will include, among other things:

- hiring the independent registered public accounting firm to conduct the annual audit of our financial statements and monitoring its independence and performance;
- reviewing and approving the planned scope of the annual audit and the results of the annual audit;
- pre-approving all audit services and permissible non-audit services provided by our independent registered public accounting firm;
- reviewing the significant accounting and reporting principles to understand their impact on our financial statements
- reviewing our internal financial, operating and accounting controls with management, our independent registered public accounting firm and our internal audit provider;
- reviewing with management and our independent registered public accounting firm, as appropriate, our financial reports, earnings announcements and our compliance with legal and regulatory requirements;
- reviewing potential conflicts of interest under and violations of our Code of Conduct;



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- establishing procedures for the treatment of complaints received by us regarding accounting, internal accounting controls or auditing matters and confidential submissions by our employees of concerns regarding questionable accounting or auditing matters;
- reviewing and approving related-party transactions; and
- reviewing and evaluating, at least annually, our audit committee's charter.

Both our independent registered public accounting firm and management periodically will meet privately with our audit committee. Our audit committee charter is available on our website at [www.leaptx.com](http://www.leaptx.com).

### *Compensation Committee*

The members of our Compensation Committee are Thomas Dietz, Ph.D., and John Littlechild, with John Littlechild serving as chairman.

The primary purpose of our compensation committee is to assist our board of directors in exercising its responsibilities relating to compensation of our executive officers and employees and to administer our equity compensation and other benefit plans. In carrying out these responsibilities, this committee will review all components of executive officer and employee compensation for consistency with its compensation philosophy, as in effect from time to time. The functions of our compensation committee will include, among other things:

- designing and implementing competitive compensation policies to attract and retain key personnel;
- reviewing and formulating policy and determining the compensation of our executive officers and employees;
- reviewing and recommending to our board of directors the compensation of our directors;
- administering our equity incentive plans and granting equity awards to our employees and directors under these plans;
- if required from time to time, reviewing with management our disclosures under the caption "Compensation Discussion and Analysis" and recommending to the full board its inclusion in our periodic reports to be filed with the Commission;
- if required from time to time, preparing the report of the compensation committee to be included in our annual proxy statement;
- engaging compensation consultants or other advisors it deems appropriate to assist with its duties; and
- reviewing and evaluating, at least annually, our compensation committee's charter.

Our compensation committee charter is available on our website at [www.leaptx.com](http://www.leaptx.com).

### *Nominating and Corporate Governance Committee*

The members of our nominating and corporate governance committee are James Cavanaugh, Ph.D., and Joseph Loscalzo, M.D., Ph.D., with James Cavanaugh, Ph.D., serving as chairman.

The primary purpose of our nominating and corporate governance committee is to assist our board of directors in promoting the best interests of our company and our stockholders through the

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implementation of sound corporate governance principles and practices. The functions of our nominating and corporate governance committee will include, among other things:

- identifying, reviewing and evaluating candidates to serve on our board;
- determining the minimum qualifications for service on our board;
- developing and recommending to our board an annual self-evaluation process for our board and overseeing the annual self-evaluation process;
- developing, as appropriate, a set of corporate governance principles, and reviewing and recommending to our board any changes to such principles; and
- periodically reviewing and evaluating our nominating and corporate governance committee's charter.

Our nominating and corporate governance committee charter is available on our website at [www.leaptx.com](http://www.leaptx.com).

### **Code of Business Conduct and Ethics**

We have adopted a Code of Business Conduct and Ethics (the "Code of Conduct") that is applicable to all of our employees, executive officers and directors. The Code of Conduct is available on our website at [www.leaptx.com](http://www.leaptx.com) under the heading "Investors"—"Corporate Governance". The audit committee of our board of directors will be responsible for overseeing the Code of Conduct and must approve any waivers of the Code of Conduct for employees, executive officers or directors. We expect that any amendments to the Code of Conduct, or any waivers of its requirements, will be disclosed on our website or in a current report on Form 8-K. We shall provide to any person without charge, upon request, a copy of the Code of Conduct. Any such request must be made in writing to Leap Therapeutics Inc., c/o Investor Relations, 47 Thorndike Street, Suite B1-1, Cambridge, MA 02141.

### **Section 16(a) Beneficial Ownership Reporting Compliance**

Section 16(a) of the Exchange Act requires our directors, executive officers and beneficial owners of more than 10% of our common stock to file reports of holdings and transactions in our common stock and our other securities with the Securities Exchange Commission. Our directors, executive officers and beneficial owners of more than 10% of our common stock did not become subject to such Section 16(a) reporting requirements until January 24, 2017, after the completion of our fiscal year ended December 31, 2016.

### **Changes to Stockholder Director Nomination Procedures**

During the year ended December 31, 2016 there were no material changes to the procedures by which stockholders may recommend nominees to the Company's Board of Directors. However, on January 23, 2017, in connection with the consummation of the merger with Macrocore and becoming a public company, we adopted our Third Amended and Restated Charter and Amended and Restated Bylaws (the "Public Company Charter Documents"). The Public Company Charter Documents outline the procedures that must be followed by our stockholders with respect to director nominations.

Pursuant to the Public Company Charter Documents, in the case of nominations for election at an annual meeting, notice must be delivered to Leap's secretary (i) not less than 90 days nor more than 120 days prior to the first anniversary of the preceding year's annual meeting or (ii) (a) if the date of the annual meeting is advanced by more than 30 days or delayed by more than 60 days from the first anniversary of the preceding year's annual meeting, or (b) with respect to the first annual meeting to be held in 2018, not more than 120 days nor less than 90 days prior to the date of such annual meeting or, if less than 90 days' notice is given of such annual meeting, the 10th day following the day on which

public announcement of the date of such meeting is first made by Leap. In the case of nominations for election at a special meeting of shareholders called for the election of directors, a shareholder may nominate candidates by delivering notice to Leap's secretary by not earlier than the one hundred twentieth (120th) day prior to such special meeting and not later than the ninetieth (90th) day prior to such special meeting or, if later, the tenth (10th) day following the day on which public announcement of the date of such meeting is first made by Leap.

In addition, such notice must provide the information required by Section 2.5 of our Amended and Restated Bylaws with respect to each nomination that the stockholder proposes to bring before the 2016 Annual Meeting. This information includes, among other things, (a) name and address of such stockholder proposing such business and the class, series and number of shares beneficially owned by such Nominating Person; (b) any Disclosable Interests (as defined in our Amended and Restated Bylaws) of the nominating stockholder; (c) name, address, and shares owned by the nominee; (d) all information relating to such proposed nominee that is required to be disclosed in a proxy statement or other filings required to be made in connection with solicitations of proxies for election of directors in a contested election pursuant to Section 14(a) under the Exchange Act (including, without limitation, such proposed nominee's written consent to being named in the proxy statement as a nominee and to serving as a director if elected); and (e) a description of all direct and indirect compensation and other material monetary agreements, arrangements and understandings during the past three (3) years, and any other material relationships, between or among any nominating person, on the one hand, and each proposed nominee, his or her respective affiliates and associates and any other persons with whom such proposed nominee (or any of his or her respective affiliates and associates) is acting in concert, on the other hand, including, without limitation, all information that would be required to be disclosed pursuant to Item 404 under Regulation S-K if such Nominating Person were the "registrant" for purposes of such rule and the proposed nominee were a director or executive officer of such registrant.

#### **Compensation Committee Interlocks and Insider Participation**

No member of our compensation committee has ever been an executive officer or employee of ours. None of our officers currently serves, or has served during the last completed year, on the board of directors, compensation committee or other committee serving an equivalent function, of any other entity that has one or more officers serving as a member of our board of directors or compensation committee.

#### **Item 11. Executive Compensation.**

This section describes the material elements of compensation awarded to, earned by or paid to each of our named executive officers. Our named executive officers for 2016 were Christopher Mirabelli, who serves as our Chief Executive Officer, President and Chairman, Douglas E. Onsi, who serves as our Chief Financial Officer, General Counsel, Treasurer and Secretary, and Augustine Lawlor, who serves as our Chief Operating Officer. This section also provides qualitative information regarding the manner and context in which compensation is awarded to and earned by our executive officers and is intended to place in perspective the data presented in the tables and narrative that follow.

**Summary Compensation Table**

The following table presents compensation awarded in 2016 to our principal executive officer and our other executive officers as of December 31, 2016, or compensation paid to or accrued for those executive officers for services rendered during 2016. We refer to these executive officers as our "named executive officers."

<u>Name and Principal Position</u>	<u>Year</u>	<u>Salary (\$)(1)</u>	<u>Bonus (\$)</u>	<u>Awards (\$)</u>	<u>Option Compensation (\$)</u>	<u>All Other Total (\$)</u>
Christopher K. Mirabelli <i>Chief Executive Officer and President</i>	2016	350,000	0	—	33,880(3)	383,880
Augustine Lawlor <i>Chief Operating Officer</i>	2016	350,000	0	—	32,044(4)	382,044
Douglas E. Onsi <i>Chief Financial Officer, Treasurer and Secretary</i>	2016	350,000	0	—	31,301(5)	381,301
Christopher K. Mirabelli <i>Chief Executive Officer and President</i>	2015	0	0	—	0	0
Augustine Lawlor(2) <i>Chief Operating Officer</i>	2015	0	0	—	0	0
Douglas E. Onsi <i>Chief Financial Officer, Treasurer and Secretary</i>	2015	0	0	—	0	0

- (1) The 2016 base salary for each named executive officer became effective January 1, 2016. Upon the consummation of the merger, the base salary for each of Christopher K. Mirabelli, Augustine Lawlor and Douglas E. Onsi was increased to \$400,000.
- (2) Augustine Lawlor became an executive officer of Leap effective December 12, 2015.
- (3) Includes 401(k) matching (\$11,667), payment of medical insurance (\$16,002) and dental insurance (\$1,037) and life insurance (\$5,174).
- (4) Includes 401(k) matching (\$11,667), payment of medical insurance (\$16,002) and dental insurance (\$1,037) and life insurance (\$3,338).
- (5) Includes 401(k) matching (\$12,250), payment of medical insurance (\$16,002) and dental insurance (\$1,037) and life insurance (\$2,012).

**Executive Compensation**

*Overview*

Our executive compensation program is based on a pay-for-performance philosophy. We designed our executive compensation program to achieve the following primary objectives: provide compensation and benefit levels that will attract, retain, motivate and reward a highly talented executive team within the context of responsible cost management; establish a direct link between our individual/team performance and results and our executives' compensation; and align the interests and objectives of our executives with those of our stockholders by linking executive equity awards to stockholder value creation. Compensation for our executive officers is composed primarily of the following three main components: base salary, annual cash incentive bonuses, and long-term equity incentives.

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*Base Salary*

Base salaries are determined on a case-by-case basis for each executive officer (including our three named executive officers), including consideration of each officer's experience, expertise and performance, as well as market compensation levels for similar positions.

<u>Name</u>	<u>2016 Base Salary (\$)</u>	<u>2017 Base Salary \$(1)</u>
Christopher K. Mirabelli <i>Chief Executive Officer and President</i>	350,000	400,000
Augustine Lawlor <i>Chief Operating Officer</i>	350,000	400,000
Douglas E. Onsi <i>Chief Financial Officer, Treasurer and Secretary</i>	350,000	400,000

(1) The 2017 base salary for each named executive officer became effective January 23, 2017.

*Annual Cash Incentive Bonuses*

Annual cash incentive bonuses are contingent upon our achievement of certain operational and financial objectives, which for 2017 are expected to consist entirely of corporate goals. Each executive officer's target bonus amount is expressed as a percentage of the officer's base salary and is intended to be commensurate with the officer's position and responsibilities. Target bonuses for each officer are 35% of base salary for the year ended December 31, 2017.

*Long-term Equity Incentives*

We believe equity awards in the form of options to purchase shares of our common stock provide an incentive for our executive officers to focus on driving growth in our stock price and long-term value creation and help us to attract and retain key talent. In addition, the granting of options helps ensure that the interests of our officers are aligned with those of our stockholders as the options only have value if the value of our common stock increases after the date the option is granted.

Our officers are entitled to certain benefits if the officer's employment terminates in certain circumstances or if a change of control occurs. Our board of directors and our compensation committee review our officers' overall compensation packages on an annual basis or more frequently as it deems appropriate. From time to time, we may retain independent compensation consultants as we consider appropriate to help identify appropriate peer group companies and to obtain and evaluate current executive compensation data. In 2016, we retained compensation consultants in designing our executive compensation programs. Moving forward, we expect that our compensation committee will retain independent compensation consultants.

**Employment Agreements**

We have entered into employment agreements with each of our executive officers (including our named executive officers), Messrs. Lawlor and Onsi and Dr. Mirabelli, on the same terms. The following is a summary of the material terms of each employment agreement including terms related to severance and payments upon termination or change of control.

Our executive employment agreements do not include a specified term as their employment is "at-will." The agreements provides that each executive receives an annual base salary, initially established at \$400,000, and that he is eligible for an annual incentive bonus, with his target bonus

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being 35% of his base salary. The Compensation Committee of the Board of Directors determines the executive's actual bonus amount based on its assessment of the satisfaction of performance criteria to be established by the Compensation Committee within the first three months of each fiscal year. The agreement also provides for the executive to participate in our benefit programs made available to our employees generally.

Under each executive's agreement, if his employment is terminated by us without cause or if the executive resigns with good reason (as such terms are defined in the agreement), in either case prior to a change in control or one year after a change in control (as such term is defined in the agreement), he will be entitled to receive cash severance equal to his annualized base salary; a pro-rata bonus, payable within two and one-half months following the end of the fiscal year in which the termination or resignation occurs; any accrued or earned, but unpaid or unreimbursed, base salary, expenses, benefits, bonus, rights to indemnification, or vacation pay; reimbursement of his COBRA premiums for 12 months; and acceleration of vesting on any outstanding equity awards along with extension of the time period to exercise the outstanding equity awards to one year. In the event that such termination or resignation occurs during the one year period immediately following a change in control, the executive will also receive, an increase in the cash severance amount to double his annualized base salary, an extension of the time period during which Leap will reimburse COBRA premiums to 18 months, and extension of the time period to exercise all outstanding equity awards to two years. An executive's right to receive these severance benefits is subject to his providing a release of claims in favor of Leap and return of all company property.

In the event that a change in control occurs within two years of the effective date of an executive's employment agreement, and the severance and other benefits provided in the agreement are considered "parachute payments" within the meaning of 280G of the Code and are subject to the excise tax imposed by Section 4999 of the code, then the executive will be entitled to receive an additional gross-up payment. This payment shall be in an amount equal to the excise tax and taxes imposed on such payment. Additionally, in the event that such change in control occurs more than two years after the effective date of the executive's employment agreement and the same conditions above are applicable, the executive's severance and other benefits constituting parachute payments will be either (i) delivered in full or (ii) delivered to a lesser extent which would result in no portion of such severance being subject to excise tax under Section 4999 of the Code, whichever provides the greatest amount to the executive. If any reduction in severance and other benefits constituting parachute payments is necessary to achieve the effect of clause (ii) above, then the reduction will occur first from cash severance payments, next from cancellation of accelerated vesting of equity awards and third from reduction of continued employee benefits.

Each executive's employment agreement incorporates the terms and provisions of a customary employee proprietary information, invention, non-competition and non-solicitation between Leap and the executive. This agreement includes a noncompetition covenant during the period of the executive's employment and for one year thereafter.

#### **Stock Option and Other Compensation Plans**

We did not grant any options to purchase common stock in 2016.

However, in connection with the consummation of the merger with Macrocare, in January 2017, we made an option grant to each executive to purchase 330,303 of shares of Leap's common stock pursuant to our Amended and Restated 2012 Equity Incentive Plan, which is described in further detail below. This option grant is at an exercise price \$9.90 per share. Each option granted to an executive will vest 33% on the first anniversary of the date of grant, and thereafter in equal monthly installments over a period of two years, generally subject to the executive's continued employment.

### Outstanding Equity Awards at Fiscal Year End

The following table sets forth information regarding outstanding equity awards held by our executive officers (including our named executive officers) as of December 31, 2016.

Name	Number of Securities Underlying Unexercised Options Exercisable	Number of Securities Underlying Unexercised Options Unexercisable	Option Exercise Price (\$)	Option Expiration Date
Christopher K. Mirabelli <i>Chief Executive Officer and President</i>	—	—	—	—
Douglas E. Onsi <i>Chief Financial Officer, Treasurer and Secretary</i>	—	—	—	—
Augustine Lawlor <i>Chief Operating Officer</i>	—	—	—	—

#### 2012 Equity Incentive Plan

The following is a summary of the material terms of the Amended and Restated 2012 Equity Incentive Plan, or 2012 Plan, which became effective upon the consummation of the merger. The 2012 Plan amended and restated our 2012 Equity Incentive Plan in its entirety.

The 2012 Plan provides for the grant of incentive stock option and nonstatutory stock options, stock appreciation rights, restricted stock and stock unit awards, performance units, stock grants and qualified performance-based awards under Section 162(m) of the Code, which we collectively refer to as "awards" in connection with the 2012 Plan. Directors, officers and other employees of Leap and our subsidiaries, as well as others performing consulting or advisory services for us, are eligible for grants under the 2012 Plan. The purpose of the 2012 Plan is to provide incentives that will attract, retain and motivate highly competent officers, directors, employees and consultants to promote the success of our business.

#### Administration

Under its terms, the 2012 Plan is administered by the compensation committee of the board of directors, which is made up of independent outside non-employee directors for the purposes of applicable securities and tax laws. The board of directors itself may also exercise any of the powers and responsibilities under the 2012 Plan. Subject to the terms of the 2012 Plan, the plan administrator (the board or its compensation committee) will select the recipients of awards and determine, among other things, the:

- number of shares of common stock covered by the awards and the dates upon which such awards become exercisable or any restrictions lapse, as applicable;
- type of award and the exercise or purchase price and method of payment for each such award;
- vesting period for awards, risks of forfeiture and any potential acceleration of vesting or lapses in risks of forfeiture; and
- duration of awards.

All decisions, determinations and interpretations made in good faith by the compensation committee with respect to the 2012 Plan and the terms and conditions of or operation of any award are final and binding on all participants, beneficiaries, heirs, assigns or other persons holding or claiming rights under the 2012 Plan or any award.

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*Available Shares*

The aggregate number of shares of our common stock which may be issued or used for reference purposes under the 2012 Plan or with respect to which awards may be granted, subject to the automatic increase provisions described below, may not exceed 1,387,204 shares, which may be either authorized and unissued shares of our common stock or shares of common stock held in or acquired for our treasury. In general, if awards under the 2012 Plan are for any reason cancelled, or expire or terminate unexercised, the number of shares covered by such awards will again be available for the grant of awards under the 2012 Plan. In addition, (i) shares used to pay the exercise price of a stock option and (ii) shares delivered to or withheld by us to pay the withholding taxes related to an award do not count as shares issued under the 2012 Plan.

In no event shall the number of shares of our common stock available for issuance pursuant to incentive options issued under the 2012 Plan exceed 1,387,204 shares of common stock.

*Eligibility for Participation*

Members of our board of directors, as well as employees of, and consultants to, us or any of our subsidiaries and affiliates are eligible to receive awards under the 2012 Plan. The selection of participants is within the sole discretion of the compensation committee.

*Incentive Stock Options*

Incentive stock options are intended to qualify as incentive stock options under Section 422 of the Internal Revenue Code and will be granted pursuant to incentive stock option agreements. The plan administrator will determine the exercise price for an incentive stock option, which may not be less than 100% of the fair market value of the stock underlying the option determined on the date of grant. In addition, incentive options granted to employees who own, or are deemed to own, more than 10% of our voting stock, must have an exercise price not less than 110% of the fair market value of the stock underlying the option on the date of grant.

*Nonstatutory Stock Options*

Nonstatutory stock options are not intended to qualify as incentive stock options under Section 422 of the Internal Revenue Code and will be granted pursuant to nonstatutory stock option agreements. The plan administrator will determine the exercise price for a nonstatutory stock option.

*Stock Appreciation Rights*

A stock appreciation right, or a SAR, entitles a participant to receive a payment equal in value to the difference between the fair market value of a share of stock on the date of exercise of the SAR over a specified exercise price of the SAR. SARs may be granted in tandem with a stock option, such that the recipient has the opportunity to exercise either the stock option or the SAR, but not both. The base exercise price (above which any appreciation is measured) will not be less than 50% of the fair market value of the common stock on the date of grant of the SAR or, in the case of an SAR granted in tandem with a stock option, the exercise price will be the same as the exercise price of the related stock option. The administrator may pay that amount in cash, in shares of our common stock, or a combination. The terms, methods of exercise, methods of settlement, form of consideration payable in settlement, and any other terms and conditions of any SAR will be determined by the administrator at the time of the grant of award and will be reflected in the award agreement.



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*Restricted Stock and Stock Units*

A restricted stock award or restricted stock unit award is the grant of shares of our common stock either currently (in the case of restricted stock) or at a future date (in the case of restricted stock units) at a price determined by the administrator (including zero), that is nontransferable and is subject to substantial risk of forfeiture until specific conditions or goals are met. Conditions are typically based on continuing employment. During the period of restriction, participants holding shares of restricted stock shall, except as otherwise provided in an individual award agreement, have full voting and dividend rights with respect to such shares but any stock dividends or other distributions payable in shares of stock or other securities of ours will be subject to the same vesting conditions that apply to the shares of restricted stock in respect of which the dividend was made. The receipt of cash dividends may also be deferred or required to be invested in additional shares of restricted stock. Participants holding restricted stock units may be entitled to receive payments equivalent to any dividends declared with respect to the common stock referenced in the grant of the restricted stock units, but only following the close of the applicable restriction period and then only if the underlying common stock has been earned. The restrictions will lapse in accordance with a schedule or other conditions determined by the administrator.

*Performance Units*

A performance unit award is a contingent right to receive predetermined shares of our common stock over an initial value for such number of shares (which may be zero) established by the compensation committee at the time of grant if certain performance goals or other business objectives are met within the specified performance period. The value of performance units will depend on the degree to which the specified performance goals are achieved but are generally based on the value of our common stock. The compensation committee may, in its discretion, pay earned performance shares in cash, or stock, or a combination of both.

Our compensation committee has discretion to select the length of any applicable restriction or performance period, the kind and/or level of the applicable performance goal, and whether the performance goal is to apply to us, one of our subsidiaries or any division or business unit, or to the recipient.

*Stock Grants*

A stock grant is an award of shares of common stock without restriction. Stock grants may only be made in limited circumstances, such as in lieu of other earned compensation. Stock grants are made without any forfeiture conditions.

*Qualified Performance-Based Awards*

Qualified performance-based awards include performance criteria intended to satisfy Section 162(m) of the Code. Section 162(m) of the Internal Revenue Code limits our federal income tax deduction for compensation to certain specified senior executives to \$1 million, but excludes from that limit "performance-based compensation." Any form of award permitted under the 2012 Plan, other than stock grants, may be granted as a qualified performance-based award, but in the case of awards other than stock options or SARs will be subject to satisfaction of performance goals. The performance criteria used to establish performance goals are limited to the following: (i) cash flow (before or after dividends); (ii) earnings per share (including, without limitation, earnings before interest, taxes, depreciation and amortization); (iii) stock price; (iv) return on equity; (v) stockholder return or total stockholder return; (vi) return on capital (including, without limitation, return on total capital or return on invested capital); (vii) return on investment; (viii) return on assets or net assets; (ix) market capitalization; (x) economic value added; (xi) debt leverage (debt to capital); (xii) revenue; (xiii) sales

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or net sales; (xiv) backlog; (xv) income, pre-tax income or net income; (xvi) operating income or pre-tax profit; (xvii) operating profit, net operating profit or economic profit; (xviii) gross margin, operating margin or profit margin; (xix) return on operating revenue or return on operating assets; (xx) cash from operations; (xxi) operating ratio; (xxii) operating revenue; (xxiii) market share improvement; (xxiv) general and administrative expenses and (xxv) customer service.

### *Transferability*

Awards, other than stock grants, granted under the 2012 Plan are generally nontransferable (other than by will or the laws of descent and distribution), except that the compensation committee may provide for the transferability of nonstatutory stock options at the time of grant or thereafter to certain family members.

### *Adjustment for Corporate Actions*

In the event of any change in the outstanding shares of common stock as a result of a reorganization, recapitalization, reclassification, stock dividend, stock split, reverse stock split or other similar distribution with respect to the shares of common stock, an appropriate and proportionate adjustment will be made in (i) the maximum numbers and kinds of shares subject to the 2012 Plan, (ii) the numbers and kinds of shares or other securities subject to then outstanding awards, (iii) the exercise price for each share or other unit of any other securities subject to then outstanding stock options or SARs (without change in the aggregate purchase price as to which such stock options or SARs remain exercisable), and (iv) the repurchase price of each share of restricted stock then subject to a risk of forfeiture in the form of a Company repurchase right. Any such adjustment in awards will be determined and made by the Compensation Committee in its sole discretion.

### *Transactions*

In the event of a transaction, including (i) any merger or consolidation of Leap, (ii) any sale or exchange of all of the common stock of Leap, (iii) any sale, transfer or other disposition of all or substantially all of Leap's assets, or (iv) any liquidation or dissolution of Leap, the compensation committee may, with respect to all or any outstanding stock options and SARs, (1) provide that such awards will be assumed, or substantially equivalent rights shall be provided in substitution therefore, (2) provide that the recipient's unexercised awards will terminate immediately prior to the consummation of such transaction unless exercised within a specified period following written notice to the recipient, (3) provide that outstanding awards shall become exercisable in whole or in part prior to or upon the transaction, (4) provide for cash payments, net of applicable tax withholdings, to be made to the recipients, (5) provide that, in connection with a liquidation or dissolution of Leap, awards shall convert into the right to receive liquidation proceeds net of the exercise price of the awards and any applicable tax withholdings, or (6) any combination of the foregoing. With respect to outstanding awards other than stock options or SARs that are not terminated prior to or upon the transaction, upon the occurrence of a transaction other than a liquidation or dissolution of Leap which is not part of another form of transaction, the repurchase and other rights of Leap under each such award will transfer to Leap's successor. Upon the occurrence of such a liquidation or dissolution of Leap, all risks of forfeiture and performance goals applicable to such other awards will automatically be deemed terminated or satisfied, unless specifically provided to the contrary in the award. Any determinations required to carry out any of the foregoing will be made by the compensation committee in its sole discretion.

### *Change of Control*

Upon the occurrence of a change of control, all outstanding stock options and SARs will accelerate with respect to such percentage of the shares not then exercisable and the risk of forfeiture

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applicable to all outstanding restricted stock and restricted stock units not based on achievement of performance goals will lapse with respect to such percentage of the restricted stock and restricted stock units still subject to such risk of forfeiture, and such percentage of any outstanding awards of performance units will be deemed to have been satisfied as is determined by the compensation committee. In each case, all unvested awards will be vested.

A change of control is defined as the occurrence of any of the following: (1) a transaction, as described above, unless securities possessing more than 50% of the total combined voting power of the resulting entity or ultimate parent entity are held by a person who held securities possessing more than 50% of the total combined voting power of Leap immediately prior to the transaction; (2) any person or group of persons, excluding Leap and certain other related entities, directly or indirectly acquires beneficial ownership of securities possessing more than 50% of the total combined voting power of Leap, unless pursuant to a tender or exchange offer that Leap's board of directors recommends stockholders accept; and (3) over a period of no more than 24 consecutive months there is a change in the composition of Leap's board such that a majority of the board members ceases to be composed of individuals who either (i) have been board members continuously since the beginning of that period, or (ii) have been elected or nominated for election as board members during such period by at least a majority of the remaining board members who have been board members continuously since the beginning of that period.

### *Amendment and Termination*

Our board of directors may at any time amend any or all of the provisions of the 2012 Plan, or suspend or terminate it entirely, retroactively or otherwise. Unless otherwise required by law or specifically provided in the 2012 Plan, the rights of a participant under awards granted prior to any amendment, suspension or termination may not be adversely affected without the consent of the participant. The compensation committee of board of directors is expressly authorized to amend any or all outstanding options at any time and from time to time to effect a repricing thereof by lowering the exercise price applicable to the shares of stock subject to such option(s) without the consent or approval of the stockholders of Leap or the holder or holders of such option(s), and, in connection with such repricing, to amend or modify any of the other terms of the option(s) so repriced, including, without limitation, for purposes of reducing the number of shares subject to such option(s) or for purposes of adversely affecting the provisions applicable to such option(s) that relate to the vesting or exercisability thereof, in each case without the approval or consent of stockholders of Leap or the holder(s) of such option(s). The 2012 Plan expires after ten years.

It is not presently possible to determine the dollar value of award payments that may be made or the number of options, shares of restricted stock, restricted stock units, or other awards that may be granted under the 2012 Plan in the future, or the individuals who may be selected for such awards because awards under the 2012 Plan are granted at the discretion of the compensation committee.

### *2016 Equity Incentive Plan*

The following is a summary of the material terms of the 2016 Equity Incentive Plan, or 2016 Plan, which became effective upon the completion of the merger. It does not purport to be complete and is qualified by reference to the full text of the 2016 Equity Incentive Plan, which has been filed as an exhibit with the SEC.

The 2016 Plan provides for the grant of incentive stock option and nonstatutory stock options, stock appreciation rights, restricted stock and stock unit awards, performance units, stock grants and qualified performance-based awards under Section 162(m) of the Code, which we collectively refer to as "awards" in connection with the 2016 Plan. Directors, officers and other employees of Leap and our subsidiaries, as well as others performing consulting or advisory services for us, are eligible for grants

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under the 2016 Plan. The purpose of the 2016 Plan is to provide incentives that will attract, retain and motivate highly competent officers, directors, employees and consultants to promote the success of our business.

### *Administration*

Under its terms, the 2016 Plan is administered by the compensation committee of the board of directors, which is made up of independent outside non-employee directors for the purposes of applicable securities and tax laws. The board of directors itself may also exercise any of the powers and responsibilities under the 2016 Plan. Subject to the terms of the 2016 Plan, the plan administrator (the board or its compensation committee) will select the recipients of awards and determine, among other things, the:

- number of shares of common stock covered by the awards and the dates upon which such awards become exercisable or any restrictions lapse, as applicable;
- type of award and the exercise or purchase price and method of payment for each such award;
- vesting period for awards, risks of forfeiture and any potential acceleration of vesting or lapses in risks of forfeiture; and
- duration of awards.

All decisions, determinations and interpretations made in good faith by the compensation committee with respect to the 2016 Plan and the terms and conditions of or operation of any award are final and binding on all participants, beneficiaries, heirs, assigns or other persons holding or claiming rights under the 2016 Plan or any award.

### *Available Shares*

The aggregate number of shares of our common stock which may be issued or used for reference purposes under the 2016 Plan or with respect to which awards may be granted, subject to the automatic increase provisions described below, may not exceed that number of shares of Leap common stock that is equal to the sum of (i) 854,321 shares plus (ii) that number of shares (not to exceed 103,023 shares in the aggregate) subject to M-CO Out of the Money Options (as defined in the 2016 Plan), if, and only to the extent that any of such M-CO Out of the Money Options expire or terminate unexercised at any time. In general, if awards under the 2016 Plan are for any reason cancelled, or expire or terminate unexercised, the number of shares covered by such awards will again be available for the grant of awards under the 2016 Plan. In addition, (i) shares used to pay the exercise price of a stock option and (ii) shares delivered to or withheld by us to pay the withholding taxes related to an award do not count as shares issued under the 2016 Plan.

The number of shares of common stock authorized under the 2016 Plan also will be increased each January 1 starting in 2018 by an amount equal to the lesser of (i) four percent (4%) of our outstanding common stock on a fully diluted basis as of the end of our immediately preceding fiscal year, and (ii) any lower amount determined by our board prior to each such January 1. In no event shall the number of shares of our common stock available for issuance pursuant to incentive options exceed a number of shares of common stock equal to ten times the number of authorized shares listed in the immediately preceding paragraph.

### *Eligibility for Participation*

Members of our board of directors, as well as employees of, and consultants to, us or any of our subsidiaries and affiliates are eligible to receive awards under the 2016 Plan. The selection of participants is within the sole discretion of the compensation committee.

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*Incentive Stock Options*

Incentive stock options are intended to qualify as incentive stock options under Section 422 of the Internal Revenue Code and will be granted pursuant to incentive stock option agreements. The plan administrator will determine the exercise price for an incentive stock option, which may not be less than 100% of the fair market value of the stock underlying the option determined on the date of grant. In addition, incentive options granted to employees who own, or are deemed to own, more than 10% of our voting stock, must have an exercise price not less than 110% of the fair market value of the stock underlying the option determined on the date of grant.

*Nonstatutory Stock Options*

Nonstatutory stock options are not intended to qualify as incentive stock options under Section 422 of the Internal Revenue Code and will be granted pursuant to nonstatutory stock option agreements. The plan administrator will determine the exercise price for a nonstatutory stock option.

*Stock Appreciation Rights*

A stock appreciation right, or a SAR, entitles a participant to receive a payment equal in value to the difference between the fair market value of a share of stock on the date of exercise of the SAR over a specified exercise price of the SAR. SARs may be granted in tandem with a stock option, such that the recipient has the opportunity to exercise either the stock option or the SAR, but not both. The base exercise price (above which any appreciation is measured) will not be less than 50% of the fair market value of the common stock on the date of grant of the SAR or, in the case of an SAR granted in tandem with a stock option, the exercise price will be the same as the exercise price of the related stock option. The administrator may pay that amount in cash, in shares of our common stock, or a combination. The terms, methods of exercise, methods of settlement, form of consideration payable in settlement, and any other terms and conditions of any SAR will be determined by the administrator at the time of the grant of award and will be reflected in the award agreement.

*Restricted Stock and Stock Units*

A restricted stock award or restricted stock unit award is the grant of shares of our common stock either currently (in the case of restricted stock) or at a future date (in the case of restricted stock units) at a price determined by the administrator (including zero), that is nontransferable and is subject to substantial risk of forfeiture until specific conditions or goals are met. Conditions are typically based on continuing employment. During the period of restriction, participants holding shares of restricted stock shall, except as otherwise provided in an individual award agreement, have full voting and dividend rights with respect to such shares but any stock dividends or other distributions payable in shares of stock or other securities of ours will be subject to the same vesting conditions that apply to the shares of restricted stock in respect of which the dividend was made. The receipt of cash dividends may also be deferred or required to be invested in additional shares of restricted stock. Participants holding restricted stock units may be entitled to receive payments equivalent to any dividends declared with respect to the common stock referenced in the grant of the restricted stock units, but only following the close of the applicable restriction period and then only if the underlying common stock has been earned. The restrictions will lapse in accordance with a schedule or other conditions determined by the administrator.

*Performance Units*

A performance unit award is a contingent right to receive predetermined shares of our common stock over an initial value for such number of shares (which may be zero) established by the compensation committee at the time of grant if certain performance goals or other business objectives

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are met within the specified performance period. The value of performance units will depend on the degree to which the specified performance goals are achieved but are generally based on the value of our common stock. The compensation committee may, in its discretion, pay earned performance shares in cash, or stock, or a combination of both.

Our compensation committee has discretion to select the length of any applicable restriction or performance period, the kind and/or level of the applicable performance goal, and whether the performance goal is to apply to us, one of our subsidiaries or any division or business unit, or to the recipient.

### *Stock Grants*

A stock grant is an award of shares of common stock without restriction. Stock grants may only be made in limited circumstances, such as in lieu of other earned compensation. Stock grants are made without any forfeiture conditions.

### *Qualified Performance-Based Awards*

Qualified performance-based awards include performance criteria intended to satisfy Section 162(m) of the Code. Section 162(m) of the Internal Revenue Code limits our federal income tax deduction for compensation to certain specified senior executives to \$1 million, but excludes from that limit "performance-based compensation." Any form of award permitted under the 2016 Plan, other than stock grants, may be granted as a qualified performance-based award, but in the case of awards other than stock options or SARs will be subject to satisfaction of performance goals. The performance criteria used to establish performance goals are limited to the following: (i) cash flow (before or after dividends); (ii) earnings per share (including, without limitation, earnings before interest, taxes, depreciation and amortization); (iii) stock price; (iv) return on equity; (v) stockholder return or total stockholder return; (vi) return on capital (including, without limitation, return on total capital or return on invested capital); (vii) return on investment; (viii) return on assets or net assets; (ix) market capitalization; (x) economic value added; (xi) debt leverage (debt to capital); (xii) revenue; (xiii) sales or net sales; (xiv) backlog; (xv) income, pre-tax income or net income; (xvi) operating income or pre-tax profit; (xvii) operating profit, net operating profit or economic profit; (xviii) gross margin, operating margin or profit margin; (xix) return on operating revenue or return on operating assets; (xx) cash from operations; (xxi) operating ratio; (xxii) operating revenue; (xxiii) market share improvement; (xxiv) general and administrative expenses and (xxv) customer service.

### *Transferability*

Awards, other than stock grants, granted under the 2016 Plan are generally nontransferable (other than by will or the laws of descent and distribution), except that the compensation committee may provide for the transferability of nonstatutory stock options at the time of grant or thereafter to certain family members.

### *Adjustment for Corporate Actions*

In the event of any change in the outstanding shares of common stock as a result of a reorganization, recapitalization, reclassification, stock dividend, stock split, reverse stock split or other similar distribution with respect to the shares of common stock, an appropriate and proportionate adjustment will be made in (i) the maximum numbers and kinds of shares subject to the 2016 Plan, (ii) the numbers and kinds of shares or other securities subject to then outstanding awards, (iii) the exercise price for each share or other unit of any other securities subject to then outstanding stock options or SARs (without change in the aggregate purchase price as to which such stock options or SARs remain exercisable), and (iv) the repurchase price of each share of restricted stock then subject

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to a risk of forfeiture in the form of a Company repurchase right. Any such adjustment in awards will be determined and made by the Compensation Committee in its sole discretion.

### *Transactions*

In the event of a transaction, including (i) any merger or consolidation of Leap, (ii) any sale or exchange of all of the common stock of Leap, (iii) any sale, transfer or other disposition of all or substantially all of Leap's assets, or (iv) any liquidation or dissolution of Leap, the compensation committee may, with respect to all or any outstanding stock options and SARS, (1) provide that such awards will be assumed, or substantially equivalent rights shall be provided in substitution therefore, (2) provide that the recipient's unexercised awards will terminate immediately prior to the consummation of such transaction unless exercised within a specified period following written notice to the recipient, (3) provide that outstanding awards shall become exercisable in whole or in part prior to or upon the transaction, (4) provide for cash payments, net of applicable tax withholdings, to be made to the recipients, (5) provide that, in connection with a liquidation or dissolution of Leap, awards shall convert into the right to receive liquidation proceeds net of the exercise price of the awards and any applicable tax withholdings, or (6) any combination of the foregoing. With respect to outstanding awards other than stock options or SARS that are not terminated prior to or upon the transaction, upon the occurrence of a transaction other than a liquidation or dissolution of Leap which is not part of another form of transaction, the repurchase and other rights of Leap under each such award will transfer to Leap's successor. Upon the occurrence of such a liquidation or dissolution of Leap, all risks of forfeiture and performance goals applicable to such other awards will automatically be deemed terminated or satisfied, unless specifically provided to the contrary in the award. Any determinations required to carry out any of the foregoing will be made by the compensation committee in its sole discretion.

### *Change of Control*

Upon the occurrence of a change of control, to the extent that the surviving entity declines to continue, convert, assume or replace outstanding awards, then all outstanding stock options and SARS will accelerate with respect to such percentage of the shares not then exercisable as is determined by the compensation committee, the risk of forfeiture applicable to all outstanding restricted stock and restricted stock units not based on achievement of performance goals will lapse with respect to such percentage of the restricted stock and restricted stock units still subject to such risk of forfeiture as is determined by the compensation committee, and such percentage of any outstanding awards of performance units will be deemed to have been satisfied as is determined by the compensation committee. In each case, a pro rata portion of each unvested award will be vested.

A change of control is defined as the occurrence of any of the following: (1) a transaction, as described above, unless securities possessing more than 50% of the total combined voting power of the resulting entity or ultimate parent entity are held by a person who held securities possessing more than 50% of the total combined voting power of Leap immediately prior to the transaction; (2) any person or group of persons, excluding Leap and certain other related entities, directly or indirectly acquires beneficial ownership of securities possessing more than 50% of the total combined voting power of Leap, unless pursuant to a tender or exchange offer that Leap's board of directors recommends stockholders accept; (3) over a period of no more than 24 consecutive months there is a change in the composition of Leap's board such that a majority of the board members ceases to be composed of individuals who either (i) have been board members continuously since the beginning of that period, or (ii) have been elected or nominated for election as board members during such period by at least a majority of the remaining board members who have been board members continuously since the beginning of that period.

*Amendment and Termination*

Our board of directors may at any time amend any or all of the provisions of the 2016 Plan, or suspend or terminate it entirely, retroactively or otherwise. Unless otherwise required by law or specifically provided in the 2016 Plan, the rights of a participant under awards granted prior to any amendment, suspension or termination may not be adversely affected without the consent of the participant. The compensation committee of board of directors is expressly authorized to amend any or all outstanding options at any time and from time to time to effect a repricing thereof by lowering the exercise price applicable to the shares of stock subject to such option(s) without the consent or approval of the stockholders of Leap or the holder or holders of such option(s), and, in connection with such repricing, to amend or modify any of the other terms of the option(s) so repriced, including, without limitation, for purposes of reducing the number of shares subject to such option(s) or for purposes of adversely affecting the provisions applicable to such option(s) that relate to the vesting or exercisability thereof, in each case without the approval or consent of stockholders of Leap or the holder(s) of such option(s). The 2016 Plan expires after ten years.

It is not presently possible to determine the dollar value of award payments that may be made or the number of options, shares of restricted stock, restricted stock units, or other awards that may be granted under the 2016 Plan in the future, or the individuals who may be selected for such awards because awards under the 2016 Equity Incentive Plan are granted at the discretion of the compensation committee.

**401(k) Plan**

We maintain a defined contribution employee retirement plan, or 401(k) plan, for our employees. Our named executive officers are also eligible to participate in the 401(k) plan on the same basis as our other employees. The 401(k) plan is intended to qualify as a tax-qualified plan under Section 401(k) of the Code. The plan provides that each participant may contribute up to the statutory limit, which is \$17,500 for calendar year 2016. Participants that are 50 years or older can also make "catch-up" contributions, which in calendar year 2016 may be up to an additional \$5,500 above the statutory limit. We may also elect to provide for discretionary profit sharing contributions, but we did not provide any such contributions in 2015. In general, eligible compensation for purposes of the 401(k) plan includes an employee's earnings reportable on IRS Form W-2 subject to certain adjustments and exclusions required under the Code. We also make matching employer contributions in cash to each employee's 401(k) plan at a rate of 100% of the first 3% of earnings contributed by each such employee and 50% of the next 2% of earnings contributed. Employees participating in the 401(k) plan are fully vested in our matching contributions, and investments are directed by employees. The 401(k) plan currently does not offer the ability to invest in our securities.

**Director Compensation**

Prior to January 1, 2016, we did not pay any compensation or make any equity awards to our directors.

Beginning on January 1, 2016, we began compensating our non-employee directors with an annual cash retainer of \$25,000. During the year ended 2016, our non-employee directors were James Cavanaugh, Thomas Dietz, John Littlechild and Joseph Loscalzo. We also reimburse non-employee directors for travel expenses incurred in connection with their duties as directors. The table below presents a summary of the compensation earned by our non-employee directors during the year ended December 31, 2016.



**Summary Table**

	<u>Fees Earned</u>	<u>Option Awards</u>	<u>All Other Compensation(1)</u>	<u>Total</u>
James Cavanaugh	\$ 25,000	—	\$ 1,924	\$ 26,924
Thomas Dietz	\$ 25,000	—	\$ 5,445	\$ 30,445
John Littlechild	\$ 25,000	—	—	\$ 25,000
Joseph Loscalzo, MD, Ph.D	\$ 25,000	—	—	\$ 25,000

(1) Represents amount of expenses reimbursed in connection with travel to and from Board meetings.

In connection with the consummation of the merger, we made stock option grants to each of our current non-employee directors.

Concurrent with the consummation of the merger with Macrocare, we adopted a new compensation program for our non-employee directors. We retained an independent compensation consultant to help us determine the terms of the non-employee director compensation program. Under the program, effective upon the consummation of the merger, each non-employee director shall be paid an annual fee of \$40,000 and such additional fees as set out in the following table. All payments are to be made quarterly, in arrears.

<u>Non-Employee Director</u>	<u>Annual Fee (\$)</u>
Chairman of audit committee	15,000
Member of audit committee (other than chairman)	10,000
Chairman of compensation committee	10,000
Member of compensation committee (other than chairman)	5,000
Chairman of governance and nominating committee	10,000
Member of governance and nominating committee (other than chairman)	5,000

Upon the effectiveness of the merger with Macrocare, we made an initial option grant to each non-employee director to purchase 15,000 shares of common stock at an exercise price of \$9.90 per share. Each initial option grant will vest on a quarterly basis over a three year period.

In addition, we intend to provide our non-employee directors with equity compensation for service on our board of directors and committees on annual basis, starting with our 2018 annual meeting of the stockholders. We expect to make these grants around the time of our annual meeting of stockholders. This equity compensation will consist of a grant of options to purchase 7,500 shares of common stock at an exercise price equal to the fair market value of Leap's common stock on the date of grant and will vest on a quarterly basis over a one year period.

Additionally, we intend to provide any new non-employee director appointed to the board of directors an initial grant to purchase 15,000 shares of common stock at an exercise price equal to the fair market value of Leap's common stock on the date of such director's appointment which shall vest quarterly over three years following grant. These annual grants and new director grants will be subject to approval by Leap's board of directors at the time.

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

The following table sets forth certain information regarding the beneficial ownership of our common stock outstanding as of March 24, 2017 by:

- each person, or group of affiliated persons, known by us to beneficially own more than 5% of our common stock;
- each of the members of our board of directors;
- each of our named executive officers; and
- all of the members of our board of directors and executive officers as a group.

Each individual or entity shown in the table has furnished us with information with respect to beneficial ownership. We have determined beneficial ownership in accordance with the SEC's rules. These rules generally attribute beneficial ownership of securities to persons who possess sole or shared voting power or investment power with respect to those securities. In addition, the rules include shares of common stock issuable pursuant to the exercise of stock options or other rights that are either immediately exercisable or exercisable on or before May 23, 2017, which is 60 days after March 24, 2017. These shares are deemed to be outstanding and beneficially owned by the person holding those rights for the purpose of computing the percentage ownership of that person, but they are not treated as outstanding for the purpose of computing the percentage ownership of any other person. Unless otherwise indicated, the persons or entities identified in this table have sole voting and investment power with respect to all shares shown as beneficially owned by them, subject to applicable community property laws.

Except as otherwise noted below, the address for each person or entity listed in the table is c/o Leap Therapeutics, Inc., 47 Thomdike Street, Suite B1-1, Cambridge, MA 02141.

<u>Name and Address of Beneficial Owner</u>	<u>Amount and Nature of Beneficial Ownership</u>	<u>Percentage Ownership</u>
<b><i>5% or Greater Stockholders:</i></b>		
HealthCare Ventures, and affiliates	5,477,902(1)	58.32%
Eli Lilly and Company Lilly Corporate Center Indianapolis, IN 46285	657,614	7.00%
<b><i>Directors and Named Executive Officers</i></b>		
Christopher K. Mirabelli, Ph.D. Chief Executive Officer, President and Chairman	5,477,902(2)	58.32%
Douglas E. Onsi Chief Financial Officer, General Counsel, Treasurer and Secretary	2,859,496(3)	30.44%
Augustine Lawlor Chief Operating Officer	5,477,902(4)	58.32%
James Cavanaugh, Ph.D. Director	2,630,656(5)	27.97%
Thomas Dietz, Ph.D. Director	12,250(6)	*(13)
William Li, MD Director	1,250(7)	*(13)
John Littlechild, Ph.D. Director	2,630,656(8)	27.97%
Joseph Loscalzo, MD, Ph.D. Director	12,250(9)	*(13)
Nissim Mashiach Director	184,491(10)	1.93%
All Directors and Named Executive Officers as a Group (nine persons)	5,712,643(11)(12)	59.34%

- (1) Includes (i) 2,618,406 shares of common stock held by HealthCare Ventures VIII, L.P., (ii) 2,515,607 shares of common stock held by HealthCare Ventures IX, L.P. and (iii) 343,889 shares of common stock held by HealthCare Ventures Strategic Fund, L.P. Christopher K. Mirabelli, James H. Cavanaugh, Ph.D., John W. Littlechild, Harold Werner and Augustine Lawlor (collectively, the "HCVVIII Directors") are the Managing Directors of HealthCare Ventures VIII, LLC ("HCPVIII LLC"), which is the General Partner of HealthCare Partners VIII, L.P. ("HCPVIII"), which is the General Partner of HealthCare Ventures VIII, L.P. Each of the HCVVIII Directors, HCPVIII LLC and HCPVIII beneficially own and share voting and dispositive power with respect to all of the securities owned by HealthCare Ventures VIII, L.P. and each disclaims beneficial ownership of these shares except to the extent of his proportionate pecuniary interest in these securities. Christopher K. Mirabelli, Douglas E. Onsi and Augustine Lawlor (collectively, the "HCVIX Directors") are the Managing Directors of HealthCare Ventures IX, LLC ("HCPPIX LLC") which is the General Partner of HealthCare Ventures IX, L.P. ("HCPPIX"), which is the General Partner of HealthCare Ventures IX, L.P. Each of the HCVIX Directors, HCPPIX LLC and HCPPIX beneficially own and share voting and dispositive power with respect to all of the securities owned by HealthCare Ventures IX, L.P. and each disclaims beneficial ownership of these shares except to the extent of his proportionate pecuniary interest in these securities. Christopher K. Mirabelli, Douglas E. Onsi and Augustine Lawlor (collectively, the "HCSP Directors") are the Managing Directors of HealthCare Strategic Partners, LLC ("HCV Strategic LLC"), which is the General Partner of HealthCare Ventures Strategic Fund, L.P. Each of the HCSP Directors, and HCV Strategic LLC beneficially own and share voting and dispositive power with respect to all of the securities owned by HCV Strategic Fund, L.P. and each disclaims

beneficial ownership of these shares except to the extent of his proportionate pecuniary interest in these securities.

- (2) Includes (i) 2,618,406 shares of common stock held by HealthCare Ventures VIII, L.P., (ii) 2,515,607 shares of common stock held by HealthCare Ventures IX, L.P. and (iii) 343,889 shares of common stock held by HealthCare Ventures Strategic Fund, L.P. Christopher K. Mirabelli, Ph.D., is a Managing Director of HealthCare Ventures VIII, LLC ("HCPVIII LLC"), which is the General Partner of HealthCare Partners VIII, L.P. ("HCPVIII"), which is the General Partner of HealthCare Ventures VIII, L.P. Christopher K. Mirabelli, Ph.D. shares voting and dispositive power with respect to all of the securities owned by HealthCare Ventures VIII, L.P. and disclaims beneficial ownership of these shares except to the extent of his proportionate pecuniary interest in these securities. Christopher K. Mirabelli, Ph.D. is a Managing Director of HealthCare Ventures IX, LLC ("HCPIX LLC") which is the General Partner of HealthCare Ventures IX, L.P. ("HCPIX"), which is the General Partner of HealthCare Ventures IX, L.P. Christopher K. Mirabelli, Ph.D. beneficially owns and shares voting and dispositive power with respect to all of the securities owned by HealthCare Ventures IX, L.P. and disclaims beneficial ownership of these shares except to the extent of his proportionate pecuniary interest in these securities. Christopher K. Mirabelli, Ph.D. is a Managing Director of HealthCare Strategic Partners, LLC ("HCV Strategic LLC"), which is the General Partner of HealthCare Ventures Strategic Fund, L.P. Christopher K. Mirabelli, Ph.D. beneficially owns and shares voting and dispositive power with respect to all of the securities owned by HCV Strategic Fund, L.P. and disclaims beneficial ownership of these shares except to the extent of his proportionate pecuniary interest in these securities.
- (3) Includes (i) 2,515,607 shares of common stock held by HealthCare Ventures IX, L.P. and (ii) 343,889 shares of common stock held by HealthCare Ventures Strategic Fund, L.P. Douglas E. Onsi is a Managing Director of HealthCare Ventures IX, LLC ("HCPIX LLC") which is the General Partner of HealthCare Ventures IX, L.P. ("HCPIX"), which is the General Partner of HealthCare Ventures IX, L.P. Douglas E. Onsi beneficially owns and shares voting and dispositive power with respect to all of the securities owned by HealthCare Ventures IX, L.P. and disclaims beneficial ownership of these shares except to the extent of his proportionate pecuniary interest in these securities. Douglas E. Onsi is a Managing Director of HealthCare Strategic Partners, LLC ("HCV Strategic LLC"), which is the General Partner of HealthCare Ventures Strategic Fund, L.P. Douglas E. Onsi beneficially owns and shares voting and dispositive power with respect to all of the securities owned by HCV Strategic Fund, L.P. and disclaims beneficial ownership of these shares except to the extent of his proportionate pecuniary interest in these securities.
- (4) Includes (i) 2,618,406 shares of common stock held by HealthCare Ventures VIII, L.P., (ii) 2,515,607 shares of common stock held by HealthCare Ventures IX, L.P. and (iii) 343,889 shares of common stock held by HealthCare Ventures Strategic Fund, L.P. Augustine Lawlor is a Managing Director of HealthCare Ventures VIII, LLC ("HCPVIII LLC"), which is the General Partner of HealthCare Partners VIII, L.P. ("HCPVIII"), which is the General Partner of HealthCare Ventures VIII, L.P. Augustine Lawlor shares voting and dispositive power with respect to all of the securities owned by HealthCare Ventures VIII, L.P. and disclaims beneficial ownership of these shares except to the extent of his proportionate pecuniary interest in these securities. Augustine Lawlor is a Managing Director of HealthCare Ventures IX, LLC ("HCPIX LLC") which is the General Partner of HealthCare Ventures IX, L.P. ("HCPIX"), which is the General Partner of HealthCare Ventures IX, L.P. Augustine Lawlor beneficially owns and shares voting and dispositive power with respect to all of the securities owned by HealthCare Ventures IX, L.P. and disclaims beneficial ownership of these shares except to the extent of his proportionate pecuniary interest in these securities. Augustine Lawlor is a Managing Director of HealthCare Strategic Partners, LLC ("HCV Strategic LLC"), which is the General Partner of HealthCare Ventures

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Strategic Fund, L.P. Augustine Lawlor beneficially owns and shares voting and dispositive power with respect to all of the securities owned by HCV Strategic Fund, L.P. and disclaims beneficial ownership of these shares except to the extent of his proportionate pecuniary interest in these securities.

- (5) Includes (i) 12,250 shares of common stock subject to stock options that were exercisable as of March 24, 2017, or that will become exercisable within 60 days after that date, and (ii) 2,618,406 shares of common stock held by HealthCare Ventures VIII, L.P. James H. Cavanaugh, Ph.D. is a Managing Directors of HealthCare Ventures VIII, LLC ("HCPVIII LLC"), which is the General Partner of HealthCare Partners VIII, L.P. ("HCPVIII"), which is the General Partner of HealthCare Ventures VIII, L.P. James Cavanaugh, Ph.D. beneficially owns and share voting and dispositive power with respect to all of the securities owned by HealthCare Ventures VIII, L.P. and disclaims beneficial ownership of these shares except to the extent of his proportionate pecuniary interest in these securities.
- (6) Includes 12,250 shares of common stock subject to stock options that were exercisable as of March 24, 2017, or that will become exercisable within 60 days after that date.
- (7) Includes 1,250 shares of common stock subject to stock options that were exercisable as of March 24, 2017, or that will become exercisable within 60 days after that date.
- (8) Includes (i) 12,250 shares of common stock subject to stock options that were exercisable as of March 24, 2017, or that will become exercisable within 60 days after that date, and (ii) 2,618,406 shares of common stock held by HealthCare Ventures VIII, L.P. John Littlechild is a Managing Directors of HealthCare Ventures VIII, LLC ("HCPVIII LLC"), which is the General Partner of HealthCare Partners VIII, L.P. ("HCPVIII"), which is the General Partner of HealthCare Ventures VIII, L.P. John Littlechild beneficially owns and share voting and dispositive power with respect to all of the securities owned by HealthCare Ventures VIII, L.P. and disclaims beneficial ownership of these shares except to the extent of his proportionate pecuniary interest in these securities.
- (9) Includes 12,250 shares of common stock subject to stock options that were exercisable as of March 24, 2017, or that will become exercisable within 60 days after that date.
- (10) Includes 184,491 shares of common stock subject to stock options that were exercisable as of March 24, 2017, or that will become exercisable within 60 days after that date.
- (11) For purposes of clarification, (i) each of the 2,618,406 shares of common stock owned by HealthCare Ventures VIII, L.P. (and indirectly owned by each of Christopher K. Mirabelli, Ph.D., Augustine Lawlor, James H. Cavanaugh, Ph.D., and John W. Littlechild) have only been counted one time in calculating the number of shares of Common Stock beneficially owned by all executive officers and directors, (ii) each of the 2,515,607 shares of common stock owned by HealthCare Ventures IX, L.P. (and indirectly owned by each of Christopher K. Mirabelli, Ph.D., Douglas E. Onsi and Augustine Lawlor) have only been counted one time in calculating the number of shares of Common Stock beneficially owned by all executive officers and directors, and (iii) each of the 343,889 shares of common stock owned by HealthCare Ventures Strategic Fund, L.P. (and indirectly owned by each of Christopher K. Mirabelli, Ph.D., Douglas E. Onsi and Augustine Lawlor) have only been counted one time in calculating the number of shares of Common Stock beneficially owned by all executive officers and directors.
- (12) Includes 234,741 shares of common stock subject to stock options held by our directors and named executive officers that were exercisable as of March 24, 2017, or that will become exercisable within 60 days after that date.
- (13) An asterisk indicates less than 1% beneficial ownership.

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

The following table contains information about our equity compensation plans as of December 31, 2016.

<u>Plan category</u>	<u>Number of securities to be issued upon exercise of outstanding stock options, warrants and rights</u>	<u>Weighted-average exercise price of outstanding options, warrants and rights</u>	<u>Number of securities remaining available for future issuance under equity compensation plans</u>
Equity compensation plans approved by security holders(1)	43,520	\$ 5.00	17,963
Equity compensation plans not approved by security holders	—	—	—
<b>Total</b>	<b>43,520</b>	<b>\$ 5.00</b>	<b>17,963</b>

(1) Includes information regarding our 2012 Equity Incentive Plan.

In connection with the consummation of the merger between Leap and Macrocare Ltd., on January 23, 2017, effective as of January 23, 2017, (i) M-CO Merger Sub Ltd. merged with and into Macrocare and Macrocare became a wholly-owned subsidiary of Leap (the "Merger"), (ii) Leap adopted its Amended and Restated 2012 Equity Incentive Plan and 2016 Equity Incentive Plan, and (iii) Leap assumed the Macrocare 2013 Share Incentive Plan (the "2013 Plan"), the Macrocare 2008 Stock Option Plan (the "2008 Plan") and all stock options outstanding under each of the 2013 Plan and the 2008 Plan immediately prior to the consummation of the Merger. By virtue of the terms of the Merger Agreement and the 2013 Plan or the 2008 Plan, as applicable, each stock option outstanding under the 2013 Plan or the 2008 Plan, as applicable, immediately prior to the consummation of the Merger was automatically converted, into a stock option exercisable for shares of Leap common stock based on a specified exchange ratio. The Amended and Restated 2012 Equity Incentive Plan amended and restated our 2012 Equity Incentive Plan in its entirety.

The following table contains information about our equity compensation plans as of January 23, 2017, immediately following the consummation of the merger with Macrocare.

<u>Plan category</u>	<u>Number of securities to be issued upon exercise of outstanding stock options, warrants and rights</u>	<u>Weighted-average exercise price of outstanding options, warrants and rights</u>	<u>Number of securities remaining available for future issuance under equity compensation plans</u>
Equity compensation plans approved by security holders (1)	1,665,093(2)\$	14.08	854,321(3)
Equity compensation plans not approved by security holders	—	—	—
<b>Total</b>	<b>1,665,093(2)\$</b>	<b>14.08</b>	<b>854,321(3)</b>

(1) Includes information regarding our Amended and Restated 2012 Equity Incentive Plan, our 2016 Equity Incentive Plan and the assumed Macrocare 2013 Plan and 2008 Plan.

(2) Includes (i) 277,889 shares of Leap common stock issued in connection with the exchange of Macrocare options and the assumption of the Macrocare 2013 Plan and 2008 Plan and (ii) 1,387,204 shares issued pursuant to the Amended and Restated 2012 Equity Incentive Plan.

(3) Includes 854,321 shares reserved for issuance under the Leap 2016 Equity Incentive Plan.

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As of March 30, 2017, there were no shares remaining that are available for issuance under the Amended and Restated 2012 Equity Incentive Plan, 650,036 shares remaining that are available for issuance under the 2016 Equity Incentive Plan and no shares remaining that are available for issuance under either the 2008 or 2013 Plans.

**Item 13. Certain Relationships and Related Transactions, and Director Independence.**

The following is a description of transactions since January 1, 2015, to which we have been a party, in which the amount involved in the transaction exceeds the lesser of \$120,000, or one percent of the average of our assets at year end, and in which any of our directors, executive officers or to our knowledge, beneficial owners of more than 5.0% of our capital stock or an affiliate or immediate family member thereof, had or will have a direct or indirect material interest, other than employment, compensation, termination and change in control arrangements with our named executive officers, which are described under "Executive and Director Compensation." We believe the terms obtained or consideration that we paid or received, as applicable, in connection with the transactions described below were comparable to terms available or the amounts that would be paid or received, as applicable, in arm's-length transactions with unrelated third parties.

Compensation arrangements for our directors and named executive officers and option grants in connection with the merger with Macrocare are described elsewhere in this Annual Report on Form 10-K

**Notes**

As set forth in the tables below, we issued promissory notes to holders of 5% or more of our capital stock. The interest rate on each note is eight percent (8%) per annum beginning on either the date the note was entered into or, if the note contains drawdown dates, commencing to accrue with respect to any principal amount outstanding on the applicable drawdown date of such principal amount.

**2014-2015 Notes**

On April 17, 2015, the notes issued on June 23, 2014, September 9, 2014, December 18, 2014 and March 25, 2015 were converted and the aggregate amount of outstanding principal and unpaid accrued interest thereon was exchanged for shares of our Series B convertible preferred stock, as described below under "—Series B Preferred Stock Financing." The following table sets forth the aggregate principal amount of promissory notes that we issued to our directors, executive officers and 5% stockholders, and their affiliates or immediate family members:

<u>Investor</u>	<u>Date Issued</u>	<u>Aggregate Principal Amount of Notes</u>
HealthCare Ventures VIII, L.P.	June 23, 2014	\$ 1,000,000
HealthCare Ventures VIII, L.P.	September 9, 2014	\$ 1,000,000
HealthCare Ventures VIII, L.P.	December 18, 2014	\$ 1,070,000
HealthCare Ventures VIII, L.P.	March 25, 2015	\$ 1,300,000

**2015-2017 Notes**

We issued a convertible promissory note to HealthCare Ventures VIII, L.P., HealthCare Ventures IX, L.P. and HealthCare Strategic Fund, L.P. The note was originally issued by Leap to the payees on September 1, 2015, in the original principal amount of up to \$1,500,000, but was thereafter amended on November 2, 2015, December 15, 2015, February 12, 2016, April 28, 2016, June 1, 2016, August 30, 2016, October 13, 2016, and January 5, 2017, such that the maximum principal amount available to Leap under the note was \$31,000,000 and HealthCare Ventures Strategic Fund, L.P. was an

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additional payee party thereunder. The interest rate on the note is eight percent (8%) per annum, commencing to accrue with respect to any principal amount outstanding on the applicable drawdown date of such principal amount. The note automatically converted into shares of common stock on January 20, 2017.

The following table sets forth the drawdowns that have been made by Leap under the note:

<u>Payee</u>	<u>Drawdown date</u>	<u>Amount</u>
HealthCare Ventures VIII, L.P	September 1, 2015	\$ 300,000.00
HealthCare Ventures VIII, L.P	September 23, 2015	\$ 500,000.00
HealthCare Ventures VIII, L.P	October 19, 2015	\$ 700,000.00
HealthCare Ventures VIII, L.P	November 2, 2015	\$ 600,000.00
HealthCare Ventures VIII, L.P	December 17, 2015	\$ 1,000,000.00
HealthCare Ventures VIII, L.P	January 8, 2016	\$ 1,900,000.00
HealthCare Ventures IX, L.P	February 16, 2016	\$ 1,000,000.00
HealthCare Ventures VIII, L.P	March 1, 2016	\$ 1,000,000.00
HealthCare Ventures VIII, L.P	March 31, 2016	\$ 3,000,000.00
HealthCare Ventures VIII, L.P	April 28, 2016	\$ 300,000.00
HealthCare Ventures VIII, L.P	May 12, 2016	\$ 1,700,000.00
HealthCare Ventures VIII, L.P	June 13, 2016	\$ 2,000,000.00
HealthCare Ventures VIII, L.P	June 29, 2016	\$ 2,000,000.00
HealthCare Ventures VIII, L.P	August 3, 2016	\$ 3,000,000.00
HealthCare Ventures VIII, L.P	September 1, 2016	\$ 3,000,000.00
HealthCare Ventures Strategic Fund, L.P	October 13, 2016	\$ 2,000,000.00
HealthCare Ventures IX, L.P	November 15, 2016	\$ 1,750,000.00
HealthCare Ventures Strategic Fund, L.P	November 15, 2016	\$ 250,000.00
HealthCare Ventures IX, L.P	December 12, 2016	\$ 2,800,000.00
HealthCare Ventures Strategic Fund, L.P.	December 12, 2016	\$ 200,000.00
HealthCare Ventures IX, L.P	January 13, 2017	\$ 750,000.00
<b>TOTAL</b>		<b>\$ 29,750,000.00</b>

#### Series A Preferred Stock Financing

On January 3, 2011, the Registrant agreed to issue to Eli Lilly and Company, in the aggregate, up to 9,000,000 shares of Series A Convertible Preferred Stock, par value \$0.001 per share, in consideration for Eli Lilly's agreement to grant the Registrant a license to certain intellectual property owned or controlled by Eli Lilly to the Registrant. The Series A Stock was issued in four tranches on January 3, 2011, September 5, 2012, July 25, 2013 and April 17, 2015. The following table sets forth the aggregate amount of securities that we issued in each tranche closing in this transaction:

<u>Investor</u>	<u>Date Issued</u>	<u>Shares of Series A Preferred Stock Issued</u>
Eli Lilly and Company	January 3, 2011	2,930,400
Eli Lilly and Company	September 5, 2012	1,465,200
Eli Lilly and Company	July 25, 2013	1,883,700
Eli Lilly and Company	April 17, 2015	2,720,700

#### License Agreement

In connection with the Series A Preferred Stock financing, the Registrant entered into a License Agreement with Eli Lilly effective as of January 3, 2011 whereby Eli Lilly agreed to license certain



intellectual property to the Registrant as consideration for the issuance of the Series A shares described above.

### Series B Preferred Stock Financing

On January 3, 2011, the Registrant agreed to issue and sell to HealthCare Ventures Strategic Fund, L.P., HealthCare Ventures VIII, L.P. and HealthCare Ventures IX, L.P. (the "Series B Investors") an aggregate of 21,500,000 shares of Series B Convertible Redeemable Preferred Stock, par value \$0.001 per share, (the "Series B Stock") at a purchase price of \$1.00 per share, for aggregate consideration of \$21,500,000. The Series B Stock was issued in four tranches on January 3, 2011, September 5, 2012, July 25, 2013 and April 17, 2015. This included 4,532,098 shares of the Registrant's Series B Stock in exchange for conversion of approximately \$4,370,000 of principal indebtedness plus unpaid accrued interest thereon under issued on June 23, 2014, September 9, 2014, December 18, 2014 and March 25, 2015 and described above under "—Notes," at a conversion price of \$1.00 per share. The following table sets forth the aggregate amount of securities that we issued to our directors, executive officers and 5% stockholders, and their affiliates or immediate family members in each tranche closing in this transaction:

<u>Investor</u>	<u>Date Issued</u>	<u>Shares of Series B Preferred Stock Issued</u>	<u>Purchase Price</u>
HealthCare Ventures Strategic Fund, L.P.	January 3, 2011	1,197,000	\$ 1,197,000
HealthCare Ventures VIII, L.P.	January 3, 2011	5,103,000	\$ 5,103,000
HealthCare Ventures IX, L.P.	January 3, 2011	700,000	\$ 700,000
HealthCare Ventures Strategic Fund, L.P.	September 5, 2012	598,500	\$ 598,500
HealthCare Ventures VIII, L.P.	September 5, 2012	2,551,500	\$ 2,551,500
HealthCare Ventures IX, L.P.	September 5, 2012	350,000	\$ 350,000
HealthCare Ventures Strategic Fund, L.P.	July 25, 2013	769,500	\$ 769,500
HealthCare Ventures VIII, L.P.	July 25, 2013	3,280,500	\$ 3,280,500
HealthCare Ventures IX, L.P.	July 25, 2013	450,000	\$ 450,000
HealthCare Ventures VIII, L.P.	April 17, 2015	5,850,000	\$ 5,850,000
HealthCare Ventures IX, L.P.	April 17, 2015	650,000	\$ 650,000

### Leap Merger with GTR Inc. and Series C Preferred Stock Issuance

On December 10, 2015, pursuant to an Agreement and Plan of merger and Reorganization, dated as of November 16, 2015, Leap Acquisition Subsidiary, Inc., a wholly owned subsidiary of Leap, merged with and into GTR Inc., with GTR Inc. as the surviving corporation in the merger becoming a wholly owned subsidiary of Leap. At the time of the merger, Christopher K. Mirabelli, Douglas E. Onsi and Augustine Lawlor were directors of Leap, Augustine Lawlor was a director and officer of GTR Inc., and entities affiliated with HealthCare Ventures LLC were shareholders of Leap and GTR Inc. Prior to the consummation of the merger with Leap, GTR repaid the full \$600,000 principal amount plus interest on a promissory note issued to HealthCare Ventures IX, L.P. As consideration for the merger, Leap issued Series C Preferred Stock to HealthCare Ventures IX, L.P.

### Indemnification Agreements

We entered into indemnification agreements with each of our directors and executive officers. These agreements require us to indemnify these individuals and, in certain cases, affiliates of such individuals, to the fullest extent permissible under Delaware law against liabilities that may arise by reason of their service to us or at our direction, and to advance expenses incurred as a result of any proceeding against them as to which they could be indemnified.

## **Recapitalization and Conversion**

In connection with the consummation of the merger with Macrocare, all outstanding Notes and Preferred Stock converted into common stock. On January 20, 2017 a 1-for-19.86754 reverse stock split of the Company's common stock outstanding was effected.

### **Voting Agreements in Connection with the Merger**

In connection with the execution of the merger agreement, on August 29, 2016, Leap entered into a voting agreement with each of Ze'ev Bronfeld, a director of Macrocare, David Ben Ami, a director of Macrocare, Ranan Groban, a director of Macrocare, Vaizra Ventures, Viatcheslav Mirilasvili, Shlomo Kalish, Pontifax (Israel) II—Individual Investors L.P., Pontifax (Israel) II L.P., Pontifax (Cayman) II L.P., and Nissim Mashiach, the chief executive officer of Macrocare (the "equityholders"), under which each such equityholder agreed to vote in favor of the merger and against any alternative acquisition proposal, agreement or transaction. As of August 29, 2016, these entities collectively beneficially owned or controlled approximately 54.28% of the voting power of Macrocare on an as-converted to common stock basis. These voting agreements granted Leap irrevocable proxies to vote any Macrocare ordinary shares over which each such equityholder had voting power in favor of the Macrocare merger proposal and against any alternative acquisition proposal, agreement or transaction.

In addition, in connection with the execution of the merger agreement, on August 29, 2016, HealthCare Ventures VIII, L.P., HealthCare Ventures IX, L.P., HealthCare Ventures Strategic Fund, L.P. and Eli Lilly and Company, who collectively beneficially owned or control 100% of Leap's outstanding common stock as of August 29, 2016, each entered into a voting agreement with Macrocare under which each such stockholder has agreed to (i) vote in favor of the Leap proposals that relate to the merger and against any alternative acquisition proposal, agreement or transaction and (ii) take certain actions necessary to approve and implement certain other requirements of Leap upon which Macrocare's obligation to consummate the transactions contemplated in the merger agreement is conditioned. Each of these voting agreements granted Macrocare irrevocable proxies to vote any shares of Leap common stock over which each such stockholder has voting power in favor of (i) each of the Leap proposals and against any alternative acquisition proposal, agreement or transaction and (ii) each such other approval necessary to satisfy certain other requirements of Leap upon which Macrocare's obligation to consummate the transactions contemplated in the merger agreement were conditioned.

The voting agreements terminated upon the effective time of the merger on January 23, 2017.

### **Equity Investment**

On January 20, 2017, pursuant to the terms of the merger agreement and their respective voting agreements, HealthCare Ventures IX, L.P. invested approximately \$10.0 million into Leap by purchase of common stock of Leap.

### **Royalty Agreement**

On January 20, 2017, Leap declared a special distribution of certain royalty rights to each of its holders of common stock outstanding immediately prior to the effective time of the merger with Macrocare. The royalty rights were set forth in a royalty agreement, referred to herein as the Royalty Agreement, by and between Leap and a special purpose vehicle formed by those holders of Leap's common stock prior to the merger, specifically, HealthCare Ventures VIII, L.P., HealthCare Ventures IX, L.P., HealthCare Ventures Strategic Fund, L.P. and Eli Lilly and Company. These holders collectively beneficially owned or controlled 100% of Leap's outstanding common stock as of the date of the merger.

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Pursuant to the Royalty Agreement, Leap will pay to the special purpose vehicle (i) 5% of Leap's net sales of products incorporating its TRX518 compound and (ii) 2% of Leap's net sales of products incorporating its DKN-01 compound. Net sales will be calculated as the gross amount invoiced by Leap, its affiliates, assignees or sublicensees to a third party, but shall be reduced by any discounts, refunds, rebates, product returns, bad debts, sales taxes, VAT and other similar taxes. The calculation of the gross amount invoiced shall also be discounted in the event that Leap's product is sold as part of a combination product. Royalties will be payable by Leap to the special purpose vehicle every calendar quarter. Among other customary terms for licensing transactions of this type, the special purpose vehicle will have the right no more than once a year to have an independent certified public accountant audit Leap's records to determine the accuracy of royalty payments received. The Royalty Agreement has an indefinite term, and neither Leap nor the special purpose vehicle has the right to terminate.

### **Registration Rights Agreement**

Leap entered into a Registration Rights Agreement with each of its holders of common stock outstanding immediately prior to the effective time of the merger. In addition, to the former holders of Leap's common stock, certain larger holders of Leap's common stock following the merger (who were among the largest holders of Macrocare ordinary shares prior to the merger) are parties to the Registration Right Agreement.

### **Property Lease**

In 2015 and 2016, Leap sublet space and shared related occupancy and support services with a related party, HealthCare Ventures LLC, or HCV. Prior to 2016, these expenses were allocated on a percentage basis among HCV and four of its "focused companies" including GITR, Inc. and HealthCare Pharmaceuticals, Inc. (formerly Dekkun Corporation), which merged in December 2015 to form Leap. The total amount charged to Leap was approximately \$98,000 in 2015, all of which is included in general and administrative expenses in the consolidated statements of operations and comprehensive loss included in this Annual Report on Form 10-K. Since January 1, 2016, these lease expenses have been allocated entirely to Leap.

The total amount charged to Leap was approximately \$308,000 in 2016, of which \$181,000 is included in general and administrative expenses and \$127,000 is included in research and development expenses in the consolidated statement of operations and comprehensive loss included in this Annual Report on Form 10-K. As of January 1, 2017, HCV assigned the lease to Leap, and there are no continuing allocations between HCV and Leap.

### **Related Party Transaction Approval Policy**

In connection with the completion of the merger with Macrocare, we adopted a related party transactions policy that requires all future transactions between us and any director, executive officer, holder of 5% or more of any class of our capital shares or any member of the immediate family of, or entities affiliated with, any of them, or any other related persons (as defined in Item 404 of Regulation S-K) or their affiliates, in which the amount involved is equal to or greater than \$120,000, be approved in advance by our nominating and corporate governance committee. Any request for such a transaction must first be presented to our General Counsel who will promptly notify our nominating and corporate governance committee for their review, consideration and approval. In approving or rejecting any such proposal, our nominating and corporate governance committee is to consider the relevant facts and circumstances available and deemed relevant to the nominating and corporate governance, including, but not limited to, the extent of the related party's interest in the transaction, and whether the transaction is on terms no less favorable to us than terms we could have generally obtained from an unaffiliated third party under the same or similar circumstances. The nominating and corporate governance committee has reviewed certain interested transactions and determined that they

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are pre-approved. These pre-approved interested transactions include, subject to certain limitations, employment or compensation of executive officers, director compensation, certain transactions with other companies, certain company charitable contributions, transaction in which all shareholders receive proportional benefits and transactions involving competitive bids.

Certain of the transactions described above were entered into prior to the adoption of this written policy but each such transaction was approved by our board of directors. Prior to our board of directors' consideration of a transaction with a related person, the material facts as to the related person's relationship or interest in the transaction were disclosed to our board of directors, and the transaction was not approved by our board of directors unless a majority of the directors approved the transaction.

**Director Independence**

Rule 5605 of the NASDAQ Listing Rules requires a majority of a listed company's board of directors to be comprised of independent directors within one year of listing. In addition, the NASDAQ Listing Rules require that, subject to specified exceptions, each member of a listed company's audit, compensation and nominating and corporate governance committees be independent under the Securities Exchange Act of 1934, as amended, or the Exchange Act. Audit committee members must also satisfy independence criteria set forth in Rule 10A-3 under the Exchange Act, and compensation committee members must also satisfy the independence criteria set forth in Rule 10C-1 under the Exchange Act. Under Rule 5605(a)(2), a director will only qualify as an "independent director" if, in the opinion of our board of directors, that person does not have a relationship that would interfere with the exercise of independent judgment in carrying out the responsibilities of a director. In order to be considered independent for purposes of Rule 10A-3, a member of an audit committee of a listed company may not, other than in his or her capacity as a member of the audit committee, the board of directors, or any other board committee, accept, directly or indirectly, any consulting, advisory, or other compensatory fee from the listed company or any of its subsidiaries or otherwise be an affiliated person of the listed company or any of its subsidiaries. In order to be considered independent for purposes of Rule 10C-1, the board must consider, for each member of a compensation committee of a listed company, all factors specifically relevant to determining whether a director has a relationship to such company which is material to that director's ability to be independent from management in connection with the duties of a compensation committee member, including, but not limited to: the source of compensation of the director, including any consulting advisory or other compensatory fee paid by such company to the director; and whether the director is affiliated with the company or any of its subsidiaries or affiliates.

Drs. Cavanaugh and Dietz and Mr. Littlechild are the current members of our audit committee; Dr. Dietz and Mr. Littlechild are the current members of our compensation committee; and Drs. Cavanaugh and Loscalzo are the current members of our nominating and corporate governance committee. In January 2017, our board of directors undertook a review of the composition of our board of directors and its committees and the independence of each director. Based upon information requested from and provided by each director concerning his or her background, employment and affiliations, including family relationships, our board of directors has determined that each of our directors, except for Christopher Mirabelli, qualifies as an "independent director" as defined under NASDAQ Listing Rules. In making such determination, our board of directors considered the relationships that each such non-employee director has with our company and all other facts and circumstances our board of directors deemed relevant in determining independence, including the beneficial ownership of our capital stock by each non-employee director.

**Item 14. Principal Accounting Fees and Services.**

The following table summarizes the fees of EisnerAmper LLP, our registered independent public accounting firm, billed to us for the fiscal years ended December 31, 2016 and 2015.

<u>Fee Category</u>	<u>2016 (\$)</u>	<u>2015 (\$)</u>
Audit Fees	214,125(1)	56,750(4)
Audit Related Fees	—	—
Tax Fees	31,500(2)	15,500(5)
All Other Fees	5,000(3)	13,000(6)
<b>Total Fees</b>	<b>250,625</b>	<b>85,250</b>

- (1) Audit fees for 2016 includes fees billed for professional services by EisnerAmper LLP for audit and quarterly review of our consolidated financial statements, including in preparation for our Form 10-K filing, and review of the registration statement on Form S-4 in connection with our merger with Macrocare, and related services that are normally provided in connection with statutory and regulatory filings or engagements.
- (2) Tax fees for 2016 consist of for professional services performed by EisnerAmper LLP with respect to tax compliance, tax advice and tax planning strategy.
- (3) Other fees for 2016 include fees billed for professional services performed by EisnerAmper LLP related to Form 8-K filings.
- (4) Audit fees for 2015 include fees billed for professional services performed by EisnerAmper LLP with respect to the audit of our 2015 financials.
- (5) Tax fees for 2015 consist of for professional services performed by EisnerAmper LLP with respect to tax compliance.
- (6) Other fees for 2015 include fees billed for professional services performed by EisnerAmper LLP with respect to review of items in connection with a proposed merger which was never consummated.

The aggregate fees included in the Audit Fees are those billed for the fiscal year. The aggregate fees included in the Audit-Related Fees and Tax Fees are those fees billed in the fiscal year.

**Pre-Approval Policies and Procedures**

Following our merger with Macrocare, the audit committee of our board of directors adopted policies and procedures for the pre-approval of audit and non-audit services, for the purpose of maintaining the independence of our independent auditor. We may not engage our independent auditor to render any audit or non-audit service unless either the service is approved in advance by the audit committee, or the engagement to render service is entered into pursuant to the audit committee's pre-approval policies and procedures. We regularly review the services and fees of our independent accountants. These services and fees will also be reviewed by the audit committee on an annual basis. The audit committee approves in advance all audit and permissible non-audit services, including any related proposed fees, to be provided by the independent auditor.

Prior to the merger with Macrocare, our board of directors reviewed all services and fees of our independent accountants and was in charge of pre-approval of audit and non-audit services.

**PART IV**

**Item 15. Exhibits, Financial Statement Schedules.**

**(a)(1) Financial Statements**

The financial statements listed below are filed as part of this Annual Report on Form 10-K.

<a href="#">Report of Independent Registered Public Accounting Firm</a>	<a href="#">F-1</a>
<a href="#">Consolidated Balance Sheets as of December 31, 2016 and 2015</a>	<a href="#">F-2</a>
<a href="#">Consolidated Statements of Operations and Comprehensive Loss for the Years Ended December 31, 2016 and 2015</a>	<a href="#">F-3</a>
<a href="#">Consolidated Statements of Redeemable Convertible and Convertible Preferred Stock and Stockholders' Deficiency for the Years Ended December 31, 2016 and 2015</a>	<a href="#">F-4</a>
<a href="#">Consolidated Statements of Cash Flows for the Years Ended December 31, 2016 and 2015</a>	<a href="#">F-5</a>
<a href="#">Notes to Consolidated Financial Statements</a>	<a href="#">F-6</a>

**(a)(2) Financial Statement Schedules**

All financial schedules have been omitted because the required information is either presented in the Consolidated Financial Statements or the Notes thereto or is not applicable or required.

**(a)(3) Exhibits**

The exhibits required by Item 601 of Regulation S-K and Item 15(b) of this Annual Report on Form 10-K are listed in the Exhibit Index immediately preceding the exhibits and are incorporated herein by reference.

**EXHIBIT INDEX**

<u>Exhibit No.</u>	<u>Description</u>
2.1	Agreement and Plan of Merger, dated as of August 29, 2016, among Leap, Merger Sub and Macrocare (filed as Exhibit 2.1 to the Registrant's registration statement on Form S-4 (File No. 333-213794), as filed on September 26, 2016 and attached as Annex A to the prospectus which forms part of such registration statement).
3.1	Third Amended and Restated Certificate of Incorporation of Leap Therapeutics, Inc. (filed as Exhibit 3.1 to the Registrant's current report on Form 8-K (File No. 001-37990) as filed on January 26, 2017).
3.2	Amended and Restated By-laws of Leap Therapeutics, Inc. (filed as Exhibit 3.4 to the Registrant's registration statement on Form S-4 (File No. 333-213794) as filed on September 26, 2016 and attached as Annex D to the prospectus which forms part of such registration statement).
4.1	Form of Common Stock Certificate of the Registrant (filed as Exhibit 4.1 to Amendment No. 2 to the Registrant's registration statement on Form S-4 (File No. 333-213794) as filed on November 16, 2016).
4.2	Amended and Restated Stockholders' Agreement, between Leap and its stockholders, effective as of December 10, 2015 (filed as Exhibit 4.2 to the Registrant's registration statement on Form S-4 (File No. 333-213794) as filed on September 26, 2016).
4.3	Registration Rights Agreement, by and among Leap and certain stockholders, dated as of January 23, 2017 (filed as Exhibit 3.1 to the Registrant's current report on Form 8-K (File No. 001-37990) as filed on January 26, 2017).
4.4*	Amendment No. 2 to Warrant, by and among Macrocare, Leap and certain warrant holders, dated as of January 23, 2017
10.1†	Amended and Restated 2012 Equity Incentive Plan of Leap Therapeutics, Inc. (filed as Exhibit 10.1 to the Registrant's registration statement on Form S-8 (File No. 333-215787) as filed on January 27, 2017).
10.2*	Form of Stock Option Grant Notice and Stock Option Agreement under Leap's Amended and Restated 2012 Equity Incentive Plan, as amended
10.3†	2016 Equity Incentive Plan of Leap Therapeutics, Inc. (filed as Exhibit 10.2 to the Registrant's registration statement on Form S-8 (File No. 333-215787) as filed on January 27, 2017).
10.4	Form of Stock Option Grant Notice and Stock Option Agreement under Leap's 2016 Equity Incentive Plan, as amended (filed as Exhibit 10.3 to Amendment No. 1 to the Registrant's registration statement on Form S-4 (File No. 333-213794) as filed on November 2, 2016).
10.5	Summary Translation of Macrocare 2008 Stock Option Plan stockholders (filed as Exhibit 10.3 to the Registrant's registration statement on Form S-8 (File No. 333-215787) as filed on January 27, 2017).
10.6	Macrocare 2013 Share Incentive Plan (filed as Exhibit 10.4 to the Registrant's registration statement on Form S-8 (File No. 333-215787) as filed on January 27, 2017).
10.7	Amendment No. 1 to Macrocare 2013 Share Incentive Plan (filed as Exhibit 10.5 to the Registrant's registration statement on Form S-8 (File No. 333-215787) as filed on January 27, 2017).

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<u>Exhibit No.</u>	<u>Description</u>
10.8‡	License Agreement, between Eli Lilly and Company and Dekkun Corporation, effective as of January 3, 2011 (filed as Exhibit 10.4 to the Registrant's registration statement on Form S-4 (File No. 333-213794) as filed on September 26, 2016).
10.9‡	License Agreement, by and between Lonza Sales AG and Healthcare Pharmaceuticals, Inc., dated as of May 28, 2015 (filed as Exhibit 10.5 to the Registrant's registration statement on Form S-4 (File No. 333-213794) as filed on September 26, 2016).
10.10	Royalty Agreement, between Leap Therapeutics, Inc. and Leap Shareholder Royalty Vehicle, Inc. (filed as Exhibit 10.1 to the Registrant's current report on Form 8-K (File No. 001-37990) as filed on January 26, 2017).
10.11	Letter Agreement, between Leap Shareholder Royalty Vehicle, Inc. and certain Leap stockholders (filed as Exhibit 10.2 to the Registrant's current report on Form 8-K (File No. 001-37990) as filed on January 26, 2017).
10.12†	Executive Employment Agreement and accompanying Employee Proprietary Information, Inventions, Non-Competition and Non-Solicitation Agreement, by and between Leap and Christopher K. Mirabelli, dated as of August 29, 2016 (filed as Exhibit 10.7 to our Registration Statement on Form S-4 (File No. 333-213794), as filed on September 26, 2016).
10.8†	Executive Employment Agreement and accompanying Employee Proprietary Information, Inventions, Non-Competition and Non-Solicitation Agreement, by and between Leap and Douglas E. Onsi, dated as of August 29, 2016 (filed as Exhibit 10.8 to our Registration Statement on Form S-4 (File No. 333-213794), as filed on September 26, 2016).
10.9†	Executive Employment Agreement and accompanying Employee Proprietary Information, Inventions, Non-Competition and Non-Solicitation Agreement, by and between Leap and Augustine Lawlor, dated as of August 29, 2016 (filed as Exhibit 10.9 to our Registration Statement on Form S-4 (File No. 333-213794), as filed on September 26, 2016).
10.10	Form of Indemnification Agreement (filed as Exhibit 10.10 to Amendment No. 1 to the Registrant's registration statement on Form S-4 (File No. 333-213794) as filed on November 2, 2016).
10.11	Voting Agreement, by and between Macrocare Ltd. and HealthCare Ventures VIII, L.P., dated as of August 29, 2016 (filed as Exhibit 10.11 to Amendment No. 1 to the Registrant's registration statement on Form S-4 (File No. 333-213794) as filed on November 2, 2016).
10.12	Voting Agreement, by and between Macrocare Ltd. and HealthCare Ventures IX L.P., dated as of August 29, 2016 (filed as Exhibit 10.12 to Amendment No. 1 to the Registrant's registration statement on Form S-4 (File No. 333-213794) as filed on November 2, 2016).
10.13	Voting Agreement, by and between Macrocare Ltd. and HealthCare Ventures Strategic Fund, L.P., dated as of August 29, 2016 (filed as Exhibit 10.13 to Amendment No. 1 to the Registrant's registration statement on Form S-4 (File No. 333-213794) as filed on November 2, 2016).
10.14	Voting Agreement, by and between Macrocare Ltd. and Eli Lilly and Company, dated as of August 29, 2016 (filed as Exhibit 10.14 to Amendment No. 1 to the Registrant's registration statement on Form S-4 (File No. 333-213794) as filed on November 2, 2016).
10.15	Voting Agreement, by and between Leap and David Ben Ami, dated as of August 29, 2016 (filed as Exhibit 10.15 to Amendment No. 1 to the Registrant's registration statement on Form S-4 (File No. 333-213794) as filed on November 2, 2016).

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<u>Exhibit No.</u>	<u>Description</u>
10.16	Voting Agreement, by and between Leap and Nissim Mashlach, dated as of August 29, 2016 (filed as Exhibit 10.16 to Amendment No. 1 to the Registrant's registration statement on Form S-4 (File No. 333-213794) as filed on November 2, 2016).
10.17	Voting Agreement, by and between Leap and Ranan Grobman, dated as of August 29, 2016 (filed as Exhibit 10.17 to Amendment No. 1 to the Registrant's registration statement on Form S-4 (File No. 333-213794) as filed on November 2, 2016).
10.18	Voting Agreement, by and between Leap and Shlomo Kalish, dated as of August 29, 2016 (filed as Exhibit 10.18 to Amendment No. 1 to the Registrant's registration statement on Form S-4 (File No. 333-213794) as filed on November 2, 2016).
10.19	Voting Agreement, by and between Leap and Viatcheslav Mirilasvili, dated as of August 29, 2016 (filed as Exhibit 10.19 to Amendment No. 1 to the Registrant's registration statement on Form S-4 (File No. 333-213794) as filed on November 2, 2016).
10.20	Voting Agreement, by and between Leap and Ze'ev Bronfeld, dated as of August 29, 2016 (filed as Exhibit 10.20 to Amendment No. 1 to the Registrant's registration statement on Form S-4 (File No. 333-213794) as filed on November 2, 2016).
10.21	Voting Agreement, by and between Leap and Pontifax (Cayman) II L.P., dated as of August 29, 2016 (filed as Exhibit 10.21 to Amendment No. 1 to the Registrant's registration statement on Form S-4 (File No. 333-213794) as filed on November 2, 2016).
10.22	Voting Agreement, by and between Leap and Pontifax (Israel) II L.P., dated as of August 29, 2016 (filed as Exhibit 10.22 to Amendment No. 1 to the Registrant's registration statement on Form S-4 (File No. 333-213794) as filed on November 2, 2016).
10.23	Voting Agreement, by and between Leap and Pontifax (Israel) II—Individual Investors, dated as of August 29, 2016 (filed as Exhibit 10.23 to Amendment No. 1 to the Registrant's registration statement on Form S-4 (File No. 333-213794) as filed on November 2, 2016).
10.24	Voting Agreement, by and between Leap and Vaizra Ventures Ltd., dated as of August 29, 2016 (filed as Exhibit 10.24 to Amendment No. 1 to the Registrant's registration statement on Form S-4 (File No. 333-213794) as filed on November 2, 2016).
10.25	Subscription Agreement, between Leap and HealthCare Ventures IX, L.P., dated as of January 23, 2017 (filed as Exhibit 10.4 to the Registrant's current report on Form 8-K (File No. 001-37990) as filed on January 26, 2017).
10.26*	Lease by and between Bulfinch Square Limited Partnership and Healthcare Ventures LLC, dated as of March 30, 2012
10.27*	Amendment to Lease by and between Bulfinch Square Limited Partnership and Healthcare Ventures LLC, dated as of June 30, 2015
10.28*	First Amendment to Lease by and between Bulfinch Square Limited Partnership and Healthcare Ventures LLC, dated as of January 4, 2016
10.29*	Consent to Assignment and Assumption of Lease, by and between Bulfinch Square Limited Partnership, Healthcare Ventures LLC, and Leap Therapeutics, Inc., dated as of December 19, 2016 and Assignment and Assumption Agreement by and between Healthcare Ventures LLC and Leap Therapeutics, Inc., dated as of December 19, 2016
21.1*	Subsidiaries of Leap Therapeutics, Inc.
23.1*	Consent of EisnerAmper LLP related to Leap Therapeutics, Inc. financial statements
31.1*	Certification of Principal Executive Officer Required Under Rule 13a-14(a) and 15d-14(a) of the Securities Exchange Act of 1934, as amended.

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<u>Exhibit No.</u>	<u>Description</u>
31.2*	Certification of Principal Financial Officer Required Under Rule 13a-14(a) and 15d-14(a) of the Securities Exchange Act of 1934, as amended.
32.1 * **	Principal Executive Officer Certification and Principal Financial Officer Certification Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
*	Exhibits filed herewith
**	This exhibit shall not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934 or otherwise subject to the liabilities of the Section, nor shall it be deemed incorporated by reference in any filings under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended, whether made before or after the date hereof and irrespective of any general incorporation language in any filing.
†	Indicates management contract or compensation plan
‡	Indicates confidential treatment has been granted by the Securities and Exchange Commission with respect to specific portions of this exhibit. Such portions have been omitted and have been filed separately with the Securities and Exchange Commission as part of an application for confidential treatment pursuant to Rule 406 of the Securities Act of 1933, as amended.

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**SIGNATURES**

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

**LEAP THERAPEUTICS, INC.**

March 31, 2017

By: /s/ CHRISTOPHER K. MIRABELLI, PH.D.

Name: Christopher K. Mirabelli, Ph.D.

Title: *President, Chief Executive Officer and  
Chairman of the Board of Directors*

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.

<u>NAME</u>	<u>TITLE</u>	<u>DATE</u>
<u>/s/ CHRISTOPHER K. MIRABELLI, PH.D.</u> Christopher K. Mirabelli, Ph.D.	Chief Executive Officer, President and Chairman of the Board <i>(Principal Executive Officer)</i>	March 31, 2017
<u>/s/ DOUGLAS E. ONSI</u> Douglas E. Onsi	Chief Financial Officer, Treasurer and Secretary <i>(Principal Financial and Accounting Officer)</i>	March 31, 2017
<u>/s/ JAMES CAVANAUGH, PH.D.</u> James Cavanaugh, Ph.D.	Director	March 31, 2017
<u>/s/ JOHN LITTLECHILD</u> John Littlechild	Director	March 31, 2017
<u>/s/ THOMAS DIETZ, PH.D.</u> Thomas Dietz, Ph.D.	Director	March 31, 2017
<u>/s/ JOSEPH LOSCALZO, M.D., PH.D.</u> Joseph Loscalzo, M.D., Ph.D.	Director	March 31, 2017
<u>/s/ NISSIM MASHAICH</u> Nissim Mashaich	Director	March 31, 2017
<u>/s/ WILLIAM LI, M.D.</u> William Li, M.D.	Director	March 31, 2017

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**REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

The Board of Directors and Stockholders of  
Leap Therapeutics, Inc.

We have audited the accompanying consolidated balance sheets of Leap Therapeutics, Inc. and Subsidiaries (the "Company") as of December 31, 2016 and 2015, and the related consolidated statements of operations and comprehensive loss, redeemable preferred stock and stockholders' deficiency, and cash flows for each of the years then ended. The financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. Our audits included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, 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. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the consolidated financial position of Leap Therapeutics, Inc. and Subsidiaries as of December 31, 2016 and 2015, and the consolidated results of their operations and their cash flows for each of the years then ended, in conformity with accounting principles generally accepted in the United States of America.

/s/ EisnerAmper LLP

Philadelphia, Pennsylvania  
March 31, 2017

LEAP THERAPEUTICS, INC. AND SUBSIDIARIES

CONSOLIDATED BALANCE SHEETS

(In thousands, except share and per share amounts)

	December 31,		Pro Forma December 31, 2016 (Note 17) (unaudited)
	2016	2015	
<b>Assets</b>			
Current assets:			
Cash and cash equivalents	\$ 793	\$ 405	\$ 33,877
Research and development incentive receivable	3,053	—	3,053
Prepaid expenses and other current assets	183	89	286
Total current assets	4,029	494	37,216
Property and equipment, net	119	—	119
Deferred offering costs	1,402	—	—
Other assets	907	766	907
Total assets	<u>\$ 6,457</u>	<u>\$ 1,260</u>	<u>\$ 38,242</u>
<b>Liabilities, Convertible Preferred Stock and Stockholders' Deficiency</b>			
Current liabilities:			
Accounts payable	\$ 3,225	\$ 2,048	\$ 4,175
Accrued expenses	2,658	479	3,653
Notes payable and accrued interest-related party	30,274	3,141	—
Total current liabilities	36,157	5,668	7,828
Commitments and contingencies (Note 13)			
Convertible preferred stock, 42,500,000 shares authorized as of December 31, 2016 and 2015			
Series A redeemable convertible preferred stock, \$0.001 par value; 9,000,000 shares designated as of December 31, 2016 and 2015; 9,000,000 shares issued and outstanding as of December 31, 2016 and 2015; liquidation preference of \$11,800 and \$11,080 as of December 31, 2016 and 2015, respectively; no shares issued or outstanding, pro forma at December 31, 2016	11,800	11,080	—
Series B convertible preferred stock, \$0.001 par value; 21,500,000 shares designated as of December 31, 2016 and 2015; 21,500,000 shares issued and outstanding as of December 31, 2016 and 2015; liquidation preference of \$28,189 and \$26,512 as of December 31, 2016 and 2015, respectively; no shares issued or outstanding, pro forma at December 31, 2016	28,189	26,512	—
Series C convertible preferred stock, \$0.001 par value; 12,000,000 shares designated as of December 31, 2016 and 2015; 11,781,984 shares issued and outstanding as of December 31, 2016 and 2015; liquidation preference of \$30,542 and \$28,289 as of December 31, 2016 and 2015, respectively; no shares issued or outstanding, pro forma at December 31, 2016	30,542	28,289	—
Stockholders' deficiency:			
Common stock, \$0.001 par value; 58,500,000 shares authorized at December 31, 2016 and 2015; no shares issued or outstanding at December 31, 2016 and 2015; 9,370,845 shares issued and outstanding, pro forma at December 31, 2016	—	—	9
Additional paid-in capital	145	100	131,790
Accumulated other comprehensive income (loss)	294	(1)	294
Accumulated deficit	(100,670)	(70,388)	(101,679)
Total stockholders' deficiency	(100,231)	(70,289)	30,414
Total liabilities, convertible preferred stock and stockholders' deficiency	<u>\$ 6,457</u>	<u>\$ 1,260</u>	<u>\$ 38,242</u>

See notes to consolidated financial statements

**LEAP THERAPEUTICS, INC. AND SUBSIDIARIES**  
**CONSOLIDATED STATEMENTS OF OPERATIONS AND COMPREHENSIVE LOSS**

(In thousands)

	Year Ended December 31,	
	2016	2015
Operating expenses:		
Research and development (including related party expenses of \$127 and \$0, respectively)	\$ 23,292	\$ 10,411
General and administrative (including related party expenses of \$181 and \$98, respectively)	4,229	1,511
Total operating expenses	<u>27,521</u>	<u>11,922</u>
Loss from operations	(27,521)	(11,922)
Interest income	2	1
Interest expense—related party	(1,233)	(129)
Australian research and development incentives	3,129	—
Other expense, net	(9)	—
Net loss	(25,632)	(12,050)
Other comprehensive income (loss):		
Foreign currency translation adjustments	295	(1)
Comprehensive loss	<u>\$ (25,337)</u>	<u>\$ (12,051)</u>

See notes to consolidated financial statements

LEAP THERAPEUTICS, INC. AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF REDEEMABLE CONVERTIBLE AND  
CONVERTIBLE PREFERRED STOCK AND STOCKHOLDERS' DEFICIT

(In thousands, except share amounts)

	Series A Redeemable Convertible Preferred Stock,		Series B Convertible Preferred Stock,		Series C Convertible Preferred Stock,		Common Stock		Additional Paid-in Capital	Accumulated Other Comprehensive Income (Loss)	Accumulated Deficit	Total Stockholders' Deficiency
	Shares	Amount	Shares	Amount	Shares	Amount	Shares	Amount				
<b>Balances at December 31, 2014</b>	6,279,300	\$ 7,703	15,000,000	\$ 18,424	8,946,944	\$ 6,933	—	\$ —	50	\$ —	(36,640)	\$ (36,590)
Issuance of Series C convertible preferred stock, net of issuance costs of \$3	—	—	—	—	2,835,040	1,922	—	—	—	—	—	—
Issuance of Series A redeemable convertible preferred stock in consideration for license	2,720,700	2,721	—	—	—	—	—	—	—	—	—	—
Conversion of notes payable —related party and accrued interest into Series B convertible preferred stock	—	—	4,532,098	4,532	—	—	—	—	—	—	—	—
Issuance of Series B convertible preferred stock, net of issuance costs of \$210	—	—	1,967,902	1,948	—	—	—	—	—	—	—	—
Accretion to redemption value	—	656	—	1,608	—	19,434	—	—	—	—	(21,698)	(21,698)
Foreign currency translation adjustment	—	—	—	—	—	—	—	—	—	(1)	—	(1)
Stock-based compensation	—	—	—	—	—	—	—	—	50	—	—	50
Net loss	—	—	—	—	—	—	—	—	—	—	(12,050)	(12,050)
<b>Balances at December 31, 2015</b>	9,000,000	\$ 11,080	21,500,000	\$ 26,512	11,781,984	\$ 28,289	—	\$ —	100	(1)	(70,388)	\$ (70,289)
Accretion to redemption value	—	720	—	1,677	—	2,253	—	—	—	—	(4,650)	(4,650)
Foreign currency translation adjustment	—	—	—	—	—	—	—	—	—	295	—	295
Stock-based compensation	—	—	—	—	—	—	—	—	45	—	—	45
Net loss	—	—	—	—	—	—	—	—	—	—	(25,632)	(25,632)
<b>Balances at December 31, 2016</b>	9,000,000	\$ 11,800	21,500,000	\$ 28,189	11,781,984	\$ 30,542	—	\$ —	145	294	(100,670)	\$ (100,231)

See notes to consolidated financial statements



**LEAP THERAPEUTICS, INC. AND SUBSIDIARIES**  
**CONSOLIDATED STATEMENTS OF CASH FLOWS**

(In thousands)

	Year Ended December 31,	
	2016	2015
<b>Cash flows from operating activities:</b>		
Net loss	\$ (25,632)	\$ (12,050)
Adjustments to reconcile net loss to net cash used in operating activities:		
Issuance of Series A convertible preferred stock for research and development	—	2,721
Depreciation expense	25	—
Stock-based compensation expense	45	50
Non-cash interest expense—related party	1,233	129
Changes in operating assets and liabilities:		
Prepaid expenses and other assets	(222)	46
Research and development incentive receivable	(3,053)	—
Accounts payable and accrued expenses	2,267	1,002
Net cash used in operating activities	<u>(25,337)</u>	<u>(8,102)</u>
<b>Cash flows from investing activities:</b>		
Purchases of property and equipment	(144)	—
Net cash used in investing activities	<u>(144)</u>	<u>—</u>
<b>Cash flows from financing activities:</b>		
Proceeds from issuance of Series B convertible preferred stock	—	1,948
Proceeds from issuance of Series C convertible preferred stock	—	1,922
Proceeds from notes payable—related party	25,900	5,000
Repayments of notes payable—related party	—	(600)
Payment of deferred offering costs	(282)	—
Net cash provided by financing activities	<u>25,618</u>	<u>8,270</u>
<b>Effect of exchange rate changes on cash and cash equivalents</b>	<u>251</u>	<u>(1)</u>
<b>Net increase in cash and cash equivalents</b>	388	167
Cash and cash equivalents at beginning of year	405	238
Cash and cash equivalents at end of year	<u>\$ 793</u>	<u>\$ 405</u>
<b>Supplemental disclosure of non-cash financing activities:</b>		
Conversion of notes payable—related party and accrued interest into Series B convertible preferred stock	\$ —	\$ 4,532
Accretion of preferred stock to redemption value	\$ 4,650	\$ 21,698
Deferred offering costs included in accounts payable	\$ 1,120	\$ —

See notes to consolidated financial statements

**LEAP THERAPEUTICS, INC. AND SUBSIDIARIES**

**Notes To Consolidated Financial Statements**

**(Amounts in thousands, except share and per share amounts)**

**1. Nature of Business, Basis of Presentation and Liquidity**

*Nature of Business*

Leap Therapeutics, Inc. was incorporated in the state of Delaware as Dekkun Corporation on January 3, 2011 and changed its name to HealthCare Pharmaceuticals, Inc. effective May 29, 2014, and then to Leap Therapeutics, Inc. effective November 16, 2015 (the "Company"). During 2015, HealthCare Pharmaceuticals Pty Ltd. ("HCP Australia") was formed and is a wholly owned subsidiary of the Company. The Company is engaged in developing novel, targeted drugs for the treatment of cancer.

*GITR Merger and Basis of Presentation*

On December 10, 2015, the Company entered into a merger agreement with GITR Inc. ("GITR"), an entity under common control, whereby a wholly owned subsidiary of the Company merged with GITR and the surviving name of the wholly owned subsidiary was GITR Inc. Pursuant to the Plan of Merger and Reorganization (the "Plan of Merger"), the Company amended its certificate of incorporation and authorized the issuance of 12,000,000 shares of Series C Convertible Redeemable Preferred Stock ("Series C Stock"). Each outstanding share of GITR Series A Convertible Preferred Stock then outstanding and accrued dividends were converted into the right to receive 1.472748 shares of Series C Stock. Consequently, the Company issued 11,781,984 shares of Series C Stock to GITR shareholders. In addition, each option to purchase shares of GITR common stock was converted into the right to receive an option to purchase shares of the Company's common stock at a conversion ratio of 0.977556:1. Consequently, the Company issued options to purchase 276,176 shares of common stock to GITR option holders.

Due to the relationship of the funds that invested in the Company and GITR prior to the date of the merger and the individuals that controlled such funds, the merger was accounted for as a combination of entities under common control. As a result, the assets and liabilities of GITR that were transferred to the Company were measured at their carrying amounts, and there was no adjustment to the total equity of the Company. The accompanying financial statements reflect the retrospective application of the merger transaction as if the merger had occurred on January 1, 2015. The historical results of the Company and GITR since January 1, 2015 have been combined at their historical carrying amounts, and all share and option disclosures have been retroactively adjusted to reflect the exchange of shares and options in the merger transaction.

*Definitive Merger Agreement with Macrocare Ltd.*

The Company entered into a definitive merger agreement (the "Merger Agreement"), dated as of August 29, 2016, with Macrocare Ltd. ("Macrocare"), a publicly held, clinical-stage biotechnology company based in Petach Tikva, Israel, and M-Co Merger Sub Ltd. ("Merger Sub"), a wholly owned subsidiary of the Company which provided for the merger of Macrocare with and into Merger Sub, with Macrocare continuing after the merger as a wholly owned subsidiary of the Company. Following the merger, the Company changed Macrocare's name to Leap Therapeutics Ltd. Pursuant to the Merger Agreement, the existing equity holders of the Company invested an additional \$10,000 at the closing of the transaction. On January 23, 2017, the Company issued 3,257,368 shares of its common stock in exchange for 100% of the outstanding ordinary shares of Macrocare Ltd. upon consummation of the merger (see Note 16).

**LEAP THERAPEUTICS, INC. AND SUBSIDIARIES**

**Notes To Consolidated Financial Statements (Continued)**

**(Amounts in thousands, except share and per share amounts)**

**1. Nature of Business, Basis of Presentation and Liquidity (Continued)**

*Reverse Stock Split*

On January 20, 2017, the Company effected a 1-for-19.86754 reverse stock split of its issued and outstanding shares of common stock and a proportional adjustment to the existing conversion ratios for each series of the Company's Preferred Stock (see Note 16). Accordingly, all share and per share amounts for all periods presented in the accompanying financial statements and notes thereto have been adjusted retroactively, where applicable, to reflect this reverse stock split and adjustment of the preferred stock conversion ratios.

*Liquidity*

Since inception, the Company has been engaged in organizational activities, including raising capital, and research and development activities. The Company does not yet have a product that has been approved by the FDA, has not generated any revenues and has not yet achieved profitable operations, nor has it ever generated positive cash flows from operations. There is no assurance that profitable operations, if achieved, could be sustained on a continuing basis. Further, the Company's future operations are dependent on the success of the Company's efforts to raise additional capital, its research and commercialization efforts, regulatory approval, and, ultimately, the market acceptance of the Company's products.

In accordance with ASC 205-40, Going Concern, the Company has evaluated whether there are conditions and events, considered in the aggregate, that raise substantial doubt about the Company's ability to continue as a going concern within one year after the date that the consolidated financial statements are issued. As of December 31, 2016 the Company had an accumulated deficit of \$100,670. During the year ended December 31, 2016, the Company incurred a loss of \$25,632 and used \$25,337 of cash in operations. The Company expects to continue to generate operating losses in the foreseeable future. The Company expects that its cash and cash equivalents of \$793 at December 31, 2016, together with (i) the \$21,189 in cash and cash equivalents held by MacroCure Ltd. at the closing of the merger with the Company, (ii) the \$10,000 in equity invested in the Company by HealthCare Ventures in connection with the closing of the merger, and (iii) the receipt of \$3,053 of research and development tax incentive payments from the Commonwealth of Australia as a result of the 2016 research and development activities of the Company's Australian subsidiary, HealthCare Pharmaceuticals Pty. Ltd., will be sufficient to fund its operating expenses for at least the next 12 months from issuance of the financial statements. In addition, the Company will seek additional funding through public or private equity financings or government programs and will seek funding or development program cost-sharing through collaboration agreements or licenses with larger pharmaceutical or biotechnology companies. If the Company does not obtain additional funding or development program cost-sharing, the Company would be forced to delay, reduce or eliminate certain clinical trials or research and development programs, reduce or eliminate discretionary operating expenses, and delay company and pipeline expansion, which would adversely affect its business prospects. The inability to obtain funding, as and when needed, would have a negative impact on the Company's financial condition and ability to pursue its business strategies.

**LEAP THERAPEUTICS, INC. AND SUBSIDIARIES**

**Notes To Consolidated Financial Statements (Continued)**

**(Amounts in thousands, except share and per share amounts)**

**2. Summary of Significant Accounting Policies**

*Principles of Consolidation*

The accompanying consolidated financial statements include the accounts of the Company and its wholly owned subsidiaries. All intercompany accounts and transactions are eliminated in the consolidation.

*Use of Estimates*

The presentation of consolidated financial statements in conformity with accounting principles generally accepted in the United States of America ("GAAP") requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the consolidated financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

*Unaudited Pro Forma Information*

The accompanying unaudited pro forma consolidated balance sheet as of December 31, 2016 has been prepared to give effect, upon the closing of the merger with Macrocare, to reflect (i) the automatic conversion of all outstanding shares of convertible preferred stock into 3,192,367 shares of common stock; (ii) the automatic conversion of all outstanding convertible notes payable—related party and related accrued interest into 1,893,541 shares of common stock; (iii) the sale and issuance of 1,011,429 shares of common stock for aggregate proceeds of \$10,000 and to record \$920 of related issuance costs; (iv) the issuance of 3,273,508 shares of common stock to the equity holders of Macrocare and the recognition of Macrocare's net assets totaling \$22,237; (v) the reclassification of \$1,402 in deferred offering costs to additional paid-in capital and to record \$75 in additional transaction costs that were not included in accrued liabilities as of December 31, 2016 and (vi) to record postcombination compensation expense of \$934, including \$306 of unrecognized compensation expense of Macrocare as of December 31, 2016 related to outstanding stock options that fully vested upon completion of the merger and for which there is no future service requirement and \$628 of incremental compensation expense associated with the modification of the terms of outstanding Macrocare stock options upon completion of the merger, as if the merger had occurred on December 31, 2016 (see Note 17).

*Cash and Cash Equivalents*

The Company considers all highly liquid investments with maturities of three months or less when purchased to be cash equivalents.

*Research and Development Expense*

Research and development costs are expensed as incurred. Research and development expenses include personnel costs associated with research and development activities, including noncash share-based compensation and costs for third-party contractors to perform research, conduct clinical trials and manufacture drug supplies and materials. The Company accrues for costs incurred by external service providers, including contract research organizations and clinical investigators, based on its estimates of service performed and costs incurred. These estimates include the level of services

**LEAP THERAPEUTICS, INC. AND SUBSIDIARIES**

**Notes To Consolidated Financial Statements (Continued)**

**(Amounts in thousands, except share and per share amounts)**

**2. Summary of Significant Accounting Policies (Continued)**

performed by the third parties, patient enrollment in clinical trials, administrative costs incurred by the third parties, and other indicators of the services completed. Based on the timing of amounts invoiced by service providers, the Company may also record payments made to those providers as prepaid expenses that will be recognized as expense in future periods as the related services are rendered.

*Research and development incentive income and receivable*

The Company recognizes other income from Australian research and development incentives when there is reasonable assurance that the income will be received, the relevant expenditure has been incurred, and the consideration can be reliably measured. The research and development incentive is one of the key elements of the Australian Government's support for Australia's innovation system and is supported by legislative law primarily in the form of the Australian Income Tax Assessment Act 1997 as long as eligibility criteria are met.

Management has assessed the Company's research and development activities and expenditures to determine which activities and expenditures are likely to be eligible under the research and development incentive regime described above. At each period end management estimates the refundable tax offset available to the Company based on available information at the time. This estimate is also reviewed by external tax advisors on an annual basis.

Under the program, 45% of eligible research and development expenses incurred by the Company through its subsidiary in Australia are reimbursed.

The research and development incentive receivable represents an amount due in connection with the above program. The Company has recorded a research and development incentive receivable of \$3,053 in the consolidated balance sheet and other income from Australian research and development incentives of \$3,129 in the consolidated statement of operations and comprehensive loss for the year ended December 31, 2016 related to refundable research and development incentive program payments in Australia.

Further, the Company recognized in the three months ended December 31, 2016, substantially all of the Australian research and development incentive income and the corresponding receivable related to eligible research and development expenses for the year then ended, even though the expenses were recognized throughout the course of the 2016 year. The balance which should have been recognized in earlier quarters (which aggregated \$2,455 as of and for the nine months ended September 30, 2016) was considered the correction of an immaterial misstatement of interim financial statements in 2016. In accordance with ASC Topic 250, Accounting Changes and Error Corrections, the Company evaluated the impact of the 4<sup>th</sup> quarter adjustment on its previously issued interim financial statements in 2016 and concluded that the results of operations for these periods were not materially misstated and accordingly the correction was recorded in the 4<sup>th</sup> quarter.

*Concentration of Credit Risk*

Financial instruments which potentially subject the Company to credit risk consist principally of cash and cash equivalents. All cash and cash equivalents are held in United States financial institutions and money market funds. At times, the Company may maintain cash balances in excess of the federally insured amount.

**LEAP THERAPEUTICS, INC. AND SUBSIDIARIES**

**Notes To Consolidated Financial Statements (Continued)**

**(Amounts in thousands, except share and per share amounts)**

**2. Summary of Significant Accounting Policies (Continued)**

*Income Taxes*

The Company accounts for income taxes using the asset and liability method. Under the asset and liability method, deferred income taxes are recognized for differences between the financial reporting and tax bases of assets and liabilities at enacted statutory tax rates in effect for the years in which the differences are expected to reverse. The effect on deferred taxes of a change in tax rates is recognized in income in the period that includes the enactment date. Valuation allowances are established when necessary to reduce deferred tax assets to the amount expected to be realized.

The Company follows accounting guidance concerning provisions for uncertain income tax positions. This guidance clarifies the accounting for income taxes by prescribing a minimum probability threshold that an uncertain tax position must meet before a financial statement benefit is recognized. The minimum threshold is defined as a tax position that is more likely than not to be sustained upon examination by the applicable taxing authority, including resolution of any related appeals or litigation processes, based on the technical merits of the position. The tax benefit to be recognized is measured as the largest amount of benefit that is greater than fifty percent likely of being realized upon ultimate settlement.

The Company recognizes accrued interest and penalties associated with uncertain tax positions as part of the income tax provision. There were no uncertain tax positions nor income tax related interest and penalties recorded for the years ended December 31, 2016 and 2015. The income tax returns of the Company for the year ended December 31, 2013 and subsequent years are subject to examination by the Internal Revenue Service and other taxing authorities, generally for three years after they were filed.

*Foreign Currency Translation*

The financial statements of the Company's foreign subsidiary are measured using the local currency as the functional currency. Assets and liabilities of this subsidiary are translated into U.S. dollars at exchange rates as of the consolidated balance sheet date. Equity is translated at historical exchange rates. Revenues and expenses are translated into U.S. dollars at average rates of exchange in effect during the year. The resulting cumulative translation adjustments have been recorded as a separate component of stockholders' deficiency. Realized foreign currency transaction gains and losses are included in the results of operations.

*Equity Securities Transactions*

Since inception, the Board of Directors has established the fair value of equity securities based upon facts and circumstances existing at the dates such equity transactions occurred, including the price at which equity instruments were sold to third parties.

*Property and Equipment*

Property and equipment are stated at cost less accumulated depreciation. Depreciation expense is recognized using the straight-line method over the estimated useful life of each asset. Computer equipment is depreciated over three years. Laboratory equipment, office equipment and furniture and fixtures are depreciated over five years. Leasehold improvements are amortized over the shorter of the

**LEAP THERAPEUTICS, INC. AND SUBSIDIARIES**

**Notes To Consolidated Financial Statements (Continued)**

**(Amounts in thousands, except share and per share amounts)**

**2. Summary of Significant Accounting Policies (Continued)**

lease term or the estimated useful life of the asset. Upon retirement or sale, the cost of assets disposed of and the related accumulated depreciation are removed from the accounts and any resulting gain or loss is included in loss from operations. Expenditures for repairs and maintenance are charged to expense as incurred.

*Impairment of Long-Lived Assets*

Long-lived assets consist of property and equipment. Long-lived assets to be held and used are tested for recoverability whenever events or changes in business circumstances indicate that the carrying amount of the assets may not be fully recoverable. Factors that the Company considers in deciding when to perform an impairment review include significant underperformance of the business in relation to expectations, significant negative industry or economic trends and significant changes or planned changes in the use of the assets. If an impairment review is performed to evaluate a long-lived asset group for recoverability, the Company compares forecasts of undiscounted cash flows expected to result from the use and eventual disposition of the long-lived asset group to its carrying value. An impairment loss would be recognized when estimated undiscounted future cash flows expected to result from the use of an asset group are less than its carrying amount. The impairment loss would be based on the excess of the carrying value of the impaired asset group over its fair value, determined based on discounted cash flows. To date, the Company has not recorded any impairment losses on long-lived assets.

*Deferred Offering Costs*

The Company capitalizes certain legal, professional accounting and other third-party fees that are directly associated with in-process equity financings as deferred offering costs until such financings are consummated. After consummation of the equity financing, these costs are recorded in stockholders' equity (deficiency) as a reduction of additional paid-in capital generated as a result of the offering. As of December 31, 2016, the Company had recorded \$1,402 of deferred offering costs in contemplation of the merger and in substance recapitalization of the Company (see Notes 16 and 17).

*Other Assets*

Other assets as of December 31, 2016 and 2015, consist of \$907 and \$766, respectively, of deposits made by the Company with certain service providers that are to be applied to future payments due under the service agreements or returned to the Company if not utilized.

*Fair Value Measurements*

Certain assets and liabilities are carried at fair value under GAAP. Fair value is defined as the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. Valuation techniques used to measure fair value must maximize the use of observable inputs and minimize the use of unobservable inputs. Financial assets and liabilities carried at fair value are to be classified and disclosed in one of the following three levels

**LEAP THERAPEUTICS, INC. AND SUBSIDIARIES**

**Notes To Consolidated Financial Statements (Continued)**

**(Amounts in thousands, except share and per share amounts)**

**2. Summary of Significant Accounting Policies (Continued)**

of the fair value hierarchy, of which the first two are considered observable and the last is considered unobservable:

- Level 1—Quoted prices in active markets for identical assets or liabilities.
- Level 2—Observable inputs (other than Level 1 quoted prices), such as quoted prices in active markets for similar assets or liabilities, quoted prices in markets that are not active for identical or similar assets or liabilities, or other inputs that are observable or can be corroborated by observable market data.
- Level 3—Unobservable inputs that are supported by little or no market activity and that are significant to determining the fair value of the assets or liabilities, including pricing models, discounted cash flow methodologies and similar techniques.

The Company's cash equivalents are carried at fair value determined according to the fair value hierarchy described above. The carrying value of the research and development incentive receivable, accounts payable and accrued expenses approximate their fair value due to the short-term nature of these assets and liabilities. Management believes that the Company's debt (see Note 6) bears interest at the prevailing market rate for instruments with similar characteristics and, accordingly, the carrying value approximates its fair value.

*Segment Information*

The Company manages its operations as a single segment for the purposes of assessing performance and making operating decisions. The Company's singular focus is developing novel, targeted drugs for the treatment of cancer. Substantially all of the Company's tangible assets are held in the United States.

*Patent Costs*

All patent related costs incurred in connection with filing and prosecuting patent applications are expensed as incurred due to the uncertainty about the recovery of the expenditure. Amounts incurred are classified as general and administrative expenses.

*Stock-Based Compensation*

The Company measures all stock options and other stock-based awards granted to employees based on the fair value on the date of the grant and recognizes compensation expense of those awards, net of estimated forfeitures, over the requisite service period, which is generally the vesting period of the respective award. Generally, the Company issues stock options to employees with only service-based vesting conditions and records the expense for these awards using the straight-line method.

The Company measures stock-based awards granted to consultants and nonemployees based on the fair value of the award on the date on which the related service is complete. Compensation expense is recognized over the period during which services are rendered by such consultants and nonemployees until completed. At the end of each financial reporting period prior to completion of the service, the fair value of these awards is remeasured using the then current fair value of the Company's common stock and updated assumption inputs in the Black-Scholes option-pricing model.



**LEAP THERAPEUTICS, INC. AND SUBSIDIARIES**

**Notes To Consolidated Financial Statements (Continued)**

**(Amounts in thousands, except share and per share amounts)**

**2. Summary of Significant Accounting Policies (Continued)**

Stock-based compensation is classified in the accompanying consolidated statements of operations based on the function to which the related services are provided. The Company recognizes compensation expense for only the portion of awards that are expected to vest. In developing a forfeiture rate estimate, the Company has considered its historical experience to estimate pre-vesting forfeitures for service-based awards. The impact of a forfeiture rate adjustment will be recognized in full in the period of adjustment, and if the actual forfeiture rate is materially different from the Company's estimate, the Company may be required to record adjustments to stock-based compensation expense in future periods.

The fair value of each stock option grant is estimated on the date of grant using the Black-Scholes option-pricing model. The Company historically has been a private company and lacks company-specific historical and implied volatility information. Therefore, it estimates its expected stock volatility based on the historical volatility of a publicly traded set of peer companies and expects to continue to do so until such time as it has adequate historical data regarding the volatility of its own traded stock price. The expected term of the Company's stock options has been determined utilizing the "simplified" method for awards that qualify as "plain-vanilla" options. The expected term of stock options granted to nonemployees is equal to the contractual term of the option award. The risk-free interest rate is determined by reference to the U.S. Treasury yield curve in effect at the time of grant of the award for time periods approximately equal to the expected term of the award. Expected dividend yield is based on the fact that the Company has never paid cash dividends on common stock and does not expect to pay any cash dividends in the foreseeable future.

*Net Loss per Share*

Basic net loss per share is computed using the weighted average number of common shares outstanding during the period. Diluted net loss per share is computed using the weighted average number of common shares outstanding during the period and, if dilutive, the weighted average number of potential shares of common stock, including the assumed exercise of stock options. There were no common shares outstanding during the years ended December 31, 2016 and 2015, and accordingly, basic and diluted net loss per share is not presented.

*Reclassification*

Certain prior period amounts have been reclassified for consistency with the current period presentation. This reclassification had no effect on previously reported results of operations. In its consolidated financial statements for the nine months ended September 30, 2016, the Company classified a payment of \$76 received from the Australian government in connection with its R&D Tax Incentive program as a reduction to reported research and development expenses. During the three months ended December 31, 2016, upon evaluation of its planned continued participation in the R&D Tax Incentive program, the Company made a policy election to treat the incentive payments as other income in its consolidated statement of operations and comprehensive loss on a prospective basis. Accordingly, the Company has revised the classification of the payment of \$76 to other income in its consolidated financial statements for the year ended December 31, 2016. The reclassification had no impact on the Company's previously reported financial position or cash flows.

**LEAP THERAPEUTICS, INC. AND SUBSIDIARIES**

**Notes To Consolidated Financial Statements (Continued)**

**(Amounts in thousands, except share and per share amounts)**

**2. Summary of Significant Accounting Policies (Continued)**

*New Accounting Pronouncements*

In May 2014, the FASB issued ASU No. 2014-09, Revenue from Contracts with Customers (Topic 606) ("ASU 2014-09"), which supersedes existing revenue recognition guidance under GAAP. The standard's core principle is that a company will recognize revenue when it transfers promised goods or services to customers in an amount that reflects the consideration to which the Company expects to be entitled in exchange for those goods or services. The standard defines a five-step process to achieve this principle, and will require companies to use more judgment and make more estimates than under the current guidance. The Company expects that these judgments and estimates will include identifying performance obligations in the customer contract, estimating the amount of variable consideration to include in the transaction price and allocating the transaction price to each separate performance obligation. ASU 2014-09 also requires additional disclosure about the nature, amount, timing and uncertainty of revenue and cash flows arising from customer contracts. Topic 606, as amended, is effective for the Company for its annual periods beginning after December 15, 2018 and for interim periods within those fiscal years. Early adoption of the standard is permitted for annual periods beginning after December 15, 2016. The Company is currently evaluating the impact that the adoption that this standard will have on its consolidated financial statements, if and when it generates revenue.

In August 2014, FASB issued Accounting Standards Update ("ASU") 2014-15, Presentation of Financial Statements—Going Concern (Subtopic 205-40): Disclosure of Uncertainties about an Entity's Ability to Continue as a Going Concern. The amendments in this ASU are intended to define management's responsibility to evaluate whether there is substantial doubt about an entity's ability to continue as a going concern and to provide related footnote disclosures. Specifically, this ASU provides a definition of the term substantial doubt and requires an assessment for a period of one year after the date that the financial statements are issued (or available to be issued). It also requires certain disclosures when substantial doubt is alleviated as a result of consideration of management's plans and requires an express statement and other disclosures when substantial doubt is not alleviated. The new standard was effective for the Company for the year ended December 31, 2016, and interim periods thereafter. The Company adopted ASU 2014-15 as of the required effective date of December 31, 2016. This guidance relates to footnote disclosure only (see Note 1), and its adoption had no impact on the Company's financial position, results of operations or cash flows.

In February 2016, FASB issued ASU 2016-02, Leases (Topic 842). FASB issued this update to increase transparency and comparability among organizations by recognizing lease assets and lease liabilities on the balance sheet and disclosing key information about leasing arrangements. The updated guidance is effective for the Company for annual periods beginning after December 15, 2020, including interim periods within those fiscal years. Early adoption of the update is permitted. The Company is evaluating the impact of the adoption of this update on its consolidated financial statements and disclosures.

In March 2016, the FASB issued ASU 2016-09, Compensation—Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting. The new standard involves several aspects of the accounting for share-based payment transactions, including the income tax consequences, classification of awards as either equity or liabilities and classification on the statement of cash flows. The new standard will be effective for the Company on January 1, 2018. The Company is evaluating the impact of the adoption of this update on its consolidated financial statements and disclosures.

**LEAP THERAPEUTICS, INC. AND SUBSIDIARIES****Notes To Consolidated Financial Statements (Continued)****(Amounts in thousands, except share and per share amounts)****2. Summary of Significant Accounting Policies (Continued)**

In August 2016, the FASB issued ASU No. 2016-15, Statement of Cash Flows: Classification of Certain Cash Receipts and Cash Payments ("ASU 2016-15"), to address diversity in practice in how certain cash receipts and cash payments are presented and classified in the statement of cash flows. The standard is effective for the Company for annual periods beginning after December 15, 2018, including interim periods within those fiscal years. The Company is currently evaluating the impact that the adoption of ASU 2016-15 will have on its consolidated financial statements.

In October 2016, the FASB issued ASU No. 2016-16, Income Taxes (Topic 740): Intra-Entity Transfer of Assets Other than Inventory ("ASU 2016-16"), which requires the recognition of the income tax consequences of an intra-entity transfer of an asset, other than inventory, when the transfer occurs. The standard is effective for the Company for annual periods beginning after December 15, 2018, including interim periods within those fiscal years. The Company is currently evaluating the impact that the adoption of ASU 2016-16 will have on its consolidated financial statements.

**3. Prepaid Expenses and Other Current Assets**

Prepaid expenses and other current assets consist of the following:

	December 31,	
	2016	2015
Goods and services tax receivable	\$ 117	\$ —
Insurance	30	43
Other	36	46
Prepaid expenses and other current assets	<u>\$ 183</u>	<u>\$ 89</u>

**4. Property and Equipment, Net**

Property and equipment, net consisted of the following:

	December 31,	
	2016	
Leasehold improvements	\$	69
Lab equipment		45
Furnitures and fixtures		30
		144
Less: accumulated depreciation		(25)
Property and equipment, net	<u>\$</u>	<u>119</u>

The Company did not own any property or equipment as of December 31, 2015.

Depreciation expense was \$25 and \$0 for the years ended December 31, 2016 and 2015, respectively.

**LEAP THERAPEUTICS, INC. AND SUBSIDIARIES**  
**Notes To Consolidated Financial Statements (Continued)**  
**(Amounts in thousands, except share and per share amounts)**

**5. Accrued Expenses**

Accrued expenses consist of the following:

	<u>December 31,</u>	
	<u>2016</u>	<u>2015</u>
Clinical trials	\$ 2,545	\$ 403
Professional fees	88	67
Payroll and related expenses	25	9
Accrued expenses	<u>\$ 2,658</u>	<u>\$ 479</u>

**6. Notes Payable—Related Party**

During 2014, the Company received aggregate proceeds of \$3,070 from three promissory notes executed with a stockholder.

During 2015, the Company received additional aggregate proceeds of \$1,300 from a promissory note with a stockholder in March 2015. On April 17, 2015, notes and accrued interest totaling \$4,532 were converted to Series B Stock at the same price per share as was paid by purchasers of Series B Stock on that date (see Note 7). Subsequent to the conversion date, the Company received additional aggregate proceeds of \$3,700 from a promissory note executed with a stockholder and made a repayment of \$600. As of December 31, 2015, the Company owed \$3,100 in connection with the outstanding promissory note with a stockholder and \$41 of accrued interest thereon.

During 2016, the Company made additional drawdowns under the convertible promissory note executed with a stockholder of \$25,900. As of December 31, 2016, the Company owed \$29,000 aggregate principal and \$1,274 of accrued interest in connection with the promissory note.

The note accrued interest at a rate of 8% per year until the principal of the note was repaid or otherwise converted. Interest expense from the related-party note for the years ended December 31, 2016 and 2015 was \$1,233 and \$129, respectively. Accrued interest as of December 31, 2016 and 2015 was \$1,274 and \$41 respectively, which is included in note payable and accrued interest-related party on the accompanying consolidated balance sheets.

On January 13, 2017 the Company made an additional drawdown under the convertible promissory note executed with a stockholder of \$750 (see Note 16). On January 20, 2017, in accordance with its terms and in connection with and prior and subject to the consummation of the merger with Macrocare, the outstanding note payable, including principal and accrued interest totaling \$31,100, was converted into 1,950,768 shares of common stock (see Note 16).

**7. Fair Value Measurements**

As of December 31, 2016 and 2015, the Company had cash equivalents of \$15 and \$215 respectively, which were invested in money market funds. The cash equivalents were valued based on Level 1 inputs.

**LEAP THERAPEUTICS, INC. AND SUBSIDIARIES**

**Notes To Consolidated Financial Statements (Continued)**

**(Amounts in thousands, except share and per share amounts)**

**8. Preferred Stock**

On January 3, 2011, the Company entered into an agreement to issue up to 9,000,000 shares of Series A Convertible Preferred Stock ("Series A Stock") in consideration for the grant of a license to certain intellectual property (see Note 13). The issuance of shares was subject to the satisfaction of certain conditions set forth in the Series A Convertible Preferred Stock Purchase Agreement. From 2011 through 2016, the Company issued the 9,000,000 shares of Series A Stock in four tranches, upon the consummation of the corresponding Series B Convertible Redeemable Preferred Stock ("Series B Stock") tranche closings.

During the period from January 3, 2011 through December 31, 2013, the Company sold 15,000,000 shares of Series B Stock for gross proceeds of \$15,000. In accordance with the terms of the Series A Convertible Preferred Stock Purchase Agreement, the Company issued 6,279,300 shares of Series A Stock to the licensor in connection with these closings valued at approximately \$6,279 on the dates of grant, which was recognized as research and development expense.

On April 17, 2015, the Company completed an additional tranche closing of the sale of its Series B Stock and issued the remaining 6,500,000 authorized shares of Series B Stock. Of the shares issued, 4,532,098 were issued in consideration for the conversion of notes payable and accrued interest totaling approximately \$4,532 (see Note 6), and the remaining 1,967,902 shares were sold for gross proceeds of approximately \$1,968. In accordance with the terms of the Series A Convertible Preferred Stock Purchase Agreement, the Company issued 2,720,700 shares of Series A Stock to the licensor contemporaneously with the Series B Stock tranche closing. These shares were valued at approximately \$2,721 on the date of grant and included in research and development expense.

On April 24, August 25, and December 19, 2014, GTR completed three tranche closings resulting in the issuance of 2,687,765 shares of Series C Stock for net proceeds of \$1,807. On February 5 and April 24, 2015, GTR completed two tranche closings resulting in the issuance of 2,835,040 shares of Series C Stock for net proceeds of approximately \$1,922.

The powers, terms, conditions, preferences, rights and privileges of the Series A Stock, Series B Stock and Series C Stock are as follows:

***Voting***

The holders of Series A Stock, Series B Stock and the Series C Stock are entitled to vote, together with the holders of common stock as one class, on all matters as to which common stockholders are entitled to vote. In any such vote, each share of such preferred stock shall entitle the holder thereof to the number of votes per share that equals the number of shares of common stock into which each such share of such preferred stock is then convertible. In addition, the holders of a majority in voting power of the Series C Stock and Series B Stock, voting together as a separate class, have the exclusive right to elect three members of the Board of Directors of the Company.

***Preferences***

The Company's Series C Stock and Series B Stock ranks, as to dividends and upon liquidation, equally with each other and senior and prior to the Company's Series A Stock and common stock and to all other classes or series of stock issued by the Company, and the Series A Stock ranks, as to dividends and upon liquidation, junior to the Series C Stock, Series B Stock and senior and prior to the

**LEAP THERAPEUTICS, INC. AND SUBSIDIARIES**

**Notes To Consolidated Financial Statements (Continued)**

**(Amounts in thousands, except share and per share amounts)**

**8. Preferred Stock (Continued)**

Company's common stock, in each instance, except as otherwise approved by the affirmative vote or consent of the holders of a majority of the voting power of the shares of Series C Stock and Series B Stock then outstanding, voting together as a separate class.

***Dividends***

Whenever any dividend is declared or paid on the Series B Stock or Series C Stock, the Board of Directors shall also declare and pay a dividend on the same terms, at the same rate and in like kind upon each share of the Series A Stock then outstanding, so that all outstanding shares of Series A Stock, Series B Stock and Series C Stock will participate equally with each other ratably per share.

The holders of shares of Series B Stock are entitled to receive, if, when and as declared or paid by the Board of Directors on any shares of Series B Stock, dividends at the rate of 8% of the applicable Original Purchase Price per share per year, which will accrue on a quarterly basis commencing on the original issuance date applicable to each share of Series B Stock equal in right to the payment of dividends and other distributions on the Series C Stock and prior in right to the payment of dividends and other such distributions on any other class of securities of the Company. Dividends are payable, as accrued, whether or not declared, (i) on any liquidation, (ii) upon any event of sale, (iii) upon any redemption date, or (iv) upon the conversion of the Series B Stock into common stock, on such shares so converted. Whenever any dividend is declared or paid on: (i) any shares of the common stock, the Board of Directors shall also declare and pay a dividend on the same terms, at the same rate and in like kind upon each share of the Series B Stock then outstanding so that all outstanding shares of Series B Stock will participate in such dividend ratably with such shares of common stock; or (ii) any shares of Series A Stock or Series C Stock, the Board of Directors shall also declare and pay a dividend on the Series B Stock on the same terms, at the same or equivalent rate, based on the number of shares of common stock into which the Series A Stock or Series C Stock, as applicable, is then convertible, if applicable, or, otherwise, the relative liquidation preference per share, as compared with the Series B Stock then outstanding.

The holders of shares of Series C Stock shall be entitled to receive, if, when and as declared or paid by the Board of Directors on any shares of Series C Stock, dividends at the rate of 8% of the applicable Original Purchase Price per share per annum, which will accrue on a quarterly basis commencing on the original issuance date applicable to each share of Series C Stock equal in right to the payment of dividends and other distributions on the Series B Stock and prior in right to the payment of dividends and other such distributions on any other class of securities of the Company. Dividends are payable, as accrued, whether or not declared, (i) on any liquidation, (ii) upon any event of sale, (iii) upon any redemption date, or (iv) upon the conversion of the Series C Stock into common stock, on such shares so converted. Whenever any dividend is declared or paid on: (i) any shares of the common stock, the Board of Directors shall also declare and pay a dividend on the same terms, at the same rate and in like kind upon each share of the Series C Stock then outstanding so that all outstanding shares of Series C Stock will participate in such dividend ratably with such shares of common stock; or (ii) any shares of Series A Stock or Series B Stock, the Board of Directors shall also declare and pay a dividend on the Series C Stock on the same terms, at the same or equivalent rate, based on the number of shares of common stock into which the Series A Stock or Series B Stock, as

**LEAP THERAPEUTICS, INC. AND SUBSIDIARIES**

**Notes To Consolidated Financial Statements (Continued)**

**(Amounts in thousands, except share and per share amounts)**

**8. Preferred Stock (Continued)**

applicable, is then convertible, if applicable, or, otherwise, the relative liquidation preference per share, as compared with the Series C Stock then outstanding.

Cumulative unpaid dividends on the Series A, Series B and Series C Stock totaled approximately \$2,800, \$6,689 and \$2,383, respectively, as of December 31, 2016 and have been accreted in the carrying amounts of the Series A, Series B and Series C Stock, respectively, in the accompanying consolidated balance sheet as of that date.

***Liquidation Rights***

In the event of any liquidation, dissolution or winding-up of the affairs of the Company (collectively, a "Liquidation"), (i) the holders of shares of Series C Stock and Series B Stock shall be entitled to receive out of the assets of the Company, before any payment shall be made to the holders of Series A Stock then outstanding, the holders of common stock or any other class or series of stock ranking on Liquidation junior to such Series C Stock and Series B Stock, an amount per share equal to the Original Purchase Price applicable thereto, plus an amount equal to any accrued but unpaid dividends thereon; and (ii) after the distribution to the holders of Series C and Series B Stock of the full amount which they are entitled to receive, the holders of Series A Stock shall be entitled to receive out of the assets of the Company, before any payment shall be made to the holders of common stock or any other class or series of stock ranking on Liquidation junior to such Series A Stock, an amount per share equal to the applicable Original Purchase Price plus an amount equal to any declared but unpaid dividends thereon.

In the event of any Liquidation, after payments shall have been made first to the holders of Series C and Series B Stock and the holders of Series A Stock of the full amount to which they shall be entitled, the holders of common stock as a class, shall be entitled to share ratably with the holders of Series A, B and C Stock in all remaining assets of the Company legally available for distribution to its stockholders. For purposes of calculating the amount of any payment to be paid upon any such Liquidation, each share of Series A Stock, Series B Stock and Series C Stock shall be deemed to be that number of shares of common stock into which it is then convertible.

***Redemption***

At the request of the holder or holders of not less than  $66\frac{2}{3}\%$  of the voting power of shares of Series C Stock and Series B Stock then outstanding, voting together as a separate class, made at any time after December 10, 2020, the Company shall redeem, at a redemption price per share equal to the Original Purchase Price of the Series C Stock or Series B Stock, as applicable, plus an amount equal to any accrued but unpaid dividends thereon, up to 25% of the Series C Stock or Series B Stock, as applicable, owned of record by the requesting holders at the time that such request is made, and in each subsequent year thereafter, upon the anniversary of the redemption date, up to 25% of the shares of Series C Stock or Series B Stock, as applicable, that were owned of record by the requesting holders on the redemption date plus up to that number of shares of Series C Stock or Series B Stock, as applicable, that the requesting holders could have required the Company to have redeemed in the year or years following the redemption date, but elected not to have redeemed.

**LEAP THERAPEUTICS, INC. AND SUBSIDIARIES**

**Notes To Consolidated Financial Statements (Continued)**

**(Amounts in thousands, except share and per share amounts)**

**8. Preferred Stock (Continued)**

In the event of and simultaneously with the closing of an event of sale, as defined, the Company shall redeem all of the shares of Series A Stock, Series B Stock and Series C Stock then outstanding for a cash amount per share defined as the Special Liquidation Price. In the event the event of sale involves consideration that does not consist of cash, then the Special Liquidation Price may be paid with such consideration having a value equal to the Special Liquidation Price. To the extent there is any cash consideration in connection with an event of sale, the cash consideration will first be applied to satisfy the Special Liquidation Price prior to the payment thereof to any stockholders of the Company. The Special Liquidation Price would be equal to that amount per share which would be received by each Series A, Series B and Series C stockholder if, in connection with an event of sale, all the consideration paid in exchange for the assets or the shares of capital stock of the Company were actually paid to and received by the Company and the Company was immediately thereafter liquidated and its assets distributed.

***Conversion***

Any holder of Series A Stock, Series B Stock or Series C Stock has the right to convert any or all of its shares into fully paid and nonassessable shares of common stock. For each share of preferred stock so converted, the rate of conversion would equal the quotient of the applicable Original Purchase Price for such preferred stock divided by the Conversion Price for such preferred stock, subject to adjustment. The Original Purchase Price and Conversion Price of the Series A Stock, Series B Stock and Series C Stock was \$1.00, \$1.00 and \$2.39 per share, respectively, during all periods presented.

If the Company issues or sells any shares of common stock, preferred stock or options for a consideration per share less than the applicable Conversion Price in effect immediately prior to the issuance (a "Dilutive Issuance"), the Conversion Price for the preferred stock in effect immediately prior to each such Dilutive Issuance shall automatically be lowered to a price determined by a formula defined in the Company's articles of incorporation. If the number of shares of common stock outstanding is increased or decreased by a stock dividend payable in shares of common stock, by a combination of the outstanding shares of common stock or by a subdivision or split-up of shares of common stock, then the Conversion Price applicable to each series of preferred stock shall be appropriately increased or decreased so that the number of shares of common stock issuable on conversion of each share of preferred stock shall be increased in proportion to such increase or decrease in outstanding shares of common stock.

***Approval Rights***

The Company may not, without the affirmative approval of the holders of shares representing at least a majority of voting power of the Series B Stock and Series C Stock then outstanding, complete certain transactions, including among others, selling the Company, acquiring another entity, declaring or paying dividends, or incurring any indebtedness in excess of \$500.

***Merger with Macrocare Ltd.***

On January 20, 2017, prior and subject to the consummation of the merger with Macrocare, all outstanding shares of the Company's convertible preferred stock were converted into 3,174,523 shares of common stock (see Note 16).



**LEAP THERAPEUTICS, INC. AND SUBSIDIARIES****Notes To Consolidated Financial Statements (Continued)****(Amounts in thousands, except share and per share amounts)****9. Common Stock**

In connection with the merger with GITR, in December 2015 the Company amended its certificate of incorporation to authorize the Company to issue 58,500,000 shares of \$0.001 par value common stock. There were no shares of common stock issued or outstanding as of December 31, 2016 and 2015.

Each share of common stock entitles the holder to one vote on all matters submitted to a vote of the Company's stockholders. Common stockholders are entitled to receive dividends, as may be declared by the board of directors, if any, subject to the preferential dividend rights of the preferred stockholders. Through December 31, 2016 and 2015, no dividends have been declared.

As of December 31, 2016, the Company had reserved 5,228,532 shares of common stock for the conversion of outstanding preferred stock, the conversion of outstanding notes payable-related party including accrued interest, the exercise of outstanding stock options and the number of shares remaining for grant under the Company's 2012 Equity Incentive Plan (see Note 10).

**10. Stock-Based Compensation**

In September 2012, the Company adopted the 2012 Equity Incentive Plan, as amended (the "Plan"), which provides designated employees of the Company and its affiliates, certain consultants and advisors who perform services for the Company and its affiliates, and nonemployee members of the Board of Directors of the Company and its affiliates with the opportunity to receive grants of incentive stock options, nonqualified stock options and stock awards. As of December 31, 2016, the aggregate number of shares of common stock of the Company that may be issued under the Plan was 61,483. As of December 31, 2016, 17,963 shares remained available for future grant under the Plan. Pursuant to the Plan of Merger, each option to purchase shares of GITR common stock was converted into the right to receive an option to purchase shares of the Company's common stock at a conversion ratio of 0.977556:1. Consequently, the Company issued options to purchase 13,900 shares of common stock to GITR option holders.

The Company could also make awards of restricted stock under the Plan. Restricted stock may be issued under the Plan for such consideration, in cash, other property or services, or any combination thereof, as is determined by the Board of Directors. During the restriction period applicable to the shares of restricted stock, such shares shall be subject to limitations on transferability, subject to forfeiture or repurchase by the Company and/or subject to other terms and conditions. Upon lapse of such restrictions, the stock certificates representing shares of common stock shall be delivered to the grantee.

A summary of activity under the Plan is as follows:

	Options	Weighted Average Exercise Price Per Share	Weighted Average Remaining Life in Years	Aggregate Intrinsic Value
Outstanding at December 31, 2015	59,274	\$ 4.95	7.90	
Forfeited	(6,046)	\$ 5.14		
Outstanding at December 31, 2016	53,228	\$ 4.93	7.00	\$ 213
Options exercisable at December 31, 2016	42,063	\$ 4.76	6.76	\$ 163
Options unvested at December 31, 2016	11,165	\$ 5.68	6.76	\$ 50

**LEAP THERAPEUTICS, INC. AND SUBSIDIARIES****Notes To Consolidated Financial Statements (Continued)****(Amounts in thousands, except share and per share amounts)****10. Stock-Based Compensation (Continued)**

During the years ended December 31, 2016 and 2015 the Company recognized \$45 and \$50, respectively, of stock-based compensation expense.

The Company did not grant any stock options during 2016 and 2015. The grant date fair value of the options granted prior to 2015 was estimated at the date of grant using the Black-Scholes option valuation model. The expected life was estimated using the "simplified" method as defined by the Securities and Exchange Commission's Staff Accounting Bulletin 107, Share-Based Payment. The expected volatility was based on the historical volatility of comparable public companies from a representative peer group selected based on industry and market capitalization data. The risk-free interest rate was based on the continuous rates provided by the U.S. Treasury with a term approximating the expected life of the option. The expected dividend yield was 0% because the Company does not expect to pay any dividends for the foreseeable future. The Company elected the straight-line attribution method in recognizing the grant date fair value of options issued over the requisite service periods of the awards, which are generally the vesting periods.

Stock options generally vest 25% on the one-year anniversary of the date of grant and quarterly thereafter during the subsequent three years. The options expire ten years from the grant date. As of December 31, 2016, there was approximately \$41 of unrecognized compensation cost related to nonvested stock options, which is expected to be recognized over a remaining weighted-average period of approximately 0.9 years.

Stock-based compensation expense was classified in the consolidated statements of operations as follows:

	Year Ended December 31,	
	2016	2015
Research and development	35	\$ 44
General and administrative	10	6
Total	<u>\$ 45</u>	<u>\$ 50</u>

**11. Income Taxes**

The Company has federal and state net operating loss carryforwards of approximately \$53,698 and \$35,732, respectively, as of December 31, 2016. The net operating loss carryforwards begin expiring in 2031. The Company may be able to utilize its net operating loss carryforwards to reduce future federal and state income tax liabilities. However, these net operating losses are subject to various limitations under Internal Revenue Code ("IRC") Section 382, which limits the use of net operating loss carryforwards to the extent there has been an ownership change of more than 50 percentage points. In addition, the net operating loss carryforwards are subject to examination by the taxing authorities and could be adjusted or disallowed due to such exams. Although the Company has not undergone an IRC Section 382 analysis, it is possible that the utilization of the Company's net operating loss carryforwards may be limited. In addition, the Company has federal and state research and development tax credits of approximately \$1,308 and \$180, respectively, that begin expiring in 2031 for federal tax purposes and 2030 for state tax purposes. The amount of net operating loss carryforward in Australia is not significant at December 31, 2016.

**LEAP THERAPEUTICS, INC. AND SUBSIDIARIES****Notes To Consolidated Financial Statements (Continued)****(Amounts in thousands, except share and per share amounts)****11. Income Taxes (Continued)**

There is no provision for income taxes in the United States because the Company has historically incurred operating losses and maintains a full valuation allowance against its deferred tax assets.

The significant components of the Company's deferred tax assets as of December 31, 2016 and 2015 were as follows:

	December 31,	
	2016	2015
Federal net operating loss carryforwards	\$ 18,258	\$ 11,717
State net operating loss carryforwards	1,858	915
Stock options	43	30
Federal research tax credits	1,308	1,091
State research tax credits	119	168
License fees	2,616	1,835
Accrued expenses	599	16
Other	31	—
Total deferred tax assets	24,832	15,772
Valuation allowance	(24,832)	(15,772)
Net deferred tax assets	<u>\$ —</u>	<u>\$ —</u>

The income tax benefit for the years ended December 31, 2016 and 2015 differed from the amounts computed by applying the U.S. federal income tax rate of 34% to the Company's loss before tax benefit, as follows:

	Year Ended December 31,	
	2016	2015
Federal statutory income tax rate	(34.0)%	(34.0)%
Effect of:		
Change in valuation allowance	31.9	34.6
Permanent differences	6.5	0.0
Other	(4.4)	(0.6)
Effective income tax rate	<u>0.0%</u>	<u>0.0%</u>

As of December 31, 2016 and 2015 the Company had provided a full valuation allowance against its net deferred tax assets because realization of any future tax benefit cannot be reasonably assured. The valuation allowance increased by approximately \$9,060 and \$4,545 during the years ended December 31, 2016 and 2015, respectively.

The Company follows the authoritative guidance on accounting for and disclosure of uncertainty in tax positions, which requires the Company to determine whether a tax position of the Company is more likely than not to be sustained upon examination, including resolution of any related appeals of litigation processes, based on the technical merits of the position. For tax positions meeting the more likely than not threshold, the tax amount recognized in the financial statement is reduced by the largest

**LEAP THERAPEUTICS, INC. AND SUBSIDIARIES****Notes To Consolidated Financial Statements (Continued)****(Amounts in thousands, except share and per share amounts)****11. Income Taxes (Continued)**

benefits that has a greater than 50% likelihood of being realized upon the ultimate settlement with the relevant taxing authority.

The Company files tax returns as prescribed by the tax laws of the jurisdictions in which it operates. In the normal course of business the Company is subject to examination by federal and state jurisdictions, where applicable. There are currently no pending tax examinations. The earliest tax years that may be subject to examination by jurisdiction are 2013 for both federal and state purposes. The company's policy is to record interest and penalties related to income taxes as part of the tax provision. There were no interest and penalties pertaining to uncertain tax positions for the years ended December 31, 2016 or 2015.

**12. Net Loss Per Share**

There were no common shares outstanding during the years ended December 31, 2016 and 2015, and accordingly, the Company has not presented basic and diluted net loss per share for these periods.

The Company's potentially dilutive securities include stock options and convertible preferred stock. These securities would have been excluded from the computation of diluted net loss per share as the effect would be to reduce the net loss per share. The following table includes the potential common shares, presented based on amounts outstanding at each period end, that would have been excluded from the computation of diluted net loss per share attributable to common stockholders for the periods indicated because including them would have had an anti-dilutive effect:

	December 31,	
	2016	2015
Options to purchase common stock	53,228	59,274
Convertible preferred stock and accrued dividends (as converted to common stock)	<u>3,273,508</u>	<u>2,128,194</u>
	<u>3,326,736</u>	<u>2,187,468</u>

In addition to the potentially dilutive securities noted above, as of December 31, 2016 and 2015 the Company had outstanding notes payable—related party for which principal and unpaid accrued interest due under the notes will automatically be converted into the class of the Company's stock issued in the Company's next qualified financing, as defined, based on a conversion price equal to the price per share paid by the investors in the financing (see Note 6). Because the necessary conditions for conversion of the notes had not been met during the periods presented, these notes have been excluded from the table above.

**13. Commitments and Contingencies**

**Manufacturing Agreements**—The Company is party to manufacturing agreements with vendors to manufacture TRX518 and DKN-01, our lead product candidates, for use in clinical trials. As of December 31, 2016, noncancelable commitments under these agreements totaled \$4,467.

**License and Service Agreements**—On January 3, 2011, the Company entered into a license agreement with Eli Lilly and Company ("Lilly") to grant a license to the Company for certain

**LEAP THERAPEUTICS, INC. AND SUBSIDIARIES**

**Notes To Consolidated Financial Statements (Continued)**

**(Amounts in thousands, except share and per share amounts)**

**13. Commitments and Contingencies (Continued)**

intellectual property rights relating to pharmaceutically active compounds that may be useful in the treatment of bone healing, cancer and, potentially, other medical conditions. The Company issued 9,000,000 shares of Series A Stock to Lilly as described in Note 7 in consideration for the grant of the license. As defined in the license agreement, the Company would be required to pay royalties to Lilly based upon a percentage in the low single digits of net sales of developed products, if and when achieved. However, there can be no assurance that clinical or commercialization success of developed products will occur, and no royalties have been paid or accrued through December 31, 2016.

**License Agreement**—On May 28, 2015, the Company entered into a license agreement with Lonza Sales AG ("Lonza"), pursuant to which Lonza granted the Company a world-wide, non-exclusive license for certain intellectual property relating to a gene expression system for manufacturing DKN-01. As defined in the license agreement, the company would be required to pay royalties to Lonza based on a percentage in the low single digits of net sales of DKN-01, if and when achieved. However, there can be no assurance that clinical or commercialization success will occur, and no royalties have been paid or accrued through December 31, 2016.

**Legal Proceedings**—At each reporting date, the Company evaluates whether or not a potential loss amount or a potential range of loss is probable and reasonably estimable under the provisions of the authoritative guidance that addresses accounting for contingencies. The Company expenses as incurred the costs related to its legal proceedings.

A patent covering TRX518 and its uses was granted to the Company by the European Patent Office. Three notices of opposition to this patent were filed by two major pharmaceutical companies and an individual, possibly on behalf of a major pharmaceutical company. At the conclusion of the opposition proceedings in 2016, the Opposition Division of the European Patent Office that heard the case issued an interlocutory decision indicating that the Company's patent should be maintained with modified claims that differ from the claims as originally granted. These claims cover the TRX518 antibody and uses of TRX518 in a method of enhancing an immune response in a subject. In July 2016, the Company filed an appeal of the decision of the Opposition Division seeking to obtain broader claims that more closely reflect the claims as granted in the patent. The Board of Appeal has not scheduled a date for the appeal hearing. The Company is appealing the decision of the Opposition Division of the European Patent Office.

In 2016, a patent covering the use of TRX518 in combination with a chemotherapeutic agent for treating cancer was granted to the Company by the European patent office. In March of 2017, notices of opposition to this patent were filed by ten different entities, including several major pharmaceutical companies. The Company intends to defend the patent as granted through opposition proceedings.

On October 16, 2015, the Company filed a trademark application (Serial No. 86/790,294) for LEAP THERAPEUTICS with the United States Patent and Trademark Office. The application was published for opposition on March 22, 2016. On September 19, 2016, Intrexon Corporation opposed the application by filing a notice of opposition with the Trademark Trial and Appeal Board, or TTAB. In its opposition, Intrexon argues that our LEAP THERAPEUTICS mark is confusingly similar to two trademark registrations Intrexon owns for the mark LEAP (Reg. Nos. 4407212 and 4637542). The Company filed its answer to the opposition and is defending the Company's right to use and register its

**LEAP THERAPEUTICS, INC. AND SUBSIDIARIES**

**Notes To Consolidated Financial Statements (Continued)**

(Amounts in thousands, except share and per share amounts)

**13. Commitments and Contingencies (Continued)**

trademark. The opposition is limited to determining whether the application should be permitted to proceed to registration.

**Indemnification Agreements**—In the ordinary course of business, the Company may provide indemnification of varying scope and terms to vendors, lessors, business partners and other parties with respect to certain matters including, but not limited to, losses arising out of breach of such agreements or from intellectual property infringement claims made by third parties. In addition, the Company has entered into indemnification agreements with members of its board of directors that will require the Company, among other things, to indemnify them against certain liabilities that may arise by reason of their status or service as directors or officers. The maximum potential amount of future payments the Company could be required to make under these indemnification agreements is, in many cases, unlimited. To date, the Company has not incurred any material costs as a result of such indemnifications. The Company is not aware of any claims under indemnification arrangements, and it has not accrued any liabilities related to such obligations in its consolidated financial statements as of December 31, 2016 or 2015.

**14. Defined Contribution Plan**

The Company has a 401(k) defined contribution plan (the "401(k) Plan") for substantially all of its employees. Eligible employees may make pretax contributions to the 401(k) Plan up to statutory limits. The Company makes matching employee contributions in cash to the 401(k) Plan at a rate of 100% of the first 3% of earnings contributed and 50% of the next 2% of earnings contributed. Employees participating in the 401(k) Plan are fully vested in the Company matching contributions, and investments are directed by participants. The Company made matching contributions of \$131 and \$46 for the years ended December 31, 2016 and 2015, respectively.

**15. Related Party Transactions**

During the years ended December 31, 2016 and 2015, the Company reimbursed an entity related to one of its stockholders for shared office space and office related expenses. The total amount charged to the Company was approximately \$308 and \$98 in the years ended December 31, 2016 and 2015, respectively, of which \$181 and \$98, respectively, are included in general and administrative expenses and \$127 and \$0, respectively, are included in research and development expenses in the accompanying consolidated statements of operations and comprehensive loss.

During the years ended December 31, 2016 and 2015 the Company executed promissory notes with stockholders (See Note 6).

The Company has a license agreement with a stockholder (See Note 13).

**16. Subsequent Events**

For its consolidated financial statements as of December 31, 2016 and for the year then ended, the Company evaluated subsequent events through March 31, 2017, the date on which those financial statements were issued.

**LEAP THERAPEUTICS, INC. AND SUBSIDIARIES**

**Notes To Consolidated Financial Statements (Continued)**

**(Amounts in thousands, except share and per share amounts)**

**16. Subsequent Events (Continued)**

*Issuance of Note Payable—Related Party*

On January 13, 2017, the Company received aggregate proceeds of \$750 from an amendment and restatement of the promissory note described in Note 6, which was executed with stockholders to provide working capital for the Company's operations. The terms of the amended and restated note were consistent with the terms described in Note 6.

*Lease Agreement*

Effective January 1, 2017, the Company entered into an assignment agreement to assume an operating lease for its office space in Cambridge, Massachusetts. Annual rent under the lease, exclusive of operating expenses and real estate taxes, will be \$289 for the 12-month period ending July 31, 2017, increasing to \$297 for the 12-month period ending July 31, 2018 and increasing to \$305 for the period ending April 30, 2019. The lease agreement expires April 30, 2019, and the Company has the option to extend the term through April 30, 2022.

*Amendments to Certificate of Incorporation*

On January 20, 2017, in connection with and prior to the completion of the merger with Macrocare, the Company's Charter and Bylaws were amended to reflect the conversion of all outstanding shares of the Company's convertible preferred stock into 3,174,523 shares of common stock, and to reflect the conversion of the outstanding note payable and accrued interest into 1,950,768 shares of common stock.

On January 20, 2017, the Company amended its Certificate of Incorporation, as amended and restated, with the Secretary of State of the State of Delaware in connection with the anticipated completion of the merger on January 23, 2017. The Certificate of Incorporation was amended in order to, among other things: (i) authorize 100,000,000 shares of common stock; (ii) eliminate all references to the previously existing series of the Company's preferred stock; (iii) authorize 10,000,000 shares of undesignated preferred stock that may be issued from time to time by the Company's board of directors and (iv) effect a one for 19.86754 reverse stock split of the Company's common stock outstanding immediately prior to the filing of the amended and restated Certificate.

*Merger with Macrocare Ltd.*

On January 23, 2017, the Company issued 3,257,368 shares of its common stock in exchange for 100% of the outstanding ordinary shares of Macrocare Ltd. upon consummation of the proposed merger. Pursuant to the terms of the merger agreement, each holder of Macrocare's ordinary shares received approximately 0.1815 shares of the Company's common stock, plus cash in lieu of fractional shares based on a value of the Company's common stock of \$9.90 per share. The exchange ratio is based on a final net cash calculation, as of the closing, of \$21,875. The merger will be accounted for as an in-substance recapitalization of the Company, as the transaction is, in essence, an exchange of shares of the Company's common stock (and options and warrants exercisable therefor) for cash. Apart from cash, the other assets and liabilities acquired are nominal, and all Macrocare employees were terminated as of the effective time of the merger. Macrocare's cash and nominal assets and liabilities

**LEAP THERAPEUTICS, INC. AND SUBSIDIARIES**

**Notes To Consolidated Financial Statements (Continued)**

**(Amounts in thousands, except share and per share amounts)**

**16. Subsequent Events (Continued)**

will be measured and recognized at their fair values as of the date of the merger, and combined with the assets, liabilities and results of operations of the Company after the consummation of the merger.

All Macrocore stock options granted under the Macrocore stock option plans (whether or not then exercisable) and all warrants to purchase Macrocore ordinary shares that were outstanding prior to the effective time of the merger became options and warrants, respectively, to purchase the Company's common stock equal to the number of ordinary shares of Macrocore issuable upon exercise of such stock options and warrants multiplied by the exchange ratio, with a corresponding exercise price equal to the exercise price of such stock options or warrants divided by the exchange ratio. After the effective time, all outstanding and unexercised Macrocore stock options and warrants assumed by the Company may be exercised solely for shares of the Company's common stock.

Vesting of all unvested Macrocore equity awards issued and outstanding was accelerated at the effective time of the merger, and all such equity awards issued and outstanding at the time of the merger remained issued and outstanding. For accounting purposes, since the acceleration of vesting was negotiated in contemplation of the merger, any remaining unrecognized compensation expense associated with the original grant date fair value of the awards was recognized as a one-time charge in the combined company's postcombination financial statements. In addition, the exercise period for all Macrocore options outstanding at the effective time of the merger was extended beyond the respective periods provided in the original awards. For accounting purposes, the extension of the exercise periods resulted in a one-time charge in the combined company's postcombination financial statements equal to the difference in the fair value of the options immediately prior to and immediately following the modification of the exercise period.

In connection with the consummation of the merger, the Company applied to be listed on the NASDAQ Global Market. NASDAQ approved the listing, and trading in the Company's common stock commenced on January 24, 2017, under the trading symbol "LPTX".

*Subscription Agreement*

On January 20, 2017, prior and subject to the consummation of the merger, the Company and HealthCare Ventures IX, L.P. ("HCV IX") entered into a subscription agreement pursuant to which HCV IX purchased 1,010,225 shares of the Company's common stock for \$10,000, at a purchase price per share of \$9.90. The investment by HCV IX was exempted from registration under Section 4(a)(2) of the Securities Act of 1933, as amended, as a transaction not involving any public offering.

*Royalty Agreement and Letter Agreement*

On January 23, 2017, prior to the merger, the Company entered into a royalty agreement with Leap Shareholder Royalty Vehicle, LLC, a Delaware limited liability company (the "Royalty Vehicle"), a special purpose vehicle formed for the specific purpose of entering into the royalty agreement. In connection with the transactions contemplated by the merger agreement, the Company declared a special distribution of certain royalty rights to each of its holders of common stock outstanding immediately prior to the effective time of the merger. These holders collectively beneficially owned or controlled 100% of the Company's outstanding common stock at the time of the merger. Pursuant to the royalty agreement, the Company will pay to the special purpose vehicle (i) 5% of the Company's



**LEAP THERAPEUTICS, INC. AND SUBSIDIARIES**

**Notes To Consolidated Financial Statements (Continued)**

**(Amounts in thousands, except share and per share amounts)**

**16. Subsequent Events (Continued)**

net sales of products incorporating its TRX518 compound and (ii) 2% of the Company's net sales of products incorporating its DKN-01 compound. The royalty agreement will have an indefinite term, and neither the Company nor the special purpose vehicle will have the right to terminate. The Company will account for the royalty rights as a loss contingency since it represents the obligation to make future cash payments to the Royalty Vehicle based on a percentage of the future revenues generated from product sales.

*Equity Incentive Plans*

On January 20, 2017, the Company's stockholders approved the amended and restated 2012 Equity Incentive Plan (the "2012 Plan"), which was effective in connection with the completion of the Company's merger with Macrocare. A total of 1,387,204 shares of common stock were reserved for issuance under this plan.

On January 20, 2017, the Company's stockholders approved the 2016 Equity Incentive Plan (the "2016 Plan"), which was effective in connection with the completion of the Company's merger with Macrocare. The number of shares of common stock issuable pursuant to outstanding awards granted under the 2016 Plan may not exceed the number that is equal to the sum of (i) 854,321 shares of common stock plus (ii) the number of shares of common stock (not to exceed 103,023 shares) subject to out-of-the-money options issued by Macrocare prior to the closing of the merger and assumed by the Company pursuant to the merger agreement upon consummation of the merger. Beginning on January 1, 2018, the number of shares of common stock authorized for issuance pursuant to the 2016 Plan will be increased each January 1 by an amount equal to four percent (4%) of the Company's outstanding common stock as of the end of the immediately preceding calendar year or such other amount as determined by the compensation committee of the Company's board of directors.

*Stock Option Grants*

On January 20, 2017, in connection with the consummation of the merger with Macrocare, the Company made an option grant to each of three executives to purchase 330,303 of shares of common stock, for a total of 990,909 shares of common stock, pursuant to our Amended and Restated 2012 Equity Incentive Plan. The options were granted at an exercise price \$9.90 per share. The options will vest 33% on the first anniversary of the date of grant, and thereafter in equal monthly installments over a period of two years, generally subject to the executive's continued employment.

**17. Unaudited Pro Forma Information (unaudited)**

The unaudited pro forma combined balance sheet as of December 31, 2016 has been prepared to give effect to the merger with Macrocare as if it had occurred on December 31, 2016.

The following pro forma adjustments are based on preliminary estimates, which may change significantly as additional information is obtained:

- To give effect to the recapitalization of the Company, including the conversion of the outstanding note payable—related party and accrued interest totaling \$30,274 as of December 31, 2016 into 1,893,541 shares of the Company's common stock and the conversion of

**LEAP THERAPEUTICS, INC. AND SUBSIDIARIES**

**Notes To Consolidated Financial Statements (Continued)**

**(Amounts in thousands, except share and per share amounts)**

**17. Unaudited Pro Forma Information (unaudited) (Continued)**

all outstanding shares of Series A, B and C preferred stock into 3,192,367 shares of the Company's common stock.

- To record the sale of 1,011,429 shares of the Company's common stock for aggregate gross proceeds of \$10,000 which was completed on January 20, 2017 as a condition to the closing of the merger, and to record \$920 of related issuance costs, which have been reflected as a reduction of additional paid-in capital and a corresponding increase in accrued expenses.
- To record the issuance of 3,273,508 shares of the Company's common stock to the equity holders of Macrocare upon completion of the merger, which are reflected as an exchange for the assets and liabilities of Macrocare. As of December 31, 2016, Macrocare had approximately \$22,237 in cash and certain nominal assets and liabilities.
- To reclassify \$1,402 of deferred offering costs to additional paid-in capital upon completion of the merger. Also, to record \$75 as an estimate of the Company's transaction costs that were not already included in accrued liabilities as of December 31, 2016, which have been reflected as an increase to accumulated deficit in the unaudited combined pro forma balance sheet.
- To record postcombination compensation expense of a) \$306 of unrecognized compensation expense of Macrocare as of December 31, 2016 related to outstanding stock options which will fully vest upon completion of the merger and for which there is no future service requirement, and b) \$628 of incremental compensation expense associated with the extension of the exercise periods associated with outstanding Macrocare stock options upon completion of the merger.



## AMENDMENT NO. 2 TO WARRANT

**THIS AMENDMENT NO. 2**, dated as of January 23, 2017 (the “**Amendment**”), to that certain Warrant to Purchase Preferred A Shares of MacroCure Ltd., an Israeli company (the “**Company**”), dated May 3, 2012, as amended by Amendment No. 1 thereto, dated as of July 22, 2013 (as so amended, the “**Warrant**”), is entered into by and among the Company, the individual or entity listed on the signature page hereto, who/which is the holder of the Warrant (the “**Holder**”), and Leap Therapeutics, Inc., a company organized under the laws of the State of Delaware (the “**Acquirer**”). Capitalized terms used herein and not otherwise defined shall have the meaning ascribed to them in the Warrant.

**WHEREAS**, following the initial public offering of the Company’s ordinary shares, part value NIS 0.01 per share (“**Ordinary Shares**”) and the related recapitalization pursuant to which all Preferred A Shares and warrants to purchase Preferred A Shares of the Company were converted into Ordinary Shares and warrants to purchase Ordinary Shares, the Warrant is currently exercisable for the number of Ordinary Shares set forth next to the name of the Holder on **Appendix I** hereto (each a “**Warrant Share**”);

**WHEREAS**, pursuant to that certain Agreement and Plan of Merger, dated as of August 29, 2016 (the “**Leap Merger Agreement**”), by and among the Acquirer, M-Co. Merger Sub, Ltd., a company formed under the laws of the State of Israel and a wholly-owned subsidiary of the Acquirer (“**Merger Sub**”), and the Company, Merger Sub will merge with and into the Company, with the Company surviving as a wholly-owned subsidiary of the Acquirer (the “**Leap Merger**”);

**WHEREAS**, pursuant to the Leap Merger, each Ordinary Share issued and outstanding immediately prior to the Effective Time (as defined in the Leap Merger Agreement) shall be cancelled and converted into the right to receive a fraction of a share of common stock, par value \$0.01 per share, of the Acquirer (“**Acquirer Common Stock**”) equal to the Exchange Ratio (as such term is defined in the Leap Merger Agreement), and, under the Leap Merger Agreement, each warrant to purchase one Ordinary Share that is outstanding immediately prior to the Effective Time is to be converted into a warrant to purchase a fraction of a share of Acquirer Common Stock (“**Acquirer Warrant Shares**”) equal to the Exchange Ratio, in each case rounded as set forth in the Leap Merger Agreement;

**WHEREAS**, the parties wish to enter into this Amendment in order to effect the foregoing arrangement, whereby (i) the Warrant will not expire upon the occurrence of the Leap Merger, (ii) the Warrant, to the extent it is outstanding immediately prior to the Effective Time, will become exercisable for the number of Acquirer Warrant Shares set forth next to the name of the Holder on **Appendix I** hereto, and (iii) the Acquirer will assume all of the Company’s rights and obligations under the Warrant; and

**WHEREAS**, the parties also seek to amend certain other provisions of the Warrant, as described herein.

**NOW, THEREFORE**, in consideration of the mutual promises herein made, the parties hereby agree as follows:

1. The preamble constitutes an integral part hereof.
  2. Immediately prior to the consummation of the Leap Merger, the reference in the Warrant to M&A Event shall be amended by the addition of the following sentence: “Notwithstanding anything else herein to the contrary, the merger contemplated by the Agreement and Plan of Merger, dated as of August 29, 2016, by and among Leap Therapeutics, Inc., a company organized under the laws of the State of Delaware (the “**Acquirer**”), M-Co. Merger Sub,
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Ltd., a company formed under the laws of the State of Israel and a wholly-owned subsidiary of the Acquirer (“**Merger Sub**”), and the Company, pursuant to which Merger Sub will merge with and into the Company, with the Company surviving as a wholly-owned subsidiary of the Acquirer, shall not be deemed an M&A Event hereunder.”

3. For good and valuable consideration (consisting of the rights and obligations of the parties set forth in the Leap Merger Agreement), upon and subject to consummation of the Leap Merger, the Company hereby assigns to Acquirer, and the Acquirer hereby assumes from the Company, all of the Company’s rights and obligations under the Warrant.
4. Beginning upon consummation of the Leap Merger, each reference in the Warrant to the “Company” or to “Macrocare Ltd.” that is not explicitly replaced in this Amendment shall be deemed a reference to the “Acquirer” or “Leap Therapeutics, Inc.” (as applicable), and each reference in the Warrant to a “Warrant Share” that is not explicitly replaced in this Amendment shall be deemed a reference to an “Acquirer Warrant Share”.
5. Section 1.1 of the Warrant shall be replaced in its entirety with the following:

“The maximum number of shares of Acquirer Common Stock that the Holder may purchase pursuant to this Warrant (each being an “**Acquirer Warrant Share**” hereunder) is the number of Acquirer Warrant Shares that is set forth opposite the name of the Holder on **Appendix I** to Amendment No. 2, dated as of January 23, 2017 to this Warrant, subject to adjustment from time to time or upon exercise as provided in Section 5 below.”

6. Section 1.2 of the Warrant shall be replaced in its entirety with the following:

“The exercise price per each Acquirer Warrant Share shall be equal to the U.S. Dollar amount that is equivalent to the quotient obtained by dividing (i) the current exercise price of NIS 0.01, by (ii) the Exchange Ratio (defined in the Leap Merger Agreement), based on the official representative rate of exchange of the U.S. Dollar and New Israeli Shekel published by the Bank of Israel on the business day immediately preceding the Effective Time (defined in the Leap Merger Agreement), and rounded as set forth in the Leap Merger Agreement (the “**Exercise Price**”), subject to adjustment from time to time or upon exercise as provided in Section 5 below.”

7. Section 2.1 of the Warrant shall be replaced in its entirety with the following:

“Subject to the provisions hereof, this Warrant may be exercised in whole or in part, at any time on or after the date of the consummation of the Merger (the “**Effective Date**”) and until the occurrence of an M&A Event (as defined below) (the “**Termination Date**”) via the payment to the Acquirer, of an amount equal to the aggregate Exercise Price of the Acquirer Warrant Shares being purchased via one of the following means of payments, to be determined solely by the Holder: (a) by cash, wire transfer, certified, cashier’s or other check acceptable to the Acquirer, in U.S. Dollars; or (b) in connection with an M&A Event, by way of Net Exercise as described, and upon the terms set forth, in Section 2.2 below. Notwithstanding the aforementioned, this Warrant shall be deemed exercised in full by the Holder immediately prior to, and conditioned upon the closing of, an M&A Event, without the need to provide any notice of exercise to the Company, in the manner set forth in Section 2.2 below.

For the purposes of this Section 2.1, beginning upon consummation of the Leap Merger, “**M&A Event**” shall mean any of the following (i) an acquisition, merger or consolidation of the Acquirer as a result of which the stockholders of the Acquirer immediately prior to the consummation of such M&A Event do not own a majority of the shares of the surviving entity immediately after the consummation of such M&A Event, (ii) a sale, by the Acquirer,

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of all or substantially all of the assets, or all or substantially all of the issued and outstanding shares held by stockholders, of the Acquirer, or (iii) the transfer of, the grant of an exclusive, perpetual, worldwide license to exploit without restriction, or any other form or mechanism having the effect of disposing of, all or substantially all of, the Acquirer's intellectual property out of the ordinary course of business, other than such transfer to a wholly owned subsidiary of the Acquirer or any of its affiliates or for a change of domicile."

8. Section 8.2 of the Warrant shall be replaced in its entirety with the following:

"This Warrant shall not entitle the Holder to any rights of a stockholder of the Acquirer, including, without limitation, any voting rights or other rights as a stockholder of the Acquirer whatsoever with respect to Acquirer Warrant Shares for which no exercise of this Warrant has occurred. Without derogating from the generality of the foregoing, no dividend or interest shall be payable or accrue in respect of this Warrant."

9. Survival of Provisions. Except as expressly amended and modified hereby, all other provisions set forth in the Warrant shall remain in full force and effect.
10. Miscellaneous. The Warrant, as amended by this Amendment, constitutes the entire agreement among the parties pertaining to the subject matter hereof and supersedes any and all prior or contemporaneous agreements relating to the subject matter hereof.
11. Binding on Successors. This Amendment shall be binding upon and shall inure to the benefit of the respective heirs, successors, assigns and legal representatives of the parties hereto.
12. Counterparts. This Amendment may be signed in any number of counterparts, each of which shall be an original, but all of which taken together shall constitute one agreement. A signed Amendment received by a party hereto via facsimile or email will be deemed an original, and binding upon the party who signed it.

[SIGNATURE PAGE FOLLOWS]

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IN WITNESS WHEREOF, the parties have executed this Amendment No. 2 to Warrant as of the date first appearing above.

**MACROCURE LTD.**

By: /s/ Shai Lankry  
Name: Shai Lankry  
Title: CFO

**HOLDER:**

**VAIZRA VENTURES LTD.**

By: /s/ Viatcheslav Mirilashvili  
Name: Viatcheslav Mirilashvili  
Title: Authorized Signatry

**LEAP THERAPEUTICS, INC.**

By: /s/ Douglas E. Onsi  
Name: Douglas E. Onsi  
Title: CFO

**[Signature Page to Amendment No. 2 to Warrant to Purchase Preferred A Shares of Macrocare Ltd.]**

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IN WITNESS WHEREOF, the parties have executed this Amendment No. 2 to Warrant as of the date first appearing above.

**MACROCURE LTD.**

**HOLDER:**

By: /s/ Shai Lankry  
Name: Shai Lankry  
Title: CFO

/s/ Y. Goldman  
**YITZHAK GOLDMAN**

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**LEAP THERAPEUTICS, INC.**

By: /s/ Douglas E. Onsi  
Name: Douglas E. Onsi  
Title: CFO

**[Signature Page to Amendment No. 2 to Warrant to Purchase Preferred A Shares of Macrocare Ltd.]**

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IN WITNESS WHEREOF, the parties have executed this Amendment No. 2 to Warrant as of the date first appearing above.

**MACROCURE LTD.**

By: /s/ Shai Lankry

Name: Shai Lankry  
Title: CFO

**HOLDER:**

**H.M.L.K FINANCIAL CONSULTING SERVICES LTD.**

By: /s/ Weinberg Menachem  
Name: Weinberg Menachem  
Title: Director

**LEAP THERAPEUTICS, INC.**

By: /s/ Douglas E. Onsi

Name: Douglas E. Onsi  
Title: CFO

**[Signature Page to Amendment No. 2 to Warrant to Purchase Preferred A Shares of Macrocare Ltd.]**

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IN WITNESS WHEREOF, the parties have executed this Amendment No. 2 to Warrant as of the date first appearing above.

**MACROCURE LTD.**

**HOLDER:**

By: /s/ Shai Lankry  
Name: Shai Lankry  
Title: CFO

/s/ Dov Shafir  
**DOV SHAFIR**

---

**LEAP THERAPEUTICS, INC.**

By: /s/ Douglas E. Onsi  
Name: Douglas E. Onsi  
Title: CFO

[Signature Page to Amendment No. 2 to Warrant to Purchase Preferred A Shares of Macrocare Ltd.]

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IN WITNESS WHEREOF, the parties have executed this Amendment No. 2 to Warrant as of the date first appearing above.

**MACROCURE LTD.**

**HOLDER:**

By: /s/ Shai Lankry  
Name: Shai Lankry  
Title: CFO

/s/ Michael Sela  
**MICHAEL SELA**

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**LEAP THERAPEUTICS, INC.**

By: /s/ Douglas E. Onsi  
Name: Douglas E. Onsi  
Title: CFO

[Signature Page to Amendment No. 2 to Warrant to Purchase Preferred A Shares of Macrocare Ltd.]

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IN WITNESS WHEREOF, the parties have executed this Amendment No. 2 to Warrant as of the date first appearing above.

**MACROCURE LTD.**

**HOLDER:**

By: /s/ Shai Lankry  
Name: Shai Lankry  
Title: CFO

/s/ Uriel Amon  
**URIEL ARNON**

**LEAP THERAPEUTICS, INC.**

By: /s/ Douglas E. Onsi  
Name: Douglas E. Onsi  
Title: CFO

[Signature Page to Amendment No. 2 to Warrant to Purchase Preferred A Shares of Macrocare Ltd.]

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IN WITNESS WHEREOF, the parties have executed this Amendment No. 2 to Warrant as of the date first appearing above.

**MACROCURE LTD.**

**HOLDER:**

By: /s/ Shai Lankry  
Name: Shai Lankry  
Title: CFO

/s/ Yariv Gilat  
**YARIV GILAT**

**LEAP THERAPEUTICS, INC.**

By: /s/ Douglas E. Onsi  
Name: Douglas E. Onsi  
Title: CFO

[Signature Page to Amendment No. 2 to Warrant to Purchase Preferred A Shares of Macrocare Ltd.]

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**Appendix I**

<b>Holder's Name</b>	<b>Warrant Shares</b>	<b>Acquirer Warrant Shares</b>
Vaizra Ventures Ltd.	248,078	
Yitzhak Goldman	12,604	
H.M.L.K Financial Consulting Services Ltd.	4,962	
Dov Shafir	9,925	
Michael Sela	9,925	
Uriel Amon	9,925	
Yariv Gilat	4,962	

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LEAP THERAPEUTICS, INC.

**NOTICE OF GRANT OF STOCK OPTION**

Notice is hereby given of the following option grant (the “Option”) to purchase shares of Stock of Leap Therapeutics, Inc. (the “Company”):

Optionee:

Grant Date:

Vesting Commencement Date:

Exercise Price: \$ \_\_\_\_\_ per share

Number of Option Shares: \_\_\_\_\_ shares

Expiration Date:

Type of Option:            Incentive Option  
    Nonstatutory Option

Exercise Schedule: [insert vesting schedule]

In no event shall the Option become exercisable for any additional Option Shares after Optionee’s cessation of Service.

Optionee understands and agrees that the Option is granted subject to and in accordance with the terms of the Leap Therapeutics, Inc. Amended and Restated 2012 Equity Incentive Plan (the “Plan”). Optionee further agrees to be bound by the terms of the Plan and the terms of the Option as set forth in the Stock Option Agreement attached hereto as Exhibit A. Optionee hereby acknowledges the receipt of a copy of the official prospectus for the Plan in the form attached hereto as Exhibit B. A copy of the Plan is available upon request made to the Corporate Secretary at the Company’s principal offices.

Employment at Will. Nothing in this Notice or in the attached Stock Option Agreement or in the Plan shall confer upon Optionee any right to continue in Service for any period of specific duration or interfere with or otherwise restrict in any way the rights of the

Company (or any Affiliate employing or retaining Optionee) or of Optionee, which rights are hereby expressly reserved by each, to terminate Optionee's Service at any time for any reason, with or without cause.

Definitions. All capitalized terms in this Notice shall have the meaning assigned to them in this Notice or in the attached Stock Option Agreement.

DATED: \_\_\_\_\_

**LEAP THERAPEUTICS, INC.**

By: \_\_\_\_\_

Title: \_\_\_\_\_

\_\_\_\_\_  
**Optionee**

Address:

**ATTACHMENTS**

**Exhibit A - Stock Option Agreement**

**Exhibit B - Plan Summary and Prospectus**

**EXHIBIT A**

**STOCK OPTION AGREEMENT**

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**LEAP THERAPEUTICS, INC.**  
**STOCK OPTION AGREEMENT**

**RECITALS**

- A. The Board has adopted the Plan for the purpose of retaining the services of selected Employees, non-employee members of the Board (or the board of directors of any Affiliate) and consultants and other advisors who provide services to the Company (or any Affiliate).
- B. Optionee is to render valuable services to the Company (or an Affiliate), and this Agreement is executed pursuant to, and is intended to carry out the purposes of, the Plan in connection with the Company's grant of an option to Optionee.
- C. All capitalized terms in this Agreement shall have the meaning assigned to them in the attached Appendix.

**NOW, THEREFORE**, it is hereby agreed as follows:

1. **Grant of Option.** The Company hereby grants to Optionee, as of the Grant Date, an option to purchase up to the number of Option Shares specified in the Grant Notice. The Option Shares shall be purchasable from time to time during the option term specified in Paragraph 2 at the Exercise Price.
  2. **Option Term.** This option shall have a maximum term of ten (10) years measured from the Grant Date and shall accordingly expire at the close of business on the Expiration Date, unless sooner terminated in accordance with Paragraph 5 or in accordance with the Plan.
  3. **Limited Transferability.**
    - (a) This option shall be neither transferable nor assignable by Optionee other than by will or the laws of inheritance following Optionee's death and may be exercised, during Optionee's lifetime, only by Optionee. However, Optionee may designate one or more persons as the beneficiary or beneficiaries of this option, and this option shall, in accordance with such designation, automatically be transferred to such beneficiary or beneficiaries upon the Optionee's death while holding this option. Such beneficiary or beneficiaries shall take the transferred option subject to all the terms and conditions of this Agreement, including (without limitation) the limited time period during which this option may, pursuant to Paragraph 5, be exercised following Optionee's death.
    - (b) If this option is designated a Nonstatutory Option in the Grant Notice, then this option may be assigned in whole or in part during Optionee's lifetime to one or more of the Optionee's Family Members or to a trust established for the exclusive benefit of Optionee and/or one or more such Family Members, to the extent such assignment is in
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connection with the Optionee's estate plan or pursuant to a domestic relations order and is approved by the Committee. The assigned portion shall be exercisable only by the person or persons who acquire a proprietary interest in the option pursuant to such assignment. The terms applicable to the assigned portion shall be the same as those in effect for this option immediately prior to such assignment.

4. **Dates of Exercise.** This option shall become exercisable for the Option Shares in one or more installments in accordance with the Exercise Schedule set forth in the Grant Notice. As the option becomes exercisable for such installments, those installments shall accumulate, and the option shall remain exercisable for the accumulated installments until the Expiration Date or sooner termination of the option term under Paragraph 5 or under the Plan.

5. **Cessation of Service.** The option term specified in Paragraph 2 shall terminate (and this option shall cease to be outstanding) prior to the Expiration Date should any of the following provisions become applicable:

(a) Should Optionee cease to remain in Service for any reason (other than (i) death, (ii) Permanent Disability, or (iii) for Cause) while this option is outstanding, then Optionee (or any person or persons to whom this option is transferred pursuant to a permitted transfer under Paragraph 3) shall have a period of three (3) months (commencing with the first date following such cessation of Service) during which to exercise this option, but in no event shall this option be exercisable at any time after the Expiration Date.

(b) Should Optionee die while this option is outstanding, then this option may be exercised by (i) the personal representative of Optionee's estate or (ii) the person or persons to whom the option is transferred pursuant to Optionee's will or the laws of inheritance following Optionee's death or to whom the option is transferred during Optionee's lifetime pursuant to a permitted transfer under Paragraph 3, as the case may be. However, if Optionee dies while holding this option and has an effective beneficiary designation in effect for this option at the time of his or her death, then the designated beneficiary or beneficiaries shall have the exclusive right to exercise this option following Optionee's death. Any such right to exercise this option shall lapse, and this option shall cease to be outstanding, upon the earlier of (i) the expiration of the twelve (12)-month period following the date of Optionee's death or (ii) the Expiration Date.

(c) Should Optionee cease Service by reason of Permanent Disability while this option is outstanding, then Optionee (or any person or persons to whom this option is transferred pursuant to a permitted transfer under Paragraph 3) shall have a period of twelve (12) months (commencing with the first date following such cessation of Service) during which to exercise this option. In no event shall this option be exercisable at any time after the Expiration Date.

(d) During the limited period of post-Service exercisability, this option may not be exercised in the aggregate for more than the number of Option Shares for which this option is, at the time of Optionee's cessation of Service, vested and exercisable pursuant to the Exercise Schedule specified in the Grant Notice. This option shall not vest or become

exercisable for any additional Option Shares following the Optionee's cessation of Service, except to the extent (if any) specifically authorized by the Plan Administrator pursuant to an express written agreement with the Optionee. Upon the expiration of such limited exercise period or (if earlier) upon the Expiration Date, this option shall terminate and cease to be outstanding for any exercisable Option Shares for which the option has not otherwise been exercised.

(e) Should Optionee's Service be terminated for Cause or should Optionee engage in conduct that would constitute grounds for Optionee's termination for Cause following Optionee's termination date, but while this option is outstanding, then this option shall terminate immediately and cease to remain outstanding.

6. **Change of Control/Transaction.** The provisions of the Plan applicable to a Change of Control or a Transaction (as such terms are defined in the Plan) apply to the option, and, in the event of a Change of Control or Transaction, the Committee may take such actions as it deems appropriate pursuant to the Plan.

7. **Adjustment in Option Shares.** If the outstanding shares of Stock are increased, decreased, or exchanged for a different number or kind of shares or other securities, or if additional shares or new or different shares or other securities are distributed with respect to shares of Stock, as a result of a reorganization, recapitalization, reclassification, stock dividend, stock split, reverse stock split, or other similar distribution with respect to such shares of Stock, an appropriate and equitable adjustment will be made in (i) the total number and/or class of securities subject to this option and (ii) the Exercise Price.

8. **Stockholder Rights.** The holder of this option shall not have any stockholder rights with respect to the Option Shares until such person shall have exercised the option, paid the Exercise Price and become a holder of record of the purchased shares.

9. **Manner of Exercising Option.**

(a) In order to exercise this option with respect to all or any part of the Option Shares for which this option is at the time exercisable, Optionee (or any other person or persons exercising the option) must take the following actions:

(i) Execute and deliver to the Company a Notice of Exercise for the Option Shares for which the option is exercised or comply with such other procedures as the Company may establish for notifying the Company of the exercise of this option for one or more Option Shares.

(ii) Pay the aggregate Exercise Price for the purchased shares in one or more of the following forms:

(A) cash or check made payable to the Company;

(B) with the Company's approval, shares of Stock held by Optionee (or any other person or persons exercising the option) for the requisite period necessary to avoid a charge to the Company's earnings for financial reporting purposes and valued at Market Value on the Exercise Date;

(C) with the Company's approval, shares of Stock otherwise issuable under the option but withheld by the Company in satisfaction of the exercise price, with such withheld shares to be valued at Market Value on the Exercise Date, or

(D) through and under the terms and conditions of any formal cashless exercise program authorized by the Company entailing the sale of Stock subject to the option in a brokered transaction (other than to the Company).

Except to the extent the sale and remittance procedure is utilized in connection with the option exercise, payment of the Exercise Price must accompany the Notice of Exercise delivered to the Company in connection with the option exercise.

(iii) Furnish to the Company appropriate documentation that the person or persons exercising the option (if other than Optionee) have the right to exercise this option.

(iv) Make appropriate arrangements with the Company (or Affiliate employing or retaining Optionee) for the satisfaction of all applicable income and employment tax withholding requirements applicable to the option exercise.

(b) As soon as practical after the Exercise Date, the Company shall issue to or on behalf of Optionee (or any other person or persons exercising this option) a certificate for the purchased Option Shares, with the appropriate legends affixed thereto.

(c) In no event may this option be exercised for any fractional shares.

10. **Compliance with Laws and Regulations.**

(a) The exercise of this option and the issuance of the Option Shares upon such exercise shall be subject to compliance by the Company and Optionee with all applicable requirements of law relating thereto and with all applicable regulations of any stock exchange (or the Nasdaq National Market, if applicable) on which the Stock may be listed for trading at the time of such exercise and issuance.

(b) The inability of the Company to obtain approval from any regulatory body having authority deemed by the Company to be necessary to the lawful issuance

and sale of any Stock pursuant to this option shall relieve the Company of any liability with respect to the non-issuance or sale of the Stock as to which such approval shall not have been obtained. The Company, however, shall use its best efforts to obtain all such approvals.

11. **Successors and Assigns.** Except to the extent otherwise provided in Paragraph 3 or in the Plan, the provisions of this Agreement shall inure to the benefit of, and be binding upon, the Company and its successors and assigns and Optionee, Optionee's assigns, the legal representatives, heirs and legatees of Optionee's estate and any beneficiaries of this option designated by Optionee.

12. **Notices.** Any notice required to be given or delivered to the Company under the terms of this Agreement shall be in writing and addressed to the Company at its principal corporate offices. Any notice required to be given or delivered to Optionee shall be in writing and addressed to Optionee at the address indicated below Optionee's signature line on the Grant Notice. All notices shall be deemed effective upon personal delivery or upon deposit in the U.S. mail, postage prepaid and properly addressed to the party to be notified.

13. **Construction.** This Agreement and the option evidenced hereby are made and granted pursuant to the Plan and are in all respects limited by and subject to the terms of the Plan. All decisions of the Plan Administrator with respect to any question or issue arising under the Plan or this Agreement shall be conclusive and binding on all persons having an interest in this option.

14. **Governing Law.** The interpretation, performance and enforcement of this Agreement shall be governed by the laws of the Commonwealth of Massachusetts, without resort to that State's conflict-of-laws rules.

15. **Excess Shares.** If the Option Shares covered by this Agreement exceed, as of the Grant Date, the number of shares of Stock which may without stockholder approval be issued under the Plan, then this option shall be void with respect to those excess shares, unless stockholder approval of an amendment sufficiently increasing the number of shares of Stock issuable under the Plan is obtained in accordance with the provisions of the Plan.

16. **Additional Terms Applicable to an Incentive Option.** In the event this option is designated an Incentive Option in the Grant Notice, the following terms and conditions shall also apply to the grant:

(a) This option shall cease to qualify for favorable tax treatment as an Incentive Option if (and to the extent) this option is exercised for one or more Option Shares: (A) more than three (3) months after the date Optionee ceases to be an Employee for any reason other than death or Permanent Disability or (B) more than twelve (12) months after the date Optionee ceases to be an Employee by reason of Permanent Disability.

(b) No installment under this option shall qualify for favorable tax treatment as an Incentive Option if (and to the extent) the aggregate Market Value (determined at the Grant Date) of the Stock for which such installment first becomes exercisable hereunder

would, when added to the aggregate value (determined as of the respective date or dates of grant) of the Stock or other securities for which this option or any other Incentive Options granted to Optionee prior to the Grant Date (whether under the Plan or any other option plan of the Company or any Affiliate) first become exercisable during the same calendar year, exceed One Hundred Thousand Dollars (\$100,000) in the aggregate. Should such One Hundred Thousand Dollar (\$100,000) limitation be exceeded in any calendar year, this option shall nevertheless become exercisable for the excess shares in such calendar year as a Nonstatutory Option.

(c) Should the exercisability of this option be accelerated, then this option shall qualify for favorable tax treatment as an Incentive Option only to the extent the aggregate Market Value (determined at the Grant Date) of the Stock for which this option first becomes exercisable in the calendar year in which the acceleration occurs does not, when added to the aggregate value (determined as of the respective date or dates of grant) of the Stock or other securities for which this option or one or more other Incentive Options granted to Optionee prior to the Grant Date (whether under the Plan or any other option plan of the Company or any Affiliate) first become exercisable during the same calendar year, exceed One Hundred Thousand Dollars (\$100,000) in the aggregate. Should the applicable One Hundred Thousand Dollar (\$100,000) limitation be exceeded in the calendar year of such acceleration, the option may nevertheless be exercised for the excess shares in such calendar year as a Nonstatutory Option.

(d) Should Optionee hold, in addition to this option, one or more other options to purchase Stock which become exercisable for the first time in the same calendar year as this option, then the foregoing limitations on the exercisability of such options as Incentive Options shall be applied on the basis of the order in which such options are granted.

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## APPENDIX

The following definitions shall be in effect under the Agreement:

- A. **Affiliate** shall mean any corporation, partnership, limited liability company, business trust, or other entity controlling, controlled by or under common control with the Company.
- B. **Agreement** shall mean this Stock Option Agreement.
- C. **Board** shall mean the Company's Board of Directors.
- D. **Cause** shall mean the commission of any act of fraud, embezzlement or dishonesty by the Optionee, any unauthorized use or disclosure by the Optionee of confidential information or trade secrets of the Company (or any Affiliate), or any other intentional misconduct by such person adversely affecting the business or affairs of the Company (or any Affiliate) in a material manner. The foregoing definition shall not in any way preclude or restrict the right of the Company (or any Affiliate) to discharge or dismiss the Optionee for any other acts or omissions, but such other acts or omissions shall not be deemed, for purposes of the Plan, to constitute grounds for termination for Cause.
- E. **Code** shall mean the Internal Revenue Code of 1986, as amended.
- F. **Committee** shall mean the Compensation Committee of the Board, or such other committee as designed under the Plan to administer the Plan.
- G. **Company** shall mean Leap Therapeutics, Inc., a Delaware corporation, and any successor corporation to all or substantially all of the assets or voting stock of Leap Therapeutics, Inc. which shall by appropriate action adopt the Plan.
- H. **Employee** shall mean an individual who is in the employ of the Company (or any Affiliate), subject to the control and direction of the employer entity as to both the work to be performed and the manner and method of performance.
- I. **Exercise Date** shall mean the date on which the option shall have been exercised in accordance with Paragraph 9 of the Agreement.
- J. **Exercise Price** shall mean the exercise price per Option Share as specified in the Grant Notice.
- K. **Exercise Schedule** shall mean the schedule set forth in the Grant Notice pursuant to which the option is to become exercisable for the Option Shares in one or more installments over the Optionee's period of Service.
- L. **Expiration Date** shall mean the date on which the option expires as specified in the Grant Notice.

- M. **Family Member** shall mean any of the following members of the Optionee's family: any child, stepchild, grandchild, parent, grandparent, stepparent, spouse, former spouse, sibling, niece, nephew, mother-in-law, father-in-law, son-in-law, daughter-in-law, bother-in-law or sister-in-law, including adopting relationships.
- N. **Grant Date** shall mean the date of grant of the option as specified in the Grant Notice.
- O. **Grant Notice** shall mean the Notice of Grant of Stock Option accompanying the Agreement, pursuant to which Optionee has been informed of the basic terms of the option evidenced hereby.
- P. **Incentive Option** shall mean an option which satisfies the requirements of Code Section 422.
- Q. **Market Value** means the value of a share of Stock on a particular date determined by such methods or procedures as may be established by the Committee. Unless otherwise determined by the Committee, the Market Value of Stock as of any date is the closing price for the Stock as reported on the New York Stock Exchange (or on any other national securities exchange on which the Stock is then listed) for that date or, if no closing price is reported for that date, the closing price on the first following date for which a closing price is reported.
- R. **Nonstatutory Option** shall mean an option not intended to satisfy the requirements of Code Section 422.
- S. **Notice of Exercise** shall mean the notice of option exercise in the form prescribed by the Company.
- T. **Option Shares** shall mean the number of shares of Stock subject to the option as specified in the Grant Notice.
- U. **Optionee** shall mean the person to whom the option is granted as specified in the Grant Notice.
- V. **Permanent Disability** shall mean the inability of Optionee to engage in any substantial gainful activity by reason of any medically determinable physical or mental impairment which is expected to result in death or to be of continuous duration of twelve (12) months or more.
- W. **Plan** shall mean the Company's Amended and Restated 2012 Equity Incentive Plan.
- X. **Plan Administrator** shall mean the Board, the Committee, or a committee acting in its capacity as administrator of the Plan.

Y. **Service** shall mean the Optionee's performance of services for the Company (or any Affiliate, whether now existing or subsequently established) in the capacity of an Employee, a non-employee member of the Board or a consultant or advisor. The Optionee shall be deemed to cease Service immediately upon the occurrence of either of the following events: (i) the Optionee no longer performs services in any of the foregoing capacities for the Company or any Affiliate or (ii) the entity for which the Optionee is performing such services ceases to remain an Affiliate of the Company, even though the Optionee may subsequently continue to perform services for that entity. Service shall not be deemed to cease during a period of military leave, sick leave or other personal leave approved by the Company; provided, however, that for a leave which exceeds three (3) months, Service shall be deemed, for purposes of determining the period within which any outstanding option held by a Optionee may be exercised as an Incentive Option, to cease on the first day immediately following the expiration of such three (3)-month period, unless the Optionee is provided with the right to return to Service following such leave either by statute or by written contract. Except to the extent otherwise required by law or expressly authorized by the Plan Administrator or by the Company's written policy on leaves of absence, no Service credit shall be given for vesting purposes for any period the Optionee is on a leave of absence.

Z. **Stock** shall mean common stock, par value \$0.001 per share, of the Company.



**EXHIBIT B**

**PLAN SUMMARY AND PROSPECTUS**

[Circulated Separately]

B-1

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LEASE

BY AND BETWEEN

BULFINCH SQUARE LIMITED PARTNERSHIP  
LANDLORD

AND

HEALTHCARE VENTURES LLC  
TENANT

43-47 Thomdike Street  
Cambridge, Massachusetts

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LEASE

43-47 Thorndike Street  
Cambridge, Massachusetts

ARTICLE 1

Reference Data

1.1 Introduction and Subject Referred To.

This is a lease (this "Lease") entered into by and between BULFINCH SQUARE LIMITED PARTNERSHIP, a Massachusetts limited partnership ("Landlord") and HEALTHCARE VENTURES LLC, a Delaware limited liability company ("Tenant").

Each reference in this Lease to any of the following terms or phrases shall be construed to incorporate the corresponding definition stated in this Section 1.1.

Date of this Lease: March 30, 2012.

Building and Property: That building having an address of 47 Thorndike Street, Cambridge, Massachusetts (the "Building") located within the building complex known as the Bulfinch Courthouse Complex which consists of the Bulfinch Building (47 Thorndike Street) and the Clerk of Courts Addition (43 Thorndike Street) in the City of Cambridge, Massachusetts bounded by Second, Thorndike, Third and Otis Streets. The Bulfinch Courthouse Complex and the land parcels on which it is located and the sidewalks adjacent thereto are hereinafter collectively referred to as the "Property".

Premises: A portion of the first floor of the Building designated as Suite B1-1, substantially as shown on Exhibit A hereto

Premises: A portion of the first floor of the Building designated as Suite B1-1, substantially as shown on Exhibit A hereto.

Premises  
Rentable Area: 3,174 square feet.

Original Term: Four (4) years, expiring on the day preceding the fourth anniversary of the Commencement Date, except that if the Commencement Date shall occur on a day other than the first day of a month, the Original Term shall expire on the last day of the month in which such anniversary shall occur.

Commencement Date: As defined in Section 3.1

Annual Fixed  
Rent:

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Year	Rate		Annual	Monthly
	(per s.f. of Premises Rentable Area per annum)			
1 - 2	\$	28.00	\$ 88,872.00*	\$ 7,406.00*
3	\$	29.00	\$ 92,046.00	\$ 7,670.50
4	\$	30.00	\$ 95,220.00	\$ 7,935.00

For purposes of the timing of the adjustments in the amount of Annual Fixed Rent during the Original Term, the term “Year” shall mean a period of twelve (12) consecutive calendar months commencing on the Commencement Date and each successive twelve (12) calendar month period, except that if the Commencement Date is not the first day of a month, the first (1<sup>st</sup>) Year shall be the period commencing on the Commencement Date and expiring on the last day of the month in which the first (1<sup>st</sup>) anniversary of the Commencement Date shall occur (in which case Tenant shall pay, in addition to Annual Fixed Rent for the twelve full months of Year 1, pro rated Annual Fixed Rent for the partial month in which the Commencement Date occurs, as provided in Section 4.1).

\*Annual Fixed Rent shall be abated in full for a period of forty five (45) days from the Commencement Date. Accordingly, the first payment of Annual Fixed Rent shall be due on the date (the “Rent Commencement Date”) that is forty-five (45) days following the Commencement Date, and if the Rent Commencement Date is not the first day of a month, the Monthly Installment for such partial month shall be pro rated as set forth in Section 4.1.

Base Taxes: The Taxes (as defined in Subsection 4.2.1) for the fiscal year ending June 30, 2012, being \$203,093.00, as the same may be reduced by the amount of any abatement.

Base Operating Costs: The Operating Costs (as defined in Subsection 4.2.2) for the calendar year ending December 31, 2012.

Tenant’s Percentage: Four and 14/100 percent (4.14%), being the ratio of Premises Rentable Area to the rentable area of the Property (76,595 square feet as of the Date of this Lease).

Permitted Uses: General office uses, subject to the provisions of Subsection 6.1.2.

Security Deposit: \$14,812

Commercial General Liability Insurance Limits: \$2,000,000 per occurrence (combined single limit) for property damage, bodily and personal injury and death, which may be provided by a combination of \$1,000,000 primary coverage and \$1,000,000 umbrella or excess liability coverage.

Original Address of Landlord: c/o Kenneth Krozy, CPA  
Krozy & Company, Inc.  
197 First Avenue, Suite 300  
Needham, MA 02494

Landlord's Agent: Crowninshield Management Corp.  
18 Crowninshield Street  
Peabody, MA 01960  
Attn: Kathleen M. Corbett, Regional Property Manager  
  
or such other entity as shall be designated by Landlord from time to time.

Original Address of Tenant: HealthCare Ventures, LLC  
55 Cambridge Parkway, Suite 102  
Cambridge, Massachusetts 02142-1234  
Attention: Jeffrey Steinberg, VP of Legal Affairs

1.2 Exhibits.

The Exhibits listed below in this section are incorporated in this Lease by reference and are to be construed as a part of this Lease.

- EXHIBIT A. Plan showing the Premises.
- EXHIBIT B. Rules and Regulations.

ARTICLE 2

Premises and Term

2.1 Premises. Landlord hereby leases to Tenant and Tenant hereby leases from Landlord, subject to and with the benefit of the terms, covenants, conditions and provisions of this Lease, the Premises, excluding exterior faces of exterior walls, the common lobbies, hallways, stairways, stairwells, elevator shafts and other common areas, and the escalators, elevators, pipes, ducts, conduits, wires and appurtenant fixtures and other common facilities serving the common areas or the Premises together with other portions of the Property.

Tenant shall have, as appurtenant to the Premises, rights to use, in common with others, subject to reasonable rules of general applicability to tenants of the Building from time to time made by Landlord of which Tenant is given notice, the common areas and facilities of the Property intended for use by tenants of the Property.

If Tenant shall elect to extend the term pursuant to Section 2.3, then if Landlord so requests, Tenant shall vacate the Premises and relinquish its rights with respect to the same provided that Landlord shall provide to Tenant substitute space in the Building, such space to be reasonably comparable in size, layout and furnish to the Premises, and further provided that Landlord shall, at its sole cost and expense, move Tenant and its equipment, furniture and other removable personal property from the Premises to such new space in such manner as will minimize, to the greatest extent practicable, interference with the business or operations of

Tenant. If Landlord elects to relocate Tenant pursuant to this paragraph, Landlord shall also reimburse Tenant for the documented, reasonable third-party costs necessarily incurred by Tenant by reason of such relocation, such as, by way of illustration only, replacing existing stocks of Tenant's stationery to reflect the new location of the Premises. Any such substitute space shall, from and after the date such space is so provided, be treated as the Premises demised under this Lease, and shall be occupied by Tenant under the same terms, provisions and conditions as are set forth in this Lease, provided, however, that the Annual Fixed Rent and Tenant's Percentage shall not be increased due to any such relocation, notwithstanding any increase in the Premises Rentable Area resulting from such relocation. Any request by Landlord pursuant to this paragraph (the "Relocation Request") shall be included in Landlord's Notice given pursuant to Section 2.3 and shall identify the proposed substitute space. The date on which Tenant shall be required to relocate shall be the first day of the Extended Term or as soon thereafter as Landlord is able to put the substitute space in the condition required hereby and to move Tenant and its equipment, furniture and other removable personal property from the Premises to such substitute space.

2.2 Term. The term of this Lease shall be for a period beginning on the Commencement Date and continuing for the Original Term and any extension thereof in accordance with the provision of this Lease, unless sooner terminated as hereinafter provided. The Original Term and any extension thereof in accordance with the provisions of this Lease is hereinafter referred to as the "term" of this Lease.

2.3 Extension Option. So long as this Lease is still in full force and effect, and subject to the Conditions (as hereinafter defined), which Landlord may waive, in its discretion, at any time, but only by notice to Tenant, Tenant shall have the right to extend the term of this Lease for one (1) additional period (the "Extended Term") of four (4) years. The Extended Term shall commence on the day succeeding the expiration of the Original Term and shall end on the day immediately preceding the fourth anniversary of the commencement of the Extended Term. All of the terms, covenants and provisions of this Lease applicable immediately prior to the expiration of the then current term Original Term shall apply to the Extended Term except that (i) the Annual Fixed Rent for the Extended Term shall be ninety-five percent (95%) of the Market Rate (as hereinafter defined) for the Premises determined as of the commencement of such Extended Term, as designated by Landlord by notice to Tenant ("Landlord's Notice"), but subject to Tenant's right to dispute as hereinafter provided, Tenant shall have no further right to extend the term of this Lease beyond the Extended Term. If Tenant shall elect to exercise the aforesaid option, it shall do so by giving Landlord notice of its election (the "Election Notice") not sooner than one (1) year, nor later than eight (8) months, prior to the expiration of the Original Term. If Tenant fails to give such Election Notice to Landlord, the term of this Lease shall automatically terminate no later than the end of the Original Term, and Tenant shall have no further option to extend the term of this Lease, it being agreed that time is of the essence with respect to the giving of such Election Notice. If Tenant shall extend the term hereof pursuant to the provisions of this Section 2.3, such extension shall (subject to satisfaction of the Conditions, unless waived by Landlord) be automatically effected without the execution of any additional documents, but Tenant shall, at Landlord's request, execute an agreement confirming the Annual Fixed Rent for the Extended Term. The "Conditions" are that, as of the date of the Election Notice there shall exist no Default of Tenant and the named Tenant as set forth in Section 1.1 (or



any successor by Merger, or any Affiliate as defined in Section 6.2.1) shall actually occupy the entire Premises.

Notwithstanding any provision of this Section 2.3 to the contrary, if Landlord's Notice shall contain the Relocation Request, then Tenant may withdraw and cancel its Election Notice by notice given to Landlord not later than twenty (20) days after Landlord's Notice (time being of the essence), in which case Tenant's Election Notice shall be null, void and of no effect and the term of this Lease shall expire not later than the expiration of the Original Term as if the Election Notice had never been given. If Tenant shall not withdraw the Election Notice timely, then Landlord may relocate Tenant in accordance with the Relocation Request and Section 2.1, and in such case, all references in this Section 2.3 to the "Premises" shall be deemed to refer to the substitute space identified in the Relocation Request

"Market Rate" shall mean the then fair market annual rent for the Premises for the Extended Term (determined as set forth below). Landlord shall give Tenant Landlord's Notice within thirty (30) days after Landlord's receipt of the Election Notice if so requested by Tenant in the Election Notice. If Tenant disagrees with Landlord's designation of the Market Rate, then Tenant shall give notice thereof to Landlord within twenty (20) days after Landlord's Notice (failure to provide such notice of disagreement within such 20-day period constituting acceptance by Tenant of Market Rate as set forth in Landlord's Notice); and if the parties cannot agree upon the Market Rate by the date that is thirty (30) days following Landlord's Notice, then either (i) Tenant shall withdraw and cancel its Election Notice by notice given to Landlord not later than five (5) Business Days after the expiration of such thirty (30) day period (time being of the essence), in which case the Election Notice shall be null, void and of no effect and the term of this Lease shall expire not later than the ten current term as if the Election Notice had never been given, or (ii) if Tenant shall not have withdrawn its Election Notice timely, the Market Rate shall be submitted to appraisal as follows: Within fifteen (15) days after the expiration of such thirty (30) day period, Landlord and Tenant shall each give notice to the other specifying the name and address of the appraiser each has chosen. The two appraisers so chosen shall meet within ten (10) days after the second appraiser is appointed and if, within twenty (20) days after the second appraiser is appointed, the two appraisers shall not agree upon a determination of the Market Rate in accordance with the following provisions of this Section 2.3 they shall together appoint a third appraiser. If only one appraiser shall be chosen whose name and address shall have been given to the other party within such fifteen (15) day period and who shall have the qualifications hereinafter set forth, that sole appraiser shall render the decision which would otherwise have been made as hereinabove provided.

If said two appraisers cannot agree upon the appointment of a third appraiser within ten (10) days after the expiration of such twenty (20) day period, then either party, on behalf of both and on notice to the other, may request such appointment by the then President of the Real Estate Board (or any similar or successor organization) for the greater Boston area in accordance with its then prevailing rules. If said President shall fail to appoint said third appraiser within ten (10) days after such request is made, then either party, on behalf of both and on notice to the other, may request such appointment by the American Arbitration Association (or any successor organization) in accordance with its then prevailing rules. In the event that all three appraisers cannot agree upon such Market Rate within ten (10) days after the third appraiser shall have been selected, then each appraiser shall submit his or her designation of such Market Rate to the other

two appraisers in writing; and Market Rate shall be determined by calculating the average of the two numerically closest (or, if the values are equidistant, all three) values so determined.

Each of the appraisers selected as herein provided shall have at least ten (10) years experience as a commercial real estate broker in the Cambridge, Massachusetts market dealing with properties of the same type and quality as the Building. Each party shall pay the fees and expenses of the appraiser it has selected and the fees of its own counsel. Each party shall pay one half (1/2) of the fees and expenses of the third appraiser (or the sole appraiser, if applicable) and all other expenses of the appraisal. The decision and award of the appraiser(s) shall be in writing and shall be final and conclusive on all parties, and counterpart copies thereof shall be delivered to both Landlord and Tenant. Judgment upon the award of the appraiser(s) may be entered in any court of competent jurisdiction.

The appraiser(s) shall determine the Market Rate of the Premises for the Extended Term and render a decision and award as to their determination to both Landlord and Tenant (a) within twenty (20) days after the appointment of the second appraiser, (b) within twenty (20) days after the appointment of the third appraiser or (c) within fifteen (15) days after the appointment of the sole appraiser, as the case may be. In rendering such decision and award, the appraiser(s) shall assume (i) that neither Landlord nor the prospective tenant is under a compulsion to rent and that Landlord and Tenant are typically motivated, well-informed and well-advised, and each is acting in what it considers its own best interest, (ii) the Premises are fit for immediate occupancy and use "as is", and (iii) that in the event the Premises have been destroyed or damaged by fire or other casualty prior to the commencement of the Extended Term, they have been fully restored. The appraisers shall also take into consideration the rents contained in leases for comparable space in the Building or in comparable buildings in the same Cambridge, Massachusetts market as the Building, for comparable periods of time, any material economic differences between the terms of this Lease and any comparison lease and other factors normally taken into account in determining fair market rental rates.

If the dispute between the parties as to the Market Rate has not been resolved before the commencement of Tenant's obligation to pay the Annual Fixed Rent based upon determination of such Market Rate, then Tenant shall pay the Annual Fixed Rent under the Lease based upon the Market Rate designated by Landlord in Landlord's Notice until either the agreement of the parties as to the Market Rate, or the decision of the appraiser(s), as the case may be, at which time Tenant shall pay any underpayment of the Annual Fixed Rent to Landlord, or Landlord shall refund any overpayment of the Annual Fixed Rent to Tenant.

Landlord and Tenant hereby waive the right to an evidentiary hearing before the appraiser(s) and agree that the appraisal shall not be an arbitration nor be subject to state or federal law relating to arbitrations.

2.4 Measurement of the Premises. Landlord and Tenant agree that the Premises Rentable Area identified in Section 1.1 is an estimate only and that, although the Annual Fixed Rent has been determined by reference to such square footage (regardless of the possibility that the actual measurement of the Premises may be more or less than the number identified, irrespective of measurement method used), Annual Fixed Rent and Tenant's Percentage shall not be changed except as expressly provided in this Lease.

## ARTICLE 3

### Commencement and Condition

3.1 Commencement Date. The Commencement Date shall be the later of (i) the date on which Landlord delivers the Premises to Tenant in the condition required by Section 3.2, or (ii) April 15, 2012. Notwithstanding the foregoing, if Tenant's personnel shall occupy all or any part of the Premises for the conduct of its business (which shall not include occupancy solely for the purposes specified in Section 3.3) prior to the Commencement Date as determined pursuant to the preceding sentence, such date of occupancy shall, for all purposes of this Lease, be the Commencement Date.

3.2 Condition of the Premises. Landlord, at its sole cost and expense, shall repaint the Premises and replace the carpeting in the Premises using Building standard paint and carpeting in colors selected by Tenant from among the Building standard options (collectively, "Landlord's Work"). Landlord shall complete Landlord's Work prior to the Commencement Date and Tenant agrees to accept the Premises with Landlord's Work completed and otherwise in "as is" condition as of the Date of this Lease, but subject to Landlord's obligations under the under Article 5.

3.3 Early Access. Commencing approximately three (3) weeks prior to the date on which Landlord's Work is expected to be substantially complete (and provided Tenant shall have delivered to Landlord the evidence of insurance required by Section 4.4.), Tenant and its contractors shall have access to the Premises for the purposes of installing telephone and computer cabling, furniture and business equipment to the extent such work shall not delay or interfere with the performance of Landlord's Work. In connection with such access, Tenant agrees (i) to cease promptly upon notice from Landlord any activity or work which has not been approved by Landlord (where such approval is required) or is not in compliance with the provisions of this Lease or which shall interfere with or delay the performance of Landlord's Work, and (ii) to comply and cause its contractors to comply promptly with all reasonable procedures prescribed by Landlord from time to time for coordinating work being performed by Landlord and work being performed by Tenant, each with the other. Such access by Tenant shall be deemed to be subject to all of the applicable provisions of this Lease, except that Tenant shall not be required to commence payment of Annual Fixed Rent nor shall Tenant be deemed to have accepted possession of the Premises solely by reason of such early access. If Tenant fails or refuses to comply or cause its contractors to comply with any of the obligations described or referred to above, then immediately upon notice to Tenant, Landlord may revoke Tenant's rights of access to the Premises until the Commencement Date.

## ARTICLE 4

### Rent, Additional Rent, Insurance and Other Charges

4.1 The Annual Fixed Rent. Tenant agrees to pay to Landlord's Agent, or as otherwise directed in writing by Landlord, commencing on the Rent Commencement Date, without offset, abatement (except as provided in Article 7), deduction or demand, the Annual Fixed Rent. Annual Fixed Rent shall be payable in equal monthly installments, in advance, on

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the first day of each and every calendar month during the term of this Lease, at the Original Address of Landlord, or at such other place as Landlord shall from time to time designate by notice, by one or more checks drawn on a domestic bank.

Annual Fixed Rent for any partial month shall be prorated on a daily basis (based on a 360 day year), and if Annual Fixed Rent commences on a day other than the first day of a calendar month, the first payment which Tenant shall make to Landlord shall be payable on the date Annual Fixed Rent commences and shall be equal to such pro-rated amount plus the installment of Annual Fixed Rent for the succeeding calendar month.

Notwithstanding the foregoing provisions of this Section 4.1, Landlord may require that Tenant pay the first installment of Annual Fixed Rent due under this Lease as hereinabove provided upon execution of this Lease, in which event said payment shall be credited against the amount of Annual Fixed Rent due from Tenant on the date Annual Fixed Rent commences as hereinabove provided.

4.2 Additional Rent. Tenant covenants and agrees to pay Tenant's Percentage of increases in Taxes and Operating Costs as provided in Sections 4.2.1 and 4.2.2, and all other charges and amounts payable by or due from Tenant to Landlord (all such amounts referred to in this sentence being "Additional Rent").

4.2.1 Real Estate Taxes. If Taxes (as hereinafter defined) assessed against the Property (or estimated to be due by governmental authority) for any fiscal tax period (a "Tax Year") during the term of this Lease shall exceed Base Taxes, whether due to increase in rate or reassessment of the Property, or both, Tenant shall reimburse Landlord therefor, as Additional Rent, in an amount equal to Tenant's Percentage of any such excess (the "Tax Excess").

Tenant shall pay to Landlord, as Additional Rent on the first day of each calendar month during the term but otherwise in the manner provided for the payment of Annual Fixed Rent, estimated payments on account of the Tax Excess, such monthly amounts to be sufficient to provide Landlord by the time Tax payments are due or are to be made by Landlord a sum equal to the Tax Excess, as reasonably estimated by Landlord from time to time on account of Taxes for the then current Tax Year. Within a reasonable time after the end of each Tax Year, Landlord shall give Tenant a written statement of the amount of the Taxes for such Tax year and the Tax Excess (if any) for such Tax Year. If the total of such monthly remittances for any Tax Year as shown by such year-end statement is greater than the Tax Excess for such Tax Year, Landlord shall credit such overpayment against Tenant's subsequent obligations on account of Taxes (or promptly refund such overpayment if the term of this Lease has ended and Tenant has no further obligations to Landlord); if the total of such remittances is less than the Tax Excess for such Tax Year, Tenant shall pay the difference to Landlord within ten (10) days after being so notified by Landlord.

If, after Tenant shall have made all payments due to Landlord pursuant to this subsection 4.2.1, Landlord shall receive a refund of any portion of Taxes as a result of an abatement of such Taxes by legal proceedings, settlement or otherwise (without either party having any obligation to undertake any such proceedings), Landlord shall pay or credit to Tenant Tenant's Percentage of that percentage of the refund (after first deducting any expenses, including attorneys',

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consultants' and appraisers' fees, incurred in connection with obtaining any such refund) which equals the percentage of the applicable Tax Year included in the term hereof, provided however, in no event shall Tenant be entitled to receive more than the sum of payments actually made by Tenant on account of Taxes with respect to such Tax Year or to receive any payment if Taxes for any Tax Year are less than Base Taxes.

In the event that the Commencement Date shall occur or the term of this Lease shall expire or be terminated during any Tax Year, or should the Tax Year or period of assessment of real estate taxes be changed or be more or less than one (1) year, or should Tenant's Percentage be modified during any Tax Year due to a change in the rentable area of the Building and/or the Premises or otherwise, as the case may be, then the amount of Tax Excess which may be otherwise payable by Tenant as provided in this subsection 4.2.1 shall be pro-rated on a daily basis based on a 360 day Tax Year.

"Taxes" shall mean all taxes, assessments, excises and other charges and impositions which are general or special, ordinary or extraordinary, foreseen or unforeseen, of any kind or nature which are levied, assessed or imposed by any governmental authority upon or against or with respect to the Property, Landlord or the owner or lessee of personal property used by or on behalf of Landlord in connection with the Property, or taxes in lieu thereof, and additional types of taxes to supplement real estate taxes due to legal limits imposed thereon. If at any time any tax or excise on rents or other taxes, however described, are levied or assessed against Landlord, either wholly or partially in substitution for, or in addition to, real estate taxes assessed or levied on the Property, such tax or excise on rents from the Property shall be included in Taxes; however, Taxes shall not include franchise, estate, inheritance, succession, capital levy, income (except to the extent that a tax on income or revenue is levied solely on rental revenues and not on other types of income and then only from rental revenue generated by the Property) or excess profits taxes assessed on Landlord, nor shall Taxes include any penalties or fees for Landlord's impermissible late payment of any Taxes. Taxes also shall include all court costs, attorneys', consultants' and accountants' fees, and other expenses incurred by Landlord in analyzing and contesting Taxes through and including all appeals. Taxes shall include any estimated payment made by Landlord on account of a fiscal tax period for which the actual and final amount of taxes for such period has not been determined by the governmental authority as of the date of any such estimated payment.

4.2.2 Operating Costs. If, during the term hereof, Operating Costs (as hereinafter defined) paid or incurred by Landlord in any twelve-month period established by Landlord (an "Operating Year") shall exceed Base Operating Costs, Tenant shall reimburse Landlord for the Tenant's Percentage of any such excess (such amount being hereinafter referred to as the "Operating Cost Excess"). Except as otherwise provided in the immediately following paragraph Tenant shall pay the Operating Cost Excess to Landlord within twenty (20) days from the date Landlord shall furnish to Tenant an itemized statement thereof, prepared, allocated and computed in accordance with then prevailing customs and practices of the real estate industry in the greater Boston area, consistently applied.

At the election of Landlord, Tenant shall pay to Landlord, as Additional Rent on the first day of each calendar month during the term but otherwise in the manner provided for the payment of Annual Fixed Rent, estimated payments on account of Operating Cost Excess, such

monthly amounts to be sufficient to provide to Landlord, by the end of each Operating Year, a sum equal to the Operating Cost Excess for such Operating Year, as estimated by Landlord from time to time during such Operating Year. If, at the expiration of each Operating Year in respect of which monthly installments of Operating Cost Excess shall have been made as aforesaid, the total of such monthly remittances is greater than the Operating Cost Excess for such Operating Year, Landlord shall credit such overpayment against Tenant's subsequent obligations on account of Operating Costs (or promptly refund such overpayment if the term of this Lease has ended and Tenant has no further obligation to Landlord); if the total of such remittances is less than the Operating Cost Excess for such Operating Year, Tenant shall pay the difference to Landlord within ten (10) days after being so notified by Landlord. In no event shall Tenant be entitled to receive any reimbursement or credit if Operating Costs for any Operating Year are less than Base Operating Costs.

In the event that the Commencement Date shall occur or the term of this Lease shall expire or be terminated during any Operating Year or Tenant's Percentage shall be modified during any Operating Year due to a change in the rentable area of the Building and/or the Premises or otherwise, as the case may be, then the amount of Operating Cost Excess which may be payable by Tenant as provided in this subsection 4.2.2 shall be pro-rated on a daily basis based on a 360 day Operating Year.

"Operating Costs" shall be all costs and expenses paid or incurred for the operation, cleaning, management, maintenance, insurance, repair, replacement, decoration, upkeep, protection and security of the Property or any part or component thereof.

If, during the term of this Lease, Landlord shall make any capital expenditure, the total cost thereof shall not be included in Operating Costs for the Operating Year in which it was made, except that Landlord may include in Operating Costs for the Operating Year in which such expenditure was made and in Operating Costs for each succeeding Operating Year an annual charge off of such capital expenditure, provided such expenditure is (i) made to comply with any law, rule, regulation, order or ordinance with which the Property complied, or was not required to comply, prior to the Commencement Date, or with any amendment or change in interpretation of any such law, rule, regulation, order or ordinance after the Commencement Date, or (ii) designed to reduce Operating Costs over time. Annual charge-offs shall be equal to the level payments of principal and interest necessary to amortize the original capital expenditure over the useful life of the improvement, repair, alteration or replacement made with the capital expenditure using an interest rate reasonably determined by Landlord as being the interest rate being charged at the time of the original capital expenditure for long-term mortgages by institutional lenders on like properties within the greater Boston metropolitan area, as determined reasonably by Landlord, provided, however, that with respect to expenditures designed to reduce Operating Costs, the annual charge-off may be equal to the yearly cost savings achieved.

Notwithstanding the foregoing, Operating Costs shall not include any of the following:

(a) Cost of repairs, restoration or other work occasioned by fire, windstorm, or any other casualty or by the exercise of the right of eminent domain; or voluntary conveyances made in lieu of condemnation.

(b) Leasing commissions, attorney's fees, costs and disbursements and any other expenses incurred in connection with marketing, negotiating and leasing space at the Building and/or in connection with negotiation, collection or resolution of disputes with current or prospective tenants or other occupants of the Building.

(c) Construction allowances, free rent and any other cash or non-cash concessions, allowances or inducements granted to other tenants or occupants (including "takeover expenses" undertaken with respect to space in other properties), and all costs of renovating or otherwise improving, furnishing, decorating, painting and making rentable areas ready for other tenants or occupants of the Building.

(d) Costs of utilities and services for which Landlord is entitled to separate reimbursement from tenants other than through an operating cost recovery provision.

(e) Costs of electricity provided to the premises of any other tenant or occupant.

(f) Costs incurred in connection with services that are provided to other tenants or occupants, or to vacant space, but are not provided to Tenant without separate additional charge.

(g) Costs (for materials, labor or other services) which Tenant has reimbursed to Landlord separately or paid directly to third persons.

(h) Interest, principal payments and any other charges, costs or expenses or debt, amortization payments on any loan, mortgage or other financing arrangement, and rent or other amounts payable under any ground, master or other underlying lease or leases.

(i) Non-cash items such as depreciation and amortization except for the annual charge off of the cost of capital expenditures as provided above.

(j) Contributions to operating, capital, maintenance and other reserves of any kind.

(k) Insurance deductibles.

(l) Costs, penalties, fines and any other expenses incurred as a result of Landlord or any tenant or other occupant (an "Other Person") having violated or failed to comply with the terms, conditions or other requirements of any lease or any applicable laws.

(m) Costs and expenses necessitated by the negligence or willful misconduct of any Other Person, its employees, contractors or agents.

(n) Costs for removing, abating or otherwise remediating any hazardous materials, including but not limited to asbestos, radon, chlorofluorocarbons and any other hazardous substances which Landlord is obligated to remove in order to comply with applicable Environmental Laws.

(o) Amounts paid to Landlord, or its subsidiaries or affiliates, for materials or services furnished by them in connection with the operation of the Building, but only to the extent that such amounts exceed competitive market rates for similar materials or services.

- (p) Landlord's general corporate overhead and general administrative costs and expenses (as distinguished from costs incurred in the operation of the Property), including compensation paid to officers or executives of Landlord above the level of property manager.
- (q) Property management fees or other charges for management services in excess of \$50,000.00 per year.
- (r) Advertising and promotional expenditures, travel and entertainment expenses, registration and convention fees.
- (s) Costs incurred in connection with the sale or other transfer of the Building.
- (t) Costs incurred by Landlord in connection with the Overlease, as defined in Section 9.1 of this Lease, unrelated to the operation of the Property.

In addition, if during any portion of any Operating Year for which Operating Costs are being computed, less than ninety-five percent (95%) of the rentable area of the Building was leased to tenants or if Landlord is supplying less than ninety-five percent (95%) of the rentable area of the Building with the services and utilities being supplied hereunder, Landlord may, at its option, reasonably project, on an item-by-item basis, the Operating Costs that would have been incurred if ninety-five percent (95%) of the Building were occupied for such Operating Year and such services and utilities were being supplied to ninety-five percent (95%) of the rentable area of the Building, and such projected amount shall, for the purposes hereof, be deemed to be the Operating Costs for such Operating Year. For purposes of the "gross up" provision contained in this paragraph, Landlord shall only increase Operating Costs which by their nature vary based on the occupancy of the Building. Landlord will not increase those Operating Costs which by their nature are fixed independently of the level of occupancy of the Building.

Provided Tenant shall have paid all amounts invoiced by Landlord on account of Operating Costs for the applicable Operating Year, Landlord shall permit Tenant, at Tenant's sole cost and expense except as hereinafter provided, to review any of Landlord's invoices and statements relating to Operating Costs for such Operating Year, at the place where such invoices and statements are customarily maintained by Landlord, provided such review is requested by notice given to Landlord (the "Review Notice") within one hundred and twenty (120) days after Tenant's receipt of Landlord's year-end statement of Operating Costs for the applicable Operating Year (the "Final Statement") and thereafter undertaken by Tenant or its accountants (provided such accountants are compensated on an hourly or lump-sum basis and not on a contingency fee basis) with due diligence. If Tenant objects to Landlord's accounting of any Operating Costs, Tenant shall, not later than the later to occur of (i) the last day on which Tenant may give a Review Notice, or (ii) thirty (30) days after Landlord makes its invoices and statements available to Tenant if Tenant has given Landlord a Review Notice timely, give Landlord a notice (the "Dispute Notice") that Tenant disputes the correctness of such accounting, specifying the particular items which Tenant claims are incorrect. If Tenant shall not give a Dispute Notice timely, then Tenant shall be deemed to have waived any and all objections to such Final Statement. If any such dispute has not been settled by agreement within two (2) months thereafter, either party may submit the dispute to arbitration in accordance with the commercial arbitration rules of the American Arbitration Association. The decision of the

arbitrators shall be final and binding on Landlord and Tenant and judgment thereon may be entered in any court of competent jurisdiction.

If it should be agreed or decided that Operating Costs were overstated by five percent (5%) or more, then Landlord shall promptly reimburse Tenant for the reasonable costs incurred by Tenant in reviewing Landlord's invoices and statements, Tenant's reasonable arbitration costs, plus any excess amount paid by Tenant on account of overstated Operating Costs with interest at the Default Rate. If it should be agreed or decided that Operating Costs were not overstated at all, then Tenant shall, as Additional Rent, promptly reimburse Landlord for its costs incurred in the arbitration and in preparing for Tenant's review of invoices and statements, and if it should be agreed or decided that Operating Costs shall have been understated or Tenant shall not have paid Tenant's Operating Cost Excess in full, Tenant shall, as Additional Rent, promptly pay any deficiency. In the event of an overstatement which is less than five percent (5%), Landlord shall reimburse Tenant for the excess amount paid by Tenant on account of overstated Operating Costs without interest and each party shall be responsible for its own costs incurred in connection with such dispute. Tenant shall keep confidential all agreements involving the rights provided in this section and the results of any audits or arbitration conducted hereunder. Notwithstanding the foregoing, Tenant shall be permitted to furnish the foregoing information to its attorneys and accountants to the extent necessary to perform their respective service for Tenant.

4.3 Personal Property and Sales Taxes. Tenant shall pay all taxes charged, assessed or imposed upon the personal property of Tenant and all taxes on the sales of services or inventory, merchandise and any other goods by Tenant in or upon the Premises.

4.4 Insurance.

4.4.1 Insurance Policies. Tenant shall, at its expense, take out and maintain, throughout the term of this Lease, the following insurance:

4.4.1.1 Commercial general liability insurance (on an occurrence basis, including without limitation, broad form contractual liability, bodily injury, property damage, fire legal liability, and products and completed operations coverage) under which Tenant is named as an insured and Landlord and Landlord's Agent (and the holder of any mortgage on the Premises or Property, as set out in a notice from time to time) are named (on a 1993 ISO CGL Form or its equivalent) as additional insureds as their interests may appear, in an amount which shall, at the beginning of the term, be at least equal to the Commercial General Liability Insurance Limits, and, which, from time to time during the term, shall be for such higher limits, if any, as Landlord shall determine to be customarily carried in the area in which the Premises are located at property comparable to the Premises and used for similar purposes;

4.4.1.2 Worker's compensation insurance with statutory limits covering all of Tenant's employees working on the Premises;

and

4.4.1.3 So-called "special form" property insurance on a "replacement cost" basis with an agreed value endorsement covering all furniture, furnishings, fixtures and equipment and other personal property brought to the Premises by Tenant or any party claiming



under Tenant and all improvements and betterments to the Premises performed at Tenant's expense; and

4.4.1.4 So-called "business income and extra expense" insurance covering twelve months loss of income.

4.4.2 Requirements. All such policies shall contain deductibles not in excess of that reasonably approved by Landlord, shall contain a clause confirming that such policy and the coverage evidenced thereby shall be primary with respect to any insurance policies carried by Landlord and shall be obtained from responsible companies qualified to do business and in good standing in the state or district in which the Property is located, which companies shall have a general policy holder's rating in Best's of at least A+ X or otherwise be acceptable to Landlord. A copy of each paid-up policy evidencing such insurance (appropriately authenticated by the insurer) or a certificate (on ACORD) Form 28 or its equivalent) of the insurer, certifying that such policy has been issued and paid in full, providing the coverage required by this Section and containing provisions specified herein, shall be delivered to Landlord prior to the commencement of the term of this Lease and, upon renewals, not less than thirty (30) days prior to the expiration of such coverage. Each such policy shall be non-cancelable and not materially changed with respect to the interest of Landlord and such mortgagees of the Property (and others that are in privity of estate with Landlord of which Landlord provides notice to Tenant from time to time) without at least thirty (30) days' prior written notice thereto. Any insurance required of Tenant under this Lease may be furnished by Tenant under a blanket policy carried by it provided that such blanket policy shall reference the Premises, and shall guarantee a minimum limit available for the Premises equal to the insurance amounts required in this Lease. Landlord may, at any time, and from time to time, inspect and/or copy any and all insurance policies required to be procured by Tenant hereunder.

4.4.3 Waiver of Subrogation. Landlord and Tenant shall each endeavor to secure an appropriate clause in, or an endorsement upon, each property damage insurance policy obtained by it and covering the Building, the Premises or the personal property, fixtures and equipment located therein or thereon, pursuant to which the respective insurance companies waive subrogation and permit the insured, prior to any loss, to agree with a third party to waive any claim it might have against said third party. The waiver of subrogation or permission for waiver of any claim hereinbefore referred to shall extend to the agents of each party and its employees and, in the case of Tenant, shall also extend to all other persons and entities occupying or using the Premises by, through or under Tenant. If and to the extent that such waiver or permission can be obtained only upon payment of an additional charge then the party benefiting from the waiver or permission shall pay such charge upon demand, or shall be deemed to have agreed that the party obtaining the insurance coverage in question shall be free of any further obligations under the provisions hereof relating to such waiver or permission from such insurance companies.

Subject to the foregoing provisions of this Subsection 4.4.3, and insofar as may be permitted by the terms of the property insurance policies carried by it, each party hereby releases the other with respect to any claim which it might otherwise have against the other party for any loss or damage to its property to the extent such damage is actually covered or would have been

covered by policies of property insurance required by this Lease to be carried by the respective parties hereunder. In addition, Tenant agrees to exhaust any and all claims against its insurer(s) prior to commencing an action against Landlord for any loss covered by insurance required to be carried by Tenant hereunder.

4.5 Utilities. Tenant shall during the term pay all electricity charges allocable to the Premises and all charges for telephone and other utilities or services not supplied by Landlord pursuant to Subsections 5.1.1 and 5.1.2, whether designated as a charge, tax, assessment, fee or otherwise, all such charges to be paid as the same from time to time become due. Except as otherwise provided in Article 5, it is understood and agreed that Tenant shall make its own arrangements for the installation or provision of all utilities and services and that Landlord shall be under no obligation to furnish any utilities to the Premises.

Tenant acknowledges that Annual Fixed Rent does not include the cost of supplying electricity to the Premises (including the electricity required to operate the heat pumps serving the Premises). The Premises are separately metered for electricity usage and Tenant shall contract directly with the utility company for a supply of electricity to the Premises and shall pay all bills for such electricity to the utility company furnishing the same when due.

4.6 Late Payment of Rent. If any installment of Annual Fixed Rent or Additional Rent is not paid on or before the date the same is due, it shall bear interest (as Additional Rent) from the date due until the date paid at the Default Rate (as defined in Section 8.4). In addition, if any installment of Annual Fixed Rent or Additional Rent is unpaid for more than five (5) days after the date due, Tenant shall pay to Landlord a late charge equal to the greater of One Hundred Dollars (\$100) or five percent (5%) of the delinquent amount. The parties agree that the amount of such late charge represents a reasonable estimate of the cost and expense that would be incurred by Landlord in processing and administration of each delinquent payment by Tenant, but the payment of such late charges shall not excuse or cure any default by Tenant under this Lease. Absent specific provision to the contrary, all Additional Rent shall be due and payable in full thirty (30) days after demand by Landlord.

4.7 Security Deposit. Upon execution of this Lease, Tenant shall deposit with Landlord the Security Deposit. The Security Deposit shall be held by Landlord as security for the faithful performance of all the terms of this Lease to be observed and performed by Tenant. The Security Deposit shall not be mortgaged, assigned, transferred or encumbered by Tenant and any such act on the part of Tenant shall be without force and effect and shall not be binding upon Landlord. Tenant shall cause the Security Deposit to be maintained throughout the term in the amount set forth in Section 1.1.

If the Annual Fixed Rent or Additional Rent payable hereunder shall be overdue and unpaid or should Landlord make any payment on behalf of the Tenant, or Tenant shall fail to perform any of the terms of this Lease, then Landlord may, at its option and without prejudice to any other remedy which Landlord may have on account thereof, appropriate and apply the entire Security Deposit or so much thereof as may be necessary to compensate Landlord toward the payment of Annual Fixed Rent, Additional Rent or other sums or loss or damage sustained by Landlord due to such breach by Tenant, provided that Landlord shall not appropriate and apply the Security Deposit on account of any breach of this Lease by Tenant unless Tenant's breach of

this Lease shall have ripened into a Default of Tenant (i.e. after any applicable notice and expiration of any applicable cure period); and Tenant shall forthwith upon demand restore the Security Deposit to the amount stated in Section 1.1 upon written demand by Landlord, and until Tenant shall have so restored the Security Deposit to the amount required by Section 1.1, Tenant shall be deemed to be in default in the payment of Additional Rent for purposes of Section 8.1(a)(I) hereof. So long as Tenant shall not be in default of its obligations under this Lease, Landlord shall return the Security Deposit, or so much thereof as shall have not theretofore been applied in accordance with the terms of this Section 4.7, to Tenant promptly following the expiration or earlier termination of the term of this Lease and the surrender of possession of the Premises by Tenant to Landlord in accordance with the terms of this Lease. While Landlord holds the Security Deposit, Landlord shall have no obligation to pay interest on the same and shall have the right to commingle the same with Landlord's other funds. If Landlord conveys Landlord's interest under this Lease, the Security Deposit, or any part thereof not previously applied, shall be turned over by Landlord to Landlord's grantee, and Tenant shall look solely to such grantee for proper application of the Security Deposit in accordance with the terms of this Section 4.7 and the return thereof in accordance herewith. The holder of a mortgage on the Property shall not be responsible to Tenant for the return or application of the Security Deposit, whether or not it succeeds to the position of Landlord hereunder, unless such holder actually receives the Security Deposit.

## ARTICLE 5

### Landlord's Covenants

5.1 Affirmative Covenants. Landlord shall, during the term of this Lease provide the following:

5.1.1 Heat and Air-Conditioning. Landlord shall provide tempered water for the operation of the heat pumps in the Premises sufficient to maintain the Premises at comfortable temperatures for general office use, subject to all federal, state and municipal regulations, during Normal Building Operating Hours (as defined in the Rules and Regulations) and subject to compliance by Tenant with the following and the provisions of Section 6.2.4 (reserving the right, at any time, to change energy or heat sources). In addition, Landlord shall provide reasonable heat, ventilation and air-conditioning ("HVAC") to the common areas of the Property. If Tenant shall require heat or air-conditioning at times other than Normal Building Operating Hours, Landlord may furnish tempered water to operate Tenant's heat pumps at such times and Tenant shall pay therefor such charges as may from time to time be in effect. If the temperature otherwise maintained in any portion of the Premises is adversely affected as a result of (i) the type or quantity of any lights, machines or equipment used by Tenant in the Premises, (ii) the occupancy of any portion of the Premises by more than one person per two hundred (200) square feet of rentable area, (iii) an electrical load for lighting or power in excess of the limits specified in Section 6.2.4, or (iv) any partitioning or other improvements installed by Tenant, then at Tenant's sole but reasonable cost, Landlord may install any equipment, or modify any existing equipment Landlord deems necessary to restore the temperature balance. Tenant agrees to keep closed, when necessary, blinds or other window treatments which, because of the sun's position, must be closed to provide for the efficient operation of the air conditioning system, and Tenant agrees to cooperate with Landlord and to abide by the reasonable regulations and requirements

which Landlord may prescribe for the proper functioning and protection of the heat pumps and Building HVAC system.

5.1.2 Cleaning; Water. Landlord shall provide cleaning, maintenance and landscaping to the common areas of the Building and Property (including snow removal to the extent necessary to maintain reasonable access to the Building) in accordance with standards generally prevailing throughout the term hereof in comparable office buildings in Cambridge, Massachusetts; furnish water for ordinary drinking, lavatory and toilet facilities (as opposed to special laboratory or other uses in excess of general office uses) and cause the Premises to be cleaned on Business Days (as defined in the Rules and Regulations) in accordance with standards of comparable office buildings in Cambridge, Massachusetts. Tenant shall pay to Landlord upon invoice the actual costs incurred by Landlord for (x) extra cleaning work in the Premises required because of carelessness, indifference, misuse or neglect on the part of Tenant or its subtenants or its or their employees or visitors, and (y) removal from the Premises and the Building of any refuse and rubbish of Tenant in excess of that ordinarily accumulated in business office occupancy, including, without limitation, kitchen refuse, or at times other than Landlord's standard cleaning times. Notwithstanding the foregoing, Landlord shall not be required to clean any portions of the Premises used for preparation, serving or consumption of food or beverages or other special purposes if same require greater or more difficult cleaning work than office areas, and Tenant agrees, at Tenant's expense, to retain Landlord's cleaning contractor to perform such extra cleaning, provided that the charges of such cleaning contractor shall be commercially reasonable.

Landlord, its cleaning contractor and their respective employees shall have access to the Premises after 6:00 p.m. and before 8:00 a.m. and shall have the right to use, without charge therefor, all light, power and water in the Premises reasonably required to clean the Premises as required hereunder.

5.1.3 Elevator, Lighting, Electricity. Landlord shall furnish non-exclusive passenger elevator service from the lobby to the Premises; purchase and install, as part of Operating Costs, all building standard lamps, tubes, bulbs, starters and ballasts for the Building-standard lighting fixtures in the Premises; provide lighting to public and common areas of the Property; and provide the common wiring, risers and conduits required for the utility company to furnish a supply of electrical power to the Premises to accommodate a load not exceeding the limitations contained in Section 6.2.4.

5.1.4 Repairs. Except as otherwise expressly provided herein, Landlord shall make such repairs and replacements to the heat pumps within the Premises, to the roof, exterior walls, floor slabs and other structural components of the Building, and to the common areas and facilities of the Building (including any common plumbing, electrical and HVAC equipment, elevators and any other common equipment or systems in the Building) as may be necessary to keep them in good repair and condition (exclusive of equipment installed by Tenant and except for those repairs required to be made by Tenant pursuant to Subsection 6.1.3 hereof and repairs or replacements occasioned by any act or negligence of Tenant, its servants, agents, customers, contractors, employees, invitees, or licensees).

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5.2 Interruption. Landlord shall have no responsibility or liability to Tenant for failure, interruption, inadequacy, defect or unavailability of any services, facilities, utilities, repairs or replacements or for any failure or inability to provide access or to perform any other obligation under this Lease caused by breakage, accident, fire, flood or other casualty, strikes or other labor trouble, order or regulation of or by any governmental authority, inclement weather, repairs, inability to obtain or shortages of utilities, supplies, labor or materials, war, civil commotion or other emergency, transportation difficulties or due to any act or neglect of Tenant or Tenant's servants, agents, employees or licensees or for any other cause beyond the reasonable control of Landlord, and in no event shall Landlord be liable to Tenant for any indirect or consequential damages suffered by Tenant due to any such failure, interruption, inadequacy, defect or unavailability; and failure or omission on the part of Landlord to furnish any of same for any of the reasons set forth in this paragraph shall not be construed as an eviction of Tenant, actual or constructive, nor entitle Tenant to an abatement of rent, nor render the Landlord liable in damages, nor release Tenant from prompt fulfillment of any of its covenants under this Lease.

Landlord reserves the right to deny access to the Building and to interrupt the services of the HVAC, plumbing, electrical or other mechanical systems or facilities in the Building when necessary from time to time by reason of accident or emergency, or for repairs, alterations, replacements or improvements which in the reasonable judgment of Landlord are desirable or necessary, until such repairs, alterations, replacements or improvements shall have been completed. Landlord shall use reasonable efforts to minimize the duration of any such interruption and to give to Tenant at least three (3) days' notice if service is to be interrupted, except in cases of emergency.

If due to Landlord's negligence or default, (i) the Premises or any portion thereof are unusable by Tenant for a period of more than five (5) consecutive Business Days following notice from Tenant due to (I) a lack of any of water, sewer, elevator service, access or electricity or (II) the failure by Landlord to perform repairs which Landlord is obligated to perform pursuant to Section 5.1.4, and (ii) Tenant shall, concurrently with the giving of such notice, discontinue use of the Premises or the portion thereof which is unusable as a result (other than for sporadic purposes such as salvage, security or retrieval of property), then as Tenant's sole remedy the Annual Fixed Rent and Additional Rent on account of Taxes and Operating Costs shall be equitably abated for such portion of the Premises rendered unusable for the period commencing on the expiration of such five (5) Business Day period and ending on the date that the Premises (or such portion) is rendered usable. If more than fifty percent (50%) of the Premises is rendered unusable and if Tenant shall vacate the entire Premises, then the aforesaid abatement shall be a full abatement. Any notice from Tenant pursuant to the first sentence of this paragraph shall expressly state that the failure of Landlord to cure any claimed default timely shall give rise to Tenant's rights of rent abatement. The provisions of this paragraph shall not apply to interruption caused by fire or other casualty (as to which Article 7 shall control).

5.3 Outside Services. In the event Tenant wishes to obtain services or to hire vendors relating to the Premises, Tenant shall first obtain the prior approval of Landlord for the installation and/or utilization of such services or vendors, which approval shall not be unreasonably withheld, conditioned or delayed. Such services shall include, but shall not be limited to, utility providers, security services, movers and equipment installers, but this Section

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5.3 shall not apply to mail or package delivery services, caterers, persons or firms servicing Tenant's business equipment at the Premises, or to the vendors of supplies, materials or other items used by Tenant in the ordinary conduct of its business. Notwithstanding any Landlord approval of the installation and/or utilization of such services or vendors, such installation and utilization shall be at Tenant's sole cost, risk and expense.

5.4 Access to Building. During Normal Building Operating Hours, the Building shall, subject to the provisions of Section 5.2, be open and access to the Premises shall be freely available, subject to the Rules and Regulations. During periods other than Normal Building Operating Hours, Tenant shall have access to the Premises, but such access shall also be subject to the Rules and Regulations. As of the Date of this Lease, access to the Building outside of Normal Building Operating Hours is by means of an electronic access control system. Landlord shall provide Tenant with a reasonable number of key cards for such system. The initial key cards shall be at no charge to Tenant. Landlord may charge a reasonable fee for any new or replacement access cards requested by Tenant from time to time sufficient to reimburse Landlord for the cost of providing such additional key cards. Tenant acknowledges that Tenant is responsible for providing security to the Premises following Tenant's entry onto the Premises for any reason and for its own personnel whenever located therein.

5.5 Indemnification. Subject to all limitations, waivers, exclusions and conditions contained in this Lease (each of which shall control in the event of any conflict or inconsistency with this Section 5.5), Landlord shall defend and indemnify Tenant and its directors, officers, agents and employees against and from any and all claims, liabilities or penalties asserted by or on behalf of any third party on account of bodily injury or damage to the property of such third party (excluding damage to the property of any subtenant or assignee of Tenant) arising out of the negligence, breach of this Lease or other wrongful conduct of Landlord or its agents, contractors or employees during the term of this Lease. In case of any action or proceeding brought against Tenant by reason of any such claim, Landlord, upon notice from Tenant, shall resist or defend such action or proceeding and employ counsel therefor reasonably satisfactory to Tenant.

## ARTICLE 6

### Tenant's Additional Covenants

6.1 Affirmative Covenants. Tenant shall do the following:

6.1.1 Perform Obligations. Tenant shall perform promptly all of the obligations of Tenant set forth in this Lease; and pay when due the Annual Fixed Rent and Additional Rent and all other amounts which by the terms of this Lease are to be paid by Tenant.

6.1.2 Use. Tenant shall, during the term of this Lease, use the Premises only for the Permitted Uses and from time to time to procure and maintain all licenses and permits necessary therefor and for any other use or activity conducted at the Premises, at Tenant's sole expense. The Permitted Uses shall expressly exclude use for utility company offices, or employment agency or governmental or quasi-governmental offices.

6.1.3 Repair and Maintenance. Tenant shall, during the term of this Lease, maintain the Premises in neat and clean order and condition and perform all repairs to the Premises and all fixtures, systems, and equipment therein (including Tenant's equipment and other personal property) as are necessary to keep them in good and clean working order, appearance and condition, reasonable use and wear thereof and damage by fire or by unavoidable casualty only excepted and shall replace any damaged or broken glass in windows and doors of the Premises (except glass in the exterior walls of the Building) with glass of the same quality as that damaged or broken.

6.1.4 Compliance with Law. Tenant shall, during the term of this Lease, make all repairs, alterations, additions or replacements to the Premises required by any law or ordinance or any order or regulation of any public authority; keep the Premises safe and equipped with all safety appliances so required; and comply with, and perform all repairs, alterations, additions or replacements required by, the orders and regulations of all governmental authorities with respect to zoning, building, fire, health and other codes, regulations, ordinances or laws applicable to the Premises or other portions of the Property and arising out of any particular use or manner of use of the Premises by Tenant (i.e. other than mere occupancy for general office purposes) or arising out of any work performed by Tenant, except that Tenant may (but only so long as (i) Landlord shall not be subject to any fine or charge, (ii) neither the Property nor any portion thereof shall be subject to being condemned or vacated and (iii) neither the Property nor any portion thereof shall be subject to any lien or encumbrance) defer compliance so long as the validity of any such law, ordinance, order or regulation shall be contested by Tenant in good faith and by appropriate legal proceedings, if Tenant first gives Landlord assurance or security against any loss, cost or expense on account thereof in form and amount acceptable to Landlord. Tenant shall use of the Premises in compliance with, and Tenant shall cause its employees, contractors and invitees to observe, all laws, codes and regulations of governmental authorities applicable to the Premises and Building, including, without limitation, those prohibiting or restricting smoking.

6.1.5 Indemnification. Tenant shall neither hold, nor attempt to hold, Landlord or its employees or Landlord's agents or their employees liable for, and Tenant shall indemnify and hold harmless Landlord, its employees and Landlord's agents and their employees from and against, any and all demands, claims, causes of action, fines, penalties, damage, liabilities, judgments and expenses (including, without limitation, attorneys' fees) incurred in connection with or arising from: (i) the use or occupancy or manner of use or occupancy of the Premises by Tenant or any person claiming under Tenant; (ii) any matter occurring on the Premises during the term; (iii) any acts, omissions or negligence of Tenant or any person claiming under Tenant, or the contractors, agents, employees, invitees or visitors of Tenant or any such person; (iv) any breach, violation or nonperformance by Tenant, or any person claiming under Tenant or the employees, agents, contractors, invitees or visitors of Tenant or any such person of any term, covenant or provision of this Lease or any law, ordinance or governmental requirement of any kind; and (v) any injury or damage to the person, property or business of Tenant, its employees, agents, contractors, invitees, visitors or any other person entering upon the Property under the express or implied invitation of Tenant. If any action or proceeding is brought against Landlord or its employees or Landlord's agents or their employees by reason of any such claim, Tenant, upon notice from Landlord, shall defend the same, at Tenant's expense, with counsel reasonably satisfactory to Landlord. Notwithstanding the foregoing in no event shall this Section 6.1.5

require Tenant to indemnify or defend Landlord or its employees or Landlord's agents or their employees against any loss, cost, damage, liability, claim, or expense to the extent arising out of the gross negligence or willful misconduct of Landlord or its employees or Landlord's agents or their employees.

6.1.6 Landlord's Right to Enter. Tenant shall, during the term of this Lease, permit Landlord and its agents and invitees to enter into and examine the Premises at reasonable times and to show the Premises to prospective lessees, lenders, partners and purchasers and others having a bona fide interest in the Premises, and to make such repairs, alterations and improvements and to perform such testing and investigation as Landlord shall reasonably determine to make or perform, and, during the last six (6) months prior to the expiration of this Lease, to keep affixed in suitable places notices of availability of the Premises. Except in instances posing an imminent threat to life or property, and except for any entry pursuant to the performance of Landlord's routine obligations under Article 5, Landlord shall give Tenant reasonable notice prior to making any entry onto the Premises, provided, however, notwithstanding Section 10.1 to the contrary, such notice may be made orally or by email.

6.1.7 Personal Property at Tenant's Risk. Tenant shall, during the term of this Lease keep, at the sole risk and hazard of Tenant, all of the furnishings, fixtures, equipment, effects and property of every kind, nature and description of Tenant and of all persons claiming by, through or under Tenant which may be on the Property.

6.1.8 Payment of Landlord's Cost of Enforcement. Tenant shall pay on demand Landlord's expenses, including reasonable attorneys' fees, incurred in enforcing any obligation of Tenant under this Lease or in curing any default by Tenant under this Lease as provided in Section 8.4.

6.1.9 Yield Up. Tenant shall, at the expiration or earlier termination of the term of this Lease, surrender all keys to the Premises; remove all of its trade fixtures and personal property in the Premises; remove such installations (including wiring and cabling wherever located), alterations, signs and improvements made (or if applicable, restore any items removed) by or on behalf of Tenant as Landlord may request, wherever located; repair all damage caused by such removal; and vacate and yield up the Premises (including all installations, alterations, signs and improvements made by or on behalf of Tenant except as Landlord shall request Tenant to remove), broom clean and in the same good order and repair in which Tenant is obliged to keep and maintain the Premises by the provisions of this Lease, damage by casualty and ordinary wear and tear excepted. If Landlord so requests, Tenant, at its sole cost and expense, shall properly cap or seal its wiring and cabling (wherever located) at each end, properly label such wiring and cabling for future use, and surrender such wiring and cabling in a good and safe condition on or before the earlier of (i) the expiration or earlier termination of the term of this Lease, or (ii) the date on which Tenant discontinues the use of such wiring and cabling. Any property not so removed shall be deemed abandoned and may be removed and disposed of by Landlord in such manner as Landlord shall determine and Tenant shall pay Landlord the entire cost and expense incurred by it in effecting such removal and disposition and in making any incidental repairs and replacements to the Premises and for use and occupancy during the period after the expiration or earlier termination of the term of this Lease and prior to the performance by Tenant of its obligations under this subsection 6.1.9.

6.1.10 Rules and Regulations. Tenant shall, during the term of this Lease, observe and abide by the Rules and Regulations of the Building set forth as Exhibit B, as the same may from time to time be amended, revised or supplemented (the "Rules and Regulations"). Tenant shall further be responsible for compliance with the Rules and Regulations by the employees, servants, agents and visitors of Tenant. The failure of Landlord to enforce any of the Rules and Regulations against Tenant, or against any other tenant or occupant of the Building, shall not be deemed to be a waiver of such Rules and Regulations. Tenant shall be liable for all injuries or damages sustained by Landlord or Landlord's agents or by other tenants, occupants or invitees of the Building arising by reason of any breach of the Rules or Regulations by Tenant or by Tenant's agents or employees.

6.1.11 Estoppel Certificate. Tenant shall, within ten (10) days' following written request by Landlord, execute, acknowledge and deliver to Landlord a statement in form satisfactory to Landlord in writing certifying that this Lease is unmodified and in full force and effect and that Tenant has no defenses, offsets or counterclaims against its obligations to pay the Annual Fixed Rent and Additional Rent and any other charges and to perform its other covenants under this Lease (or, if there have been any modifications, that this Lease is in full force and effect as modified and stating the modifications and, if there are any defenses, offsets or counterclaims, setting them forth in reasonable detail), the dates to which the Annual Fixed Rent and Additional Rent and other charges have been paid, and any other matter pertaining to this Lease. Any such statement delivered pursuant to this subsection 6.1.11 may be relied upon by any prospective purchaser or mortgagee of the Property, or any prospective assignee of such mortgage.

6.1.12 Landlord's Expenses For Consents. Tenant shall reimburse Landlord, as Additional Rent, promptly on demand for all reasonable out-of-pocket, third party legal, engineering and other professional services expenses incurred by Landlord in connection with all requests by Tenant for consent or approval hereunder.

6.2 Negative Covenants. Tenant shall not do the following.

6.2.1 Assignment and Subletting. Tenant shall not assign, mortgage, pledge, hypothecate, encumber or otherwise transfer this Lease or sublease (which term shall be deemed to include the granting of concessions and licenses and the like) all or any part of the Premises or suffer or permit this Lease or the leasehold estate hereby created or any other rights arising under this Lease to be assigned, transferred, mortgaged, pledged, hypothecated or encumbered, in whole or in part, whether voluntarily, involuntarily or by operation of law, or permit the use or occupancy of the Premises by anyone other than Tenant, or the Premises to be offered or advertised for assignment or subletting, except as hereinafter provided. .

Notwithstanding the preceding paragraph, so long as Health Care Ventures LLC is the tenant under this Lease, Tenant may allow the employees or principals of any entity owned in whole or in part by any investment fund managed by Tenant to occupy office space within the Premises and to share the use of the Premises with Tenant for the Permitted Uses without entering into a sublease, so long as such third parties utilize the same common areas within the Premises as Tenant and do not occupy more than two thirds (2/3) of the office space within the Premises in the aggregate. Provided Tenant shall have given Landlord notice of the name of any



such entity whose employees or principals shall occupy space in the Premises, Landlord agrees, as an accommodation to Tenant only, to accept payments of Annual Fixed Rent and Additional Rent for Taxes and Operating Costs from such entities that are delivered to Landlord by Tenant concurrently with Tenant's monthly payments of Annual Fixed Rent and Additional Rent in accordance with this Lease and to credit the same against the amounts thereof due from Tenant under this Lease. In addition, Landlord agrees to provide services and materials for or related to the Premises at the sole request of any such entity (Tenant hereby authorizing Landlord to provide such requested services or materials without notice to Tenant), and Tenant agrees that Tenant shall be liable for the cost of any such services or materials provided by Landlord that Landlord is not obligated by this Lease to provide on a rent inclusion basis as if the same were requested by Tenant. No use or occupancy of the Premises by any third party pursuant to this paragraph, nor the acceptance of rent from any such third party, nor Landlord's furnishing of any services or materials at the request of any such third party shall vest in any such third party or anyone acting under such third party any rights (including, without limitation, the right to be listed on the Building directory) or interest in this Lease or the Premises.

Notwithstanding the foregoing, Tenant may, without the need for Landlord's consent, but only upon not less than ten (10) days prior notice to Landlord, assign its interest in this Lease (a "Permitted Assignment") to (i) any entity which shall be a successor to Tenant either by merger or consolidation (a "Merger") or to a purchaser of all or substantially all of Tenant's assets in either case provided the successor or purchaser shall have a tangible net worth, after giving effect to the transaction, of not less than the greater of the net worth of Tenant named in Section 1.1 as of the Date of this Lease or the net worth of Tenant named in Section 1.1 immediately prior to such Merger or sale (the "Required Net Worth") or (ii) any entity (an "Affiliate") which is a direct or indirect subsidiary or parent (or a direct or indirect subsidiary of a parent) of the named Tenant set forth in Section 1.1, in either case of (i) or (ii) only so long as (I) the principal purpose of such assignment is not the acquisition of Tenant's interest in this Lease (except if such assignment is made for a valid intracorporate business purpose to an Affiliate) and is not made to circumvent the provisions of this Section 6.2.1, (II) except if pursuant to a Merger permitted by clause (i) above, Tenant shall, contemporaneously with such assignment, provide Landlord with a fully executed counterpart of any such assignment, which assignment shall comply with the provisions of this Section 6.2.1 and shall include an agreement by the assignee in form reasonably satisfactory to Landlord, to assume all of Tenant's obligations under this Lease and be bound by all of the terms of this Lease, (III) in the case of an actual or deemed assignment pursuant to clause (i), Tenant shall provide Landlord, not less than ten (10) days in advance of any such assignment, evidence reasonably satisfactory to Landlord of the Required Net Worth of the successor or purchaser, and (IV) there shall not be a Default of Tenant at the effective date of such assignment. Tenant shall also be permitted, without the need for Landlord's consent, but only upon not less than ten (10) days prior notice to Landlord, to enter into any sublease (a "Permitted Sublease") with any Affiliate provided that such sublease shall expire upon any event pursuant to which the sublessee thereunder shall cease to be an Affiliate. Any assignment to an Affiliate shall provide that it may, at Landlord's election, be terminated and deemed void if during the term of this Lease such assignee or any successor to the interest of Tenant hereunder shall cease to be an Affiliate.

In the event that Tenant shall intend to enter into any sublease or assignment, other than a Permitted Sublease or Permitted Assignment, then Tenant shall, not later than sixty (60) days

prior to the proposed commencement of such sublease or assignment, give Landlord notice of such intent, identifying the proposed subtenant or assignee, all of the terms and conditions of the proposed sublease or assignment and such other information as the Landlord may reasonably request.

Landlord shall not unreasonably condition or withhold its consent to a proposed assignment or sublease, provided that, in addition to any other grounds for withholding of consent, Landlord may withhold its consent if in Landlord's good faith judgment: (i) the proposed assignee or subtenant does not have the financial strength to perform its obligations under the proposed assignment or sublease; (ii) the proposed assignee or subtenant is a business competitor of Landlord or is an affiliate of a business competitor of Landlord; (iii) the identity of the proposed assignee or subtenant is, or the intended use of any part of the Premises would be, in Landlord's determination, inconsistent with first-class office space or Landlord's commitments to other tenants in the Building; (iv) at the time of the proposed assignment or subleasing Landlord is able to meet the space requirements of Tenant's proposed assignee or subtenant by leasing available space in the Building to such person or entity and either (a) the proposed assignee or subtenant is a tenant or other occupant of the Building (or is an entity affiliated with any such tenant or occupant), or (b) the proposed assignee or subtenant is an entity, or is affiliated with any entity, which shall have entered into negotiation with Landlord for space in the Building within the preceding six (6) months; (vi) the use of the Premises or the Building by the proposed assignee or subtenant would increase Operating Costs, require any alterations to the Building to cause the Building to comply with applicable laws, or otherwise cause Landlord to incur any additional cost or expense or (vii) any such sublease shall result in the Premises being occupied by more than one party in addition to Tenant at any one time.

If any part of the Premises are sublet (or occupied by any party other than Tenant and its employees) after a Default of Tenant Landlord may collect the rents from such assignee, subtenant or occupant, as the case may be, and apply the net amount collected to the Annual Fixed Rent and Additional Rent herein reserved, but no such collection shall be deemed a waiver of the provisions set forth in the first paragraph of this Subsection 6.2.1, the acceptance by Landlord of such subtenant or occupant, as the case may be, as a tenant, or a release of Tenant from the future performance by Tenant of its covenants, agreements or obligations contained in this Lease.

Any sublease of all or any portion of the Premises shall provide that it is subject and subordinate to this Lease and to the matters to which this Lease is or shall be subject or subordinate, that other than the payment of Annual Fixed Rent and Additional Rent due pursuant to Sections 4.1, 4.2.1 and 4.2.2 or any obligation relating solely to those portions of the Premises which are not part of the subleased premises, the subtenant shall comply with and be bound by all of the obligations of Tenant hereunder, that unless Landlord waives such prohibition, the subtenant may not enter into any sub-sublease, sublease assignment, license or any other agreement granting any right of occupancy of any portion of the subleased premises; and that Landlord shall be an express beneficiary of any such obligations, and that in the event of termination of this Lease or reentry or dispossession of Tenant by Landlord under this Lease, Landlord may, at its option, take over all of the right, title and interest of Tenant, as sublessor under such sublease, and such subtenant shall, at Landlord's option, attorn to Landlord pursuant to the then executory provisions of such sublease, except that neither Landlord nor any

mortgagee of the Property, as holder of a mortgage or as Landlord under this Lease if such mortgagee succeeds to that position, shall (a) be liable for any act or omission of Tenant under such sublease, (b) be subject to any credit, counterclaim, offset or defense which theretofore accrued to such subtenant against Tenant, or (c) be bound by any previous modification of such sublease unless consented to by Landlord and such mortgagee or by any previous prepayment of more than one (1) month's rent, (d) be bound by any covenant of Tenant to undertake or complete any construction of the Premises or any portion thereof, (e) be required to account for any security deposit of the subtenant other than any security deposit actually received by Landlord, (f) be bound by any obligation to make any payment to such subtenant or grant any credits unless specifically agreed to by Landlord and such mortgagee, (g) be responsible for any monies owing by Tenant to the credit of subtenant or (h) be required to remove any person occupying the Premises or any part thereof; and such sublease shall provide that the subtenant thereunder shall, at the request of Landlord, execute a suitable instrument in confirmation of such agreement to attorn. The provisions of this paragraph shall not be deemed a waiver of the provisions set forth in the first paragraph of this Subsection 6.2.1.

No subletting or assignment shall in any way impair the continuing primary liability of the named Tenant set forth in Section 1.1 and any immediate or remote successor in interest, and no consent to any subletting or assignment in a particular instance shall be deemed to be a waiver of the obligation to obtain the Landlord's written approval in the case of any other subletting or assignment. The joint and several liability of Tenant named herein and any immediate and remote successor in interest of Tenant (by assignment or otherwise), and the due performance of the obligations of this Lease on Tenant's part to be performed or observed, shall not in any way be discharged, released or impaired by any (a) agreement which modifies any of the rights or obligations of the parties under this Lease, (b) stipulation which extends the time within which an obligation under this Lease is to be performed, (c) waiver of the performance of an obligation required under this Lease, or (d) failure to enforce any of the obligations set forth in this Lease. No assignment, subletting or occupancy shall affect the Permitted Uses. Any subletting, assignment or other transfer of Tenant's interest in this Lease in contravention of this Subsection 6.2.1 shall be voidable at Landlord's option.

If the rent and other sums (including, without limitation, all monetary payments plus the reasonable value of any services performed or any other thing of value given by any assignee or subtenant in consideration of such assignment or sublease), either initially or over the term of any assignment or sublease (other than a Permitted Assignment of a Permitted Sublease), payable by such assignee or subtenant on account of an assignment or sublease of all or any portion of the Premises exceed the sum of (i) Annual Fixed Rent plus (ii) Additional Rent called for hereunder with respect to the space assigned or sublet plus (iii) the cost of any leasehold improvements to the space to be subleased and any reasonable brokerage commissions, construction costs and attorneys fees incurred by Tenant in connection with such sublease or assignment (such costs to be amortized over the term of such sublease or assignment), Tenant shall pay fifty percent (50%) of such excess to Landlord, as Additional Rent, payable monthly at the time for payment of Annual Fixed Rent. Nothing in this paragraph shall be deemed to abrogate the provisions of this Subsection 6.2.1 and Landlord's acceptance of any sums pursuant to this paragraph shall not be deemed a granting of consent to any assignment of the Lease or sublease of all or any portion of the Premises.

6.2.2 Nuisance. Tenant shall not injure, deface or otherwise harm the Premises; nor commit any nuisance; nor permit in the Premises any vending machine (except such as is used for the sale of merchandise to employees of Tenant) or inflammable fluids or chemicals (except such as are customarily used in connection with standard office equipment); nor permit any cooking to such extent as requires special exhaust venting; nor permit the emission of any objectionable noise or odor; nor make, allow or suffer any waste; nor make any use of the Premises which is improper, offensive or contrary to any law or ordinance or which will invalidate or increase the premiums for any of Landlord's insurance or which is liable to render necessary any alteration or addition to the Building; nor conduct any auction, fire, "going out of business" or bankruptcy sales.

6.2.3 Floor Load; Heavy Equipment. Tenant shall not place a load upon any floor of the Premises exceeding the lesser of the floor load capacity which such floor was designed to carry or which is allowed by law. Landlord reserves the right to prescribe the weight and position of all heavy business machines and equipment, including safes, which shall be placed so as to distribute the weight. Business machines and mechanical equipment which cause vibration or noise shall be placed and maintained by Tenant at Tenant's expense in settings sufficient to absorb and prevent vibration, noise and annoyance.

6.2.4 Electricity. Tenant shall not connect to the electrical distribution system serving the Premises (i) a total load exceeding the lesser of the capacity of such system or the maximum load permitted from time to time under applicable governmental regulations or (ii) any apparatus or device in the Premises (1) using current in excess of 110 volts, or (2) which would cause Tenant's electrical demand load to exceed 1.0 watts per rentable square foot for overhead lighting or 2.0 watts per rentable square foot for convenience outlets. The capacity of the electrical distribution system serving the Premises shall be the lesser of (a) the capacity of the branch of the system serving the Premises exclusively or (b) the share of the capacity of the system serving the entire Building allocated to the Premises, which shall be based on the ratio of the Premises Rentable Area to the rentable area of the Building.

6.2.5 Installation, Alterations or Additions. Tenant shall not make any installations, alterations, additions or improvements (collectively and individually referred to in this Section 6.2.5 as "work") in, to or on the Premises nor to permit the making of any holes in the walls or partitions (except to hang pictures, shelves, marker boards and customary office art), ceilings or floors without on each occasion obtaining the prior consent of Landlord, and then only pursuant to plans and specifications approved by Landlord in advance in each instance. Landlord's approval shall not be unreasonably withheld or delayed with respect to alterations, additions or improvements which do not affect the structural elements of the Building, equal or exceed Building standards in quality and do not affect the plumbing, heating, ventilating, air-conditioning, mechanical, electrical or life-safety systems of the Building, are not visible from outside of the Premises and shall not increase Taxes or Operating Costs nor require Landlord to perform any work to the Property; and Tenant need not obtain Landlord's consent to change the finishes within the Premises provided Tenant shall give Landlord prior notice thereof and any such work shall be scheduled at a time reasonably acceptable to Landlord. All work to be performed to the Premises by Tenant shall (i) be performed in a good and workmanlike manner by contractors approved in advance by Landlord and in compliance with all applicable zoning, building, fire, health and other codes, regulations, ordinances and laws, (ii) be made at Tenant's

sole cost and expense and at such times and in such a manner as Landlord may from time to time designate, and (iii) be free of liens and encumbrances and become part of the Premises and the property of Landlord without being deemed additional rent for tax purposes, Landlord and Tenant agreeing that Tenant shall be treated as the owner of the work for tax purposes until the expiration or earlier termination of the term hereof, subject to Landlord's rights pursuant to Section 6.1.9 to require Tenant to remove the same at or prior to the expiration or earlier termination of the term hereof and, to the extent Landlord shall make such election, title thereto shall remain vested in Tenant at all times. Tenant shall pay promptly when due the entire cost of any work to the Premises so that the Premises, Building and Property shall at all times be free of 'liens, and, at Landlord's request, Tenant shall furnish to Landlord a bond or other security acceptable to Landlord assuring that any such work will be completed in accordance with the plans and specifications theretofore approved by Landlord and assuring that the Premises will remain free of any mechanics' lien or other encumbrances that may arise out of such work. Prior to the commencement of any such work, and throughout and until completion thereof, Tenant and/or its contractors shall maintain, or cause to be maintained, such insurance as shall be reasonably required by Landlord. In addition, Tenant shall save Landlord harmless and indemnified from all injury, loss, claims or damage to any person or property occasioned by or arising out of such work. Whenever and as often as any mechanic's or materialmen's lien shall have been filed against the Property based upon any act of Tenant or of anyone claiming through Tenant, Tenant shall within three (3) days of notice from Landlord to Tenant take such action by bonding, deposit or payment as will remove or satisfy the lien. Tenant shall, upon request of Landlord, execute and deliver to Landlord a bill of sale covering any work Tenant shall be required to surrender hereunder.

Tenant's contracts and purchase orders for work in the Premises shall require that each contractor comply with the provisions of this Section 6.2.5, the Rules and Regulations and all other provisions of this Lease applicable to the activities of the contractor anywhere on the Property. If Tenant or any of its contractors or subcontractors shall fail or refuse to comply with any such obligations, then upon notice to Tenant, Landlord may require Tenant to cease performance of the work immediately until Tenant makes arrangements satisfactory to Landlord to achieve compliance.

Tenant shall not, at any time, directly or indirectly, employ or permit the employment of any contractor, mechanic or laborer in the Premises, if such employment will interfere or cause any conflict with other contractors, mechanics or laborers engaged in the construction, maintenance or operation of the Building 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.

6.2.6 Abandonment. Tenant shall not abandon or vacate the Premises during the term.

6.2.7 Signs. Tenant shall not paint or place any signs or place any curtains, blinds, shades, awnings, arials, or the like, visible from outside the Premises. Landlord shall install Building standard tenant identification signage on or adjacent to the entry doors to the Premises shall maintain a tenant directory in the lobby of the Building in which will be placed Tenant's name and the location of the Premises in the Building.

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6.2.8 Oil and Hazardous Materials. Tenant shall not introduce on or transfer to the Premises or Property, any Hazardous Materials (as hereinafter defined); nor dump, flush or otherwise dispose of any Hazardous Materials into the drainage, sewage or waste disposal systems serving the Premises or Property; nor generate, store, use, release, spill or dispose of any Hazardous Materials in or on the Premises or the Property, or transfer any Hazardous Materials from the Premises to any other location; and Tenant shall not commit or suffer to be committed in or on the Premises or Property any act which would require any reporting or filing of any notice with any governmental agency pursuant to any statutes, laws, codes, ordinances, rules or regulations, present or future, applicable to the Property or to Hazardous Materials. Notwithstanding the foregoing, Tenant shall not be prohibited from using minimal quantities of cleaning fluids, photocopy toner and other products or substances which may constitute or contain Hazardous Materials, but which are customarily present in or about premises devoted to first-class administrative office uses, provided that the transportation, use, storage and disposal thereof by Tenant is in strict compliance with all Environmental Laws and the manufacturer's instructions and recommendations with respect thereto.

Tenant agrees that if it shall generate, store, release, spill, dispose of or transfer to the Premises or Property any Hazardous Materials, it shall forthwith remove the same, at its sole cost and expense, in the manner provided by all applicable Environmental Laws (as hereinafter defined), regardless of when such Hazardous Materials shall be discovered. Furthermore, Tenant shall pay any fines, penalties or other assessments imposed by any governmental agency with respect to any such Hazardous Materials and shall forthwith repair and restore any portion of the Premises or Property which it shall disturb in so removing any such Hazardous Materials to the condition which existed prior to Tenant's disturbance thereof.

Tenant agrees to deliver promptly to Landlord any notices, orders or similar documents received from any governmental agency or official concerning any violation of any Environmental Laws or with respect to any Hazardous Materials affecting the Premises or Property. In addition, Tenant shall, within ten (10) days of receipt, accurately complete any questionnaires from Landlord or other informational requests relating to Tenant's use of the Premises and, in particular, to Tenant's use, generation, storage and/or disposal of Hazardous Materials at, to, or from the Premises.

Tenant shall indemnify, defend (by counsel satisfactory to Landlord), protect, and hold Landlord free and harmless from and against any and all claims, or threatened claims, including without limitation, claims for death of or injury to any person or damage to any property, actions, administrative proceedings, whether formal or informal, judgments, damages, punitive damages, liabilities, penalties, fines, costs, taxes, assessments, forfeitures, losses, expenses, attorneys' fees and expenses, consultant fees, and expert fees that arise from or are caused in whole or in part, directly or indirectly, by (i) Tenant's use, analysis, storage, transportation, disposal, release, threatened release, discharge or generation of Hazardous Materials to, in, on, under, about or from the Premises, or (ii) Tenant's failure to comply with any Environmental Laws. Tenant's obligations hereunder shall include, without limitation, and whether foreseeable or unforeseeable, all costs (including, without limitation, capital, operating and maintenance costs) incurred in connection with any investigation or monitoring of site conditions, repair, cleanup, containment, remedial, removal or restoration work, or detoxification or decontamination of the Premises, and the preparation and implementation of any closure, remedial action or other

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required plans in connection therewith. For purposes of this Section 6.2.8, any acts or omissions of Tenant, or its subtenants or assignees or its or their employees, agents, or contractors (whether or not they are negligent, intentional, willful or unlawful) shall be attributable to Tenant.

The term "Hazardous Materials" shall mean and include any oils, petroleum products, asbestos, radioactive, biological, medical or infectious wastes or materials, and any other toxic or hazardous wastes, materials and substances which are defined, determined or identified as such in any Environmental Laws, or in any judicial or administrative interpretation of Environmental Laws.

The term "Environmental Laws" shall mean any and all federal, state and municipal statutes, laws, regulations, ordinances, rules, judgments, orders, decrees, codes, plans, injunctions, permits, concessions, grants, franchises, licenses, agreements or other governmental restrictions relating to the environment or to emissions, discharges or releases of pollutants, contaminants, petroleum or petroleum products, medical, biological, infectious, toxic or hazardous substances or wastes into the environment including, without limitation, ambient air, surface water, ground water or land, or otherwise relating to the manufacture, processing, distribution, use, treatment, storage, disposal, transport or handling of pollutants, contaminants, petroleum or petroleum products, medical, biological, infectious, toxic or hazardous substances or wastes or the cleanup or other remediation thereof.

## ARTICLE 7

### Casualty or Taking

7.1 Termination. In the event that the Premises or the Property, or any material part thereof shall be destroyed or damaged by fire or casualty, shall be taken by any public authority or for any public use or shall be condemned by the action of any public authority, then the term of this Lease may be terminated at the election of Landlord. Such election, which may be made notwithstanding the fact that Landlord's entire interest may have been divested, shall be made by the giving of notice by Landlord to Tenant within one hundred twenty (120) days after the date of the taking or casualty.

7.2 Restoration. If Landlord does not elect to so terminate, this Lease shall continue in force and (so long as the damage is not caused by the negligence or other wrongful act of Tenant or its employees, agents, contractors or invitees) a just proportion of the Annual Fixed Rent reserved, according to the nature and extent of the damages sustained by the Premises, shall be suspended or abated until the Premises (excluding any improvements to the Premises made at Tenant's expense), or what may remain thereof, shall be put by Landlord in proper condition for use, which Landlord covenants to do with reasonable diligence to the extent permitted by the net proceeds of insurance recovered or damages awarded for such destruction, taking, or condemnation and subject to zoning and building laws or ordinances then in existence. "Net proceeds of insurance recovered or damages awarded" refers to the gross amount of such insurance or damages actually made available to Landlord (and not retained by any Superior Lessor or Superior Mortgagee) less the reasonable expenses of Landlord incurred in connection with the collection of the same, including without limitation, fees and expenses for legal and appraisal services.

7.3 Award. Irrespective of the form in which recovery may be had by law, all rights to seek reimbursement for damages or compensation arising from fire or other casualty or any taking by eminent domain or condemnation shall belong to Landlord in all cases. Tenant hereby grants to Landlord all of Tenant's rights to such claims for damages and compensation and covenants to deliver such further assignments thereof as Landlord may from time to time request. Nothing contained herein shall be construed to prevent Tenant from prosecuting in any condemnation proceedings a claim for relocation expenses, provided that such action shall not affect the amount of compensation otherwise recoverable by Landlord from the taking authority.

## ARTICLE 8

### Defaults

8.1 Default of Tenant. (a) (I) If Tenant shall default in its obligations to pay the Annual Fixed Rent or Additional Rent or any other charges or amounts under this Lease when due or shall default in complying with its obligations under Sections 4.4 and 6.1.11 of this Lease and if any such default described in this subclause (I) shall continue for ten (10) days after notice from Landlord designating such default, or (II) if as promptly as possible but in any event within thirty (30) days after notice from Landlord to Tenant specifying any default or defaults other than those set forth in clause (I) Tenant has not cured the default or defaults so specified (provided that if Tenant is proceeding in good faith and with due diligence to complete the cure of any such non-monetary performance breach which is curable but cannot reasonably be cured within thirty (30) days, such thirty (30) day period shall be extended for up to an additional ninety (90) days); or (b) if any assignment shall be made by Tenant for the benefit of creditors; or (c) if Tenant's leasehold interest shall be taken on execution; or (d) if a lien or other involuntary encumbrance shall be filed against Tenant's leasehold interest or Tenant's other property, including said leasehold interest, and shall not be discharged within ten (10) days thereafter; or (e) if a petition shall be filed by Tenant for liquidation, or for reorganization or an arrangement under any provision of any bankruptcy law or code as then in force and effect; or (f) if an involuntary petition under any of the provisions of any bankruptcy law or code shall be filed against Tenant and such involuntary petition shall not be dismissed within thirty (30) days thereafter; or (g) if a custodian or similar agent shall be authorized or appointed to take charge of all or substantially all of the assets of Tenant; or (h) if Tenant dissolves or shall be dissolved or shall liquidate or shall adopt any plan or commence any proceeding, the result of which is intended to include dissolution or liquidation; or (i) if any order shall be entered in any proceeding by or against Tenant decreeing or permitting the dissolution of Tenant or the winding up of its affairs; or (j) if Tenant shall fail to pay any installment of Annual Fixed Rent or Additional Rent when due, Tenant shall cure such default within the grace period provided in clause (a) (I) above (or with Landlord's approval after the expiration of such grace period) and Tenant shall, within the next year following the date such initial defaulted payment was first due, fail more than twice to pay any installment of Annual Fixed Rent or Additional Rent when due, then, and in any of such cases indicated in clauses (a) through (j) hereof (collectively and individually, a "Default of Tenant"), Landlord may, in addition to and not in derogation of any remedies for any preceding breach of covenant, immediately or at any time thereafter give notice to Tenant terminating this Lease and the term hereof, which notice shall specify the date of termination, whereupon on the date so specified, the term of this Lease and all of Tenant's rights

and privileges under this Lease shall expire and terminate but Tenant shall remain liable as hereinafter provided.

8.2 Remedies. In the event of any termination pursuant to Section 8.1, Tenant shall pay the Annual Fixed Rent, Additional Rent and other charges payable hereunder up to the time of such termination. Thereafter, whether or not the Premises shall have been re-let, Tenant shall be liable to Landlord for, and shall pay to Landlord the Annual Fixed Rent, Additional Rent and other charges which would be payable hereunder for the remainder of the term of this Lease had such termination not occurred, less the net proceeds, if any, of any reletting of the Premises, after deducting all expenses in connection with such reletting, including, without limitation, all repossession costs, brokerage commissions, attorneys' fees and expenses, advertising costs, administration expenses, alteration costs, the value of any tenant inducements (including but without limitation free rent, moving costs, and contributions toward leasehold improvements) and any other expenses incurred in preparation for such reletting. Tenant shall pay such damages to Landlord monthly on the days on which the Annual Fixed Rent, Additional Rent or other charges would have been payable hereunder if the term of this Lease had not been so terminated.

At any time after such termination, in lieu of recovering damages pursuant to the provisions of the immediately preceding paragraph with respect to any period after the date of demand therefor, at Landlord's election, Tenant shall pay to Landlord the amount, if any, by which (A) the Annual Fixed Rent, Additional Rent and other charges which would be payable hereunder from the date of such demand to the end of what would be the then unexpired term of this Lease had such termination not occurred, which amount shall be discounted to present value at a discount rate equal to the Prime Rate less one hundred (100) basis points if the Prime Rate is greater than one hundred (100) basis points, shall exceed (B) the then fair rental value of the Premises for the same period, which amount shall also be discounted as aforesaid.

Nothing contained in this Lease shall, however, limit or prejudice the right of Landlord to prove for and obtain in proceedings for bankruptcy or insolvency by reason of the termination of this Lease, an amount equal to the maximum allowed by any statute or rule of law in effect at the time when, and governing the proceedings in which, the damages are to be proved, whether or not the amount be greater than, equal to, or less than the amount of the loss or damages referred to above.

In case of any Default of Tenant, re-entry, expiration and repossession by summary proceedings or otherwise, Landlord may (i) relet the Premises or any part or parts thereof, either in the name of Landlord or otherwise, for a term or terms which may at Landlord's option be equal to or less than or exceed the period which would otherwise have constituted the balance of the term of this Lease and may grant concessions or free rent to the extent that Landlord considers advisable and necessary to relet the same and (ii) may make such alterations, repairs and decorations in the Premises as Landlord in its sole judgment considers advisable and necessary for the purpose of reletting the Premises; and the making of such alterations, repairs and decorations shall not operate or be construed to release Tenant from liability hereunder as aforesaid. Following a termination of the term of this Lease due to a Default of Tenant and the surrender of the Premises to Landlord in the condition required by this Lease, Landlord shall, to the extent (if any) required by applicable law, use reasonable efforts to mitigate its damages hereunder. Landlord shall in no event be liable in any way whatsoever for failure to relet the



Premises so long as Landlord shall comply with its obligations under the preceding sentence, or, in the event that the Premises are relet, for failure to collect the rent under such reletting.

To the fullest extent permitted by law, Tenant hereby expressly waives any and all rights of redemption granted under any present or future laws in the event of Tenant being evicted or dispossessed, or in the event of Landlord obtaining possession of the Premises, by reason of the violation by Tenant of any of the covenants and conditions of this Lease.

8.3 Remedies Cumulative. Except as expressly provided otherwise in Section 8.2, any and all rights and remedies which Landlord may have under this Lease, and at law and equity (including without limitation actions at law for direct, indirect, special and consequential (foreseeable and unforeseeable) damages), for Tenant's failure to comply with its obligations under this Lease shall be cumulative and shall not be deemed inconsistent with each other, and any two or more of all such rights and remedies may be exercised at the same time insofar as permitted by law. Notwithstanding the foregoing, to the fullest extent permitted by law, Landlord hereby waives, and Tenant shall not be liable to Landlord for, any claim for special or consequential losses or damages (excluding, for purposes of clarity, damages to which Landlord is entitled under Section 8.2) arising out of any breach of this Lease by Tenant, provided that the foregoing waiver shall not apply to any damages to which Landlord may be entitled pursuant to Section 8.5 or to claims asserted by a third party for which Landlord may be liable as a result, in whole or part, of conduct constituting a breach by Tenant of any of the terms of this Lease.

8.4 Landlord's Right to Cure Defaults. At any time with or without notice, Landlord shall have the right, but shall not be required, to pay such sums or do any act which requires the expenditure of monies which may be necessary or appropriate by reason of the failure or neglect of Tenant to comply with any of its obligations under this Lease (irrespective of whether the same shall have ripened into a Default of Tenant), and in the event of the exercise of such right by Landlord, Tenant agrees to pay to Landlord forthwith upon demand, as Additional Rent, all such sums including reasonable attorneys fees, together with interest thereon at a rate (the "Default Rate") equal to the lesser of six percent (6%) over the Prime Rate or the maximum rate allowed by law. "Prime Rate" shall mean the annual floating rate of interest, determined daily and expressed as a percentage from time to time announced by Bank of America as its "prime" or "base" rate, so-called, or if at any time Bank of America ceases to announce such a rate, as announced by the largest national or state-chartered banking institution then having an office in the City of Boston and announcing such a rate. If at any time neither Bank of America nor the largest national or state-chartered banking institution having an office in the City of Boston is announcing such a floating rate, "Prime Rate" shall mean a rate of interest, determined daily, which is two hundred (200) basis points above the 14-day moving average closing trading price of 90-day U.S. Treasury Bills.

8.5 Holding Over. Any holding over by Tenant of all or any portion of the Premises after the expiration or early termination of the term of this Lease shall be treated as a daily tenancy at sufferance at a rental rate equal to one hundred fifty percent (150%) of the greater of (x) the fair market rental value for the Premises on a month-to-month basis or (y) the sum of Annual Fixed Rent plus Additional Rent on account of Operating Costs and Taxes in effect immediately prior to the expiration or earlier termination of the term (prorated on a daily basis). Tenant shall also pay to Landlord all damages, direct and/or consequential (foreseeable and

unforeseeable), sustained by reason of any such holding over. Otherwise, all of the covenants, agreements and obligations of Tenant applicable during the term of this Lease shall apply and be performed by Tenant during such period of holding over as if such period were part of the term of this Lease.

8.6 Effect of Waivers of Default. Any consent or permission by Landlord to any act or omission by Tenant shall not be deemed to be consent or permission by Landlord to any other similar or dissimilar act or omission and any such consent or permission in one instance shall not be deemed to be consent or permission in any other instance.

8.7 No Waiver, etc. The failure of Landlord or Tenant to seek redress for violation of, or to insist upon the strict performance of, any covenant or condition of this Lease shall not be deemed a waiver of such violation nor prevent a subsequent act, which would have originally constituted a violation, from having all the force and effect of an original violation. The receipt by Landlord of rent with knowledge of the breach of any covenant of this Lease shall not be deemed to have been a waiver of such breach by Landlord, or by Tenant, unless such waiver be in writing signed by the party to be charged. No consent or waiver, express or implied, by Landlord or Tenant to or of any breach of any agreement or duty shall be construed as a waiver or consent to or of any other breach of the same or any other agreement or duty.

8.8 No Accord and Satisfaction. No acceptance by Landlord of a lesser sum than the Annual Fixed Rent, Additional Rent or any other charge then due shall be deemed to be other than on account of the earliest installment of such rent or charge due, nor shall any endorsement or statement on any check or any letter accompanying any check or payment as rent or other charge be deemed an accord and satisfaction, and Landlord may accept such check or payment without prejudice to Landlord's right to recover the balance of such installment or pursue any other remedy in this Lease provided.

## ARTICLE 9

### Rights of Holders

9.1 Overlease. The Property of which the Premises are a part was leased to Cambridge Multi-Cultural Arts Center, Inc. ("CMAC"), as lessee, by the County Commissioners of Middlesex County (the "Commissioners"), as lessor, pursuant to that certain Lease Agreement, dated December 31, 1980 (the "Overlease"). The Overlease is recorded with the Middlesex South Registry of Deeds (the "Registry") in Book 14208, Page 142. On June 10, 1981, CMAC assigned its entire interest in the Overlease to Landlord's predecessor in interest. A copy of said assignment is recorded in the Registry in Book 14555, Page 84. Landlord's predecessor in interest assigned its interest to Landlord pursuant to an Agreement of Assignment, Assumption of Lease, and Agreement to Reassign dated May 9, 1983 and recorded in Book 15005, Page 443. This Lease is expressly made subject to the terms of the Overlease. Tenant agrees to execute, acknowledge and deliver any instruments that CMAC, or its successors or assigns, may request in accordance with the terms of the Overlease or this Lease.

9.2 Rights of Mortgagees or Ground Lessor. This Lease, and all rights of Tenant hereunder, are and shall be subject and subordinate to any ground or master lease, including,

without limitation, the Overlease, and all renewals, extensions, modifications and replacements thereof, and to all mortgages, which may now or hereafter affect the Building or the Property and/or any such lease, whether or not such mortgages shall also cover other lands and/or buildings and/or leases, to each and every advance made or hereafter to be made under such mortgages, and to all renewals, modifications, replacements and extensions of such leases and such mortgages and all consolidations of such mortgages. This Section shall be self-operative and no further instrument of subordination shall be required. In confirmation of such subordination, Tenant shall promptly execute, acknowledge and deliver any instrument that Landlord, the lessor under any such lease or the holder of any such mortgage or any of their respective successors in interest may reasonably request to evidence such subordination. Any lease to which this Lease is subject and subordinate is herein called "Superior Lease" and the lessor of a Superior Lease or its successor in interest, at the time referred to, is herein called "Superior Lessor"; and any mortgage to which this Lease is subject and subordinate, is herein called "Superior Mortgage" and the holder of a Superior Mortgage is herein called "Superior Mortgagee".

If any Superior Lessor or Superior Mortgagee or the nominee or designee of any Superior Lessor or Superior Mortgagee shall succeed to the rights of Landlord under this Lease, whether through possession or foreclosure action or delivery of a new lease or deed, or otherwise, then at the request of such party so succeeding to Landlord's rights (herein called "Successor Landlord") and upon such Successor Landlord's written agreement to accept Tenant's attornment, Tenant shall attorn to and recognize such Successor Landlord as Tenant's landlord under this Lease and shall promptly execute and deliver any instrument that such Successor Landlord may reasonably request to evidence such attornment. Upon such attornment, this Lease shall continue in full force and effect as a direct lease between the Successor Landlord and Tenant upon all of the terms, conditions and covenants as are set forth in this Lease, except that the Successor Landlord (unless formerly the landlord under this Lease) shall not be (a) liable in any way to Tenant for any act or omission, neglect or default on the part of Landlord under this Lease, (b) responsible for any monies owing by or on deposit with Landlord to the credit of Tenant, (c) subject to any counterclaim or setoff which theretofore accrued to Tenant against Landlord, (d) bound by any modification of this Lease subsequent to such Superior Lease or Superior Mortgage, or by any previous prepayment of Annual Fixed Rent or Additional Rent for more than one (1) month, which was not approved in writing by the Successor Landlord, (e) liable to the Tenant beyond the Successor Landlord's interest in the Property, (f) responsible for the performance of any work to be done by Landlord under this Lease to render the Premises ready for occupancy by the Tenant, or (g) required to remove any person occupying the Premises or any part thereof, except if such person claims by, through or under the Successor Landlord. Tenant agrees at any time and from time to time to execute a suitable instrument in confirmation of Tenant's agreement to attorn, as aforesaid.

## ARTICLE 10

### Miscellaneous Provisions

10.1 Notices. Except as may be expressly provided herein otherwise, all notices, requests, demands, consents, approval or other communications to or upon the respective parties hereto shall be in writing, shall be delivered by hand or mailed by certified or registered mail,

return receipt requested, or by a nationally recognized courier service that provides a receipt for delivery such as Federal Express, United Parcel Service or U.S. Postal Service Express Mail and shall be addressed as follows: If intended for Landlord, to the Original Address of Landlord set forth in Section 1.1 of this Lease with a copy to Landlord's Agent (or to such other address or addresses as may from time to time hereafter be designated by Landlord by notice to Tenant); and if intended for Tenant, addressed to Tenant at the Original Address of Tenant set forth in Section 1.1 of this Lease until the Commencement Date and thereafter to the Property (or to such other address or addresses as may from time to time hereafter be designated by Tenant by notice to Landlord). Notices shall be effective on the date delivered to (or the first date such delivery is attempted and refused by) the party to which such notice is required or permitted to be given or made under this Lease. Notices from Landlord may be given by Landlord's Agent, if any, or Landlord's attorney; and any bills or invoices for Annual Fixed Rent or Additional Rent may be given by mail (which need not be registered or certified) and, if so given, shall be deemed given on the third Business Day following the date of posting.

10.2 Quiet Enjoyment; Landlord's Right to Make Alterations, Etc. Landlord agrees that upon Tenant's paying the rent and performing and observing the agreements, conditions and other provisions on its part to be performed and observed, Tenant shall and may peaceably and quietly have, hold and enjoy the Premises during the term hereof without any manner of hindrance or molestation from Landlord or anyone claiming under Landlord, subject, however, to the terms of this Lease; provided, however, Landlord reserves the right at any time and from time to time, without the same constituting breach of Landlord's covenant of quiet enjoyment or an actual or constructive eviction, and without Landlord incurring any liability to Tenant or otherwise affecting Tenant's obligations under this Lease, to make such changes, alterations, improvements, repairs or replacements in or to the interior and exterior of the Building (including the Premises) and the fixtures and equipment thereof, and in or to the Property, or properties adjacent thereto, as Landlord may deem necessary or desirable, provided that Landlord uses commercially reasonable efforts to minimize, to the extent practical, any interference with the conduct of business at the Premises and that except for any alterations or improvements required by law or which are Landlord's obligation under Article 5, Landlord shall make no alterations or improvements to the Premises which shall materially interfere with Tenant's ability to use the Premises for the Permitted Uses or materially reduce the floor area of the Premises.

Without incurring any liability to Tenant, Landlord may permit access to the Premises and open the same, whether or not Tenant shall be present, upon any demand of any receiver, trustee, assignee for the benefit of creditors, sheriff, marshal or court officer Landlord reasonably believes is entitled to such access for the purpose of taking possession of, or removing, Tenant's property or for any other lawful purpose (but this provision and any action by Landlord hereunder shall not be deemed a recognition by Landlord that the person or official making such demand has any right or interest in or to this Lease, or in or to the Premises), or upon demand of any representative of the fire, police, building, sanitation or other department of the city, state or federal governments.

Tenant acknowledges that CMAC has certain rights, pursuant to that certain Sublease and License Agreement between CMAC, as tenant, and Graham Gund, as landlord, including the right to utilize certain areas of the Building and the lobby area of the so-called Clerk of Courts

Addition (the "Addition") and certain land area adjacent to the Addition (but not any portion of the Premises) for the exhibition of visual arts and/or cultural exhibits. Such area may also be used by CMAC for (a) presentations of the performing arts and (b) installation and maintenance, at its expense, of a kiosk of reasonable height, width and location for display of notices and posters; provided that no exhibition or presentation shall unreasonably interfere with access to or egress from the Building or such Addition for Landlord, tenants of the Building or other buildings on the Property, their employees, customers or invitees or the general public. Tenant agrees that any uses by CMAC set forth hereinabove shall not be a breach of Landlord's covenant of quiet enjoyment or any other covenant contained herein.

10.3 Lease not to be Recorded; Confidentiality of Lease Terms. Tenant agrees that it will not record this Lease. Both parties shall, upon the request of either (and at the expense of the requesting party), execute and deliver a notice or short form of this Lease in such form, if any, as may be acceptable for recording with the land records of the governmental entity responsible for keeping such records for the City of Cambridge. In no event shall such document set forth the rent or other charges payable by Tenant pursuant to this Lease; and any such document shall expressly state that it is executed pursuant to the provisions contained in this Lease and is not intended to vary the terms and conditions of this Lease

Tenant acknowledges that the terms under which the Landlord has leased the Premises to Tenant (including, without limitation, the rental rate(s), term and other financial and business terms), constitute confidential information of Landlord ("Confidential Information"). Tenant covenants and agrees to keep the Confidential Information confidential and not to disclose the same to third parties; provided, however, that such Confidential Information may be disclosed by Tenant to those of its officers, employees, attorneys, accountants, lenders and financial advisors (collectively, "Representatives") who need to know such information in connection with Tenant's use and occupancy of the Premises and for financial reporting and credit related activities. Tenant furthermore agrees to inform its Representatives of the confidential nature of such Confidential Information and to use all reasonable efforts to cause each Representative to treat such Confidential Information confidentially and in accordance with the terms of this paragraph.

10.4 Assignment of Rents and Transfer of Title; Limitation of Landlord's Liability. Tenant agrees that the assignment by Landlord of Landlord's interest in this Lease, or the rents payable hereunder, whether absolute or conditional in nature or otherwise, which assignment is made to the holder of a mortgage on property which includes the Premises, shall never be treated as an assumption by such holder of any of the obligations of Landlord hereunder unless such holder shall, by notice sent to Tenant, specifically otherwise elect and that, except as aforesaid, such holder shall be treated as having assumed Landlord's obligations hereunder (subject to the limitations set forth in Section 9.1) only upon foreclosure of such holder's mortgage and the taking of possession of the Premises.

The term "Landlord", so far as covenants or obligations to be performed by Landlord are concerned, shall be limited to mean and include only the owner or owners at the time in question of Landlord's interest in the Property, and in the event of any transfer or transfers of such title to said property, Landlord (and in case of any subsequent transfers or conveyances, the then grantor) shall be concurrently freed and relieved from and after the date of such transfer or

conveyance, without any further instrument or agreement, of all liability with respect to the performance of any covenants or obligations on the part of Landlord contained in this Lease thereafter to be performed, it being intended hereby that the covenants and obligations contained in this Lease on the part of Landlord, shall, subject as aforesaid, be binding on Landlord, its successors and assigns, only during and in respect of their respective period of ownership of such interest in the Property.

Notwithstanding the foregoing, in no event shall the acquisition of Landlord's interest in the Property by a purchaser which, simultaneously therewith, leases Landlord's entire interest in the Property back to Landlord or the seller thereof be treated as an assumption by operation of law or otherwise, of Landlord's obligations hereunder. Tenant shall look solely to such seller-lessee, and its successors from time to time in title, for performance of Landlord's obligations hereunder. The seller-lessee, and its successors in title, shall be the Landlord hereunder unless and until such purchaser expressly assumes in writing the Landlord's obligations hereunder.

Tenant shall not assert nor seek to enforce any claim for breach of this Lease against any of Landlord's assets other than Landlord's interest in the Property, and Tenant agrees to look solely to such interest for the satisfaction of any liability or claim against Landlord under this Lease, it being specifically agreed that in no event whatsoever shall Landlord ever be personally liable for any such liability. Tenant furthermore agrees that no trustee, officer, director, general or limited partner, member, shareholder, beneficiary, employee or agent (including any person or entity from time to time engaged to supervise and/or manage the operation of Landlord) of Landlord shall be held to any liability, jointly or severally, for any debt, claim, demand, judgment, decree, liability or obligation of any kind (in tort, contract or otherwise) of, against or with respect to Landlord or arising out of any action taken or omitted for or on behalf of Landlord.

10.5 Landlord's Default. Landlord shall not be deemed to be in breach of, or in default in the performance of, any of its obligations under this Lease unless it shall fail to perform such obligation(s) and such failure shall continue for a period of thirty (30) days, or such additional time as is reasonably required to correct any such breach or default, after written notice has been given by Tenant to Landlord specifying the nature of Landlord's alleged default provided Landlord shall have commenced a cure within such thirty-day period after Tenant's notice and Landlord is diligently pursuing such cure to completion. Tenant shall have no right to terminate this Lease for any breach or default by Landlord hereunder and no right, for any such breach or default, to offset or counterclaim against any rent due hereunder. In no event shall Landlord ever be liable to Tenant for any punitive damages or for any loss of business or any other indirect, special or consequential damages suffered by Tenant from whatever cause. Tenant further agrees that if Landlord shall have failed to cure any such breach or default within thirty (30) days of such notice to Landlord (or if such breach or default cannot be cured within said time, then within such additional time as may be necessary if within said thirty days Landlord has commenced and is diligently pursuing the remedies necessary to cure such breach or default), then the holder(s) of any mortgage(s) or the lessor under any ground lease entitled to notice pursuant to Section 10.6 shall have an additional thirty (30) days within which to cure such breach or default if such breach or default cannot be cured within that time, then such additional time as may be necessary, if within such thirty (30) days any such holder or lessor has commenced and is diligently pursuing the remedies necessary to cure such breach or default

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(including but not limited to commencement of foreclosure proceedings, if necessary to effect such cure).

If, Tenant shall commence an action or proceeding against Landlord to enforce an obligation of Landlord under this Lease and Tenant shall obtain a final non-appealable judgment against Landlord in such proceeding after all appeals, Tenant shall be entitled to receive, in addition to any damages or other relief awarded, reasonable attorneys fees and court costs.

10.6 Notice to Mortgagee and Ground Lessor. After receiving notice from any party that it holds a mortgage which includes the Premises as part of the mortgaged premises, or that it is the ground lessor under a lease with Landlord, as ground lessee, which includes the Premises as part of the demised premises, no notice from Tenant to Landlord shall be effective unless and until a copy of the same is given to such holder or ground lessor, and the curing of any of Landlord's defaults by such holder or ground lessor shall be treated as performance by Landlord.

10.7 Brokerage. Tenant warrants and represents that it has dealt with no broker in connection with the consummation of this Lease, other than Richards Barry Joyce & Partners, representing Tenant, and Hammond Real Estate, representing Landlord (the "Brokers"). In the event of any brokerage claims or liens other than by the Brokers, against Landlord or the Property predicated upon or arising out of prior dealings with Tenant, Tenant agrees to defend the same and indemnify and hold Landlord harmless against any such claim, and to discharge any such lien. Landlord represents that it has dealt with no brokers in connection with this Lease other than the Brokers. Landlord shall pay the commission of the Brokers in connection with this Lease pursuant to a separate agreement between Landlord and Hammond Real Estate, and Landlord hereby agrees to indemnify and hold Tenant harmless against any claims by the Brokers or any other brokers arising out of prior dealings with Landlord in connection with this Lease.

10.8 Waiver of Jury Trial. LANDLORD AND TENANT HEREBY WAIVE TRIAL BY JURY IN ANY ACTION, PROCEEDING OR COUNTERCLAIM BROUGHT BY EITHER OF THEM AGAINST THE OTHER IN CONNECTION WITH THIS LEASE.

10.9 Applicable Law and Construction. This Lease shall be governed by and construed in accordance with the laws of the Commonwealth of Massachusetts and if any provisions of this Lease shall to any extent be invalid, the remainder of this Lease shall not be affected thereby. Tenant expressly acknowledges and agrees that Landlord has not made and is not making, and Tenant, in executing and delivering this Lease, is not relying upon, any warranties, representations, promises or statements, except to the extent that the same are expressly set forth in this Lease or in any other written agreement which may be made between the parties concurrently with the execution and delivery of this Lease and which shall expressly refer to this Lease. All understandings and agreements heretofore made between the parties are merged in this Lease and any other such written agreement(s) made concurrently herewith, which alone fully and completely express the agreement of the parties and which are entered into after full investigation, neither party relying upon any statement or representation not embodied in this Lease or any other such written agreement(s) made concurrently herewith. This Lease may be amended, and the provisions hereof may be waived or modified, only by instruments in writing executed by Landlord and Tenant. The titles of the several Articles and Sections

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contained herein are for convenience only and shall not be considered in construing this Lease. The submission of this document for examination and negotiation does not constitute an offer to lease, or a reservation of, or option for, the Premises, and Tenant shall have no right to the Premises hereunder until the execution and delivery hereof by both Landlord and Tenant. Except as herein otherwise provided, the terms hereof shall be binding upon and shall inure to the benefit of the successors and assigns, respectively, of Landlord and Tenant and, if Tenant shall be an individual, upon and to his heirs, executors, administrators, successors and assigns. If two or more persons or parties are named as Tenant herein, (i) each of such persons or parties shall be jointly and severally liable for the obligations of the Tenant hereunder, and Landlord may proceed against any one without first having commenced proceedings against any other of them, and (ii) any notices, requests, demands, consents, approvals or other communications delivered by Tenant under the Lease which are not executed by each person or party named as Tenant herein may be deemed void, if Landlord shall so elect. Each term and each provision of this Lease to be performed by Tenant shall be construed to be both an independent covenant and a condition and time is of the essence with respect to the exercise of any of Tenant's rights, and the performance of any and all of Tenant's obligations, under this Lease. The reference contained to successors and assigns of Tenant is not intended to constitute a consent to assignment by Tenant. Except as otherwise set forth in this Lease, any obligations of Tenant (including, without limitation, rental and other monetary obligations, repair and maintenance obligations and obligations to indemnify Landlord), shall survive the expiration or earlier termination of this Lease, and Tenant shall immediately reimburse Landlord for any expense incurred by Landlord in curing Tenant's failure to satisfy any such obligation (notwithstanding the fact that such cure might be effected by Landlord following the expiration or earlier termination of this Lease).

WITNESS the execution hereof under seal on the day and year first above written.

Landlord:

Bulfinch Square Limited Partnership

By: Courthouse Associate, Inc., its general partner

By: /s/ Kenneth Krozy

Kenneth Krozy  
Vice President

Tenant:

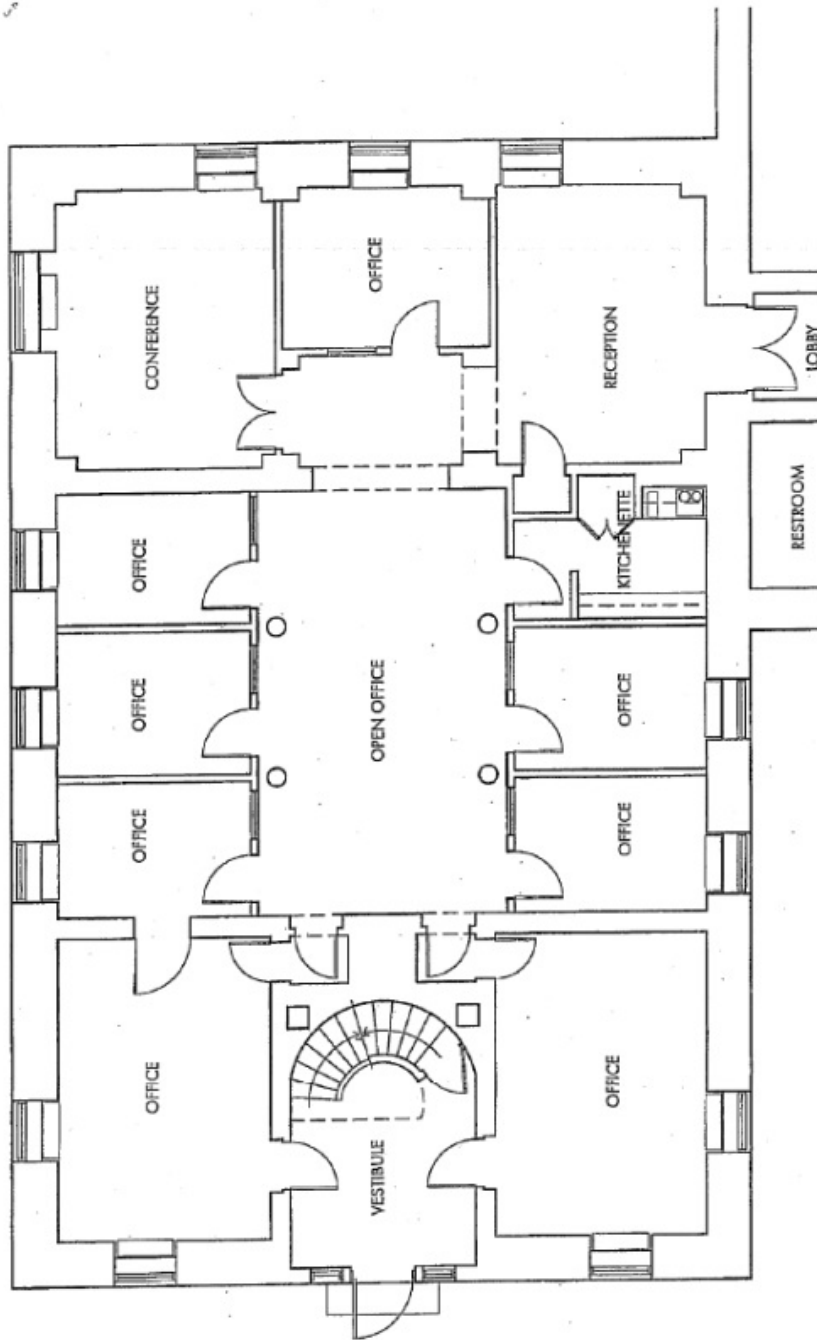
Health Care Ventures LLC

/s/ Jeffrey Steinberg

Name: Jeffrey Steinberg  
Title: VP - Legal Affairs



# EXHIBIT A



**SUITE B1-1**  
**BULFINCH BUILDING - 47 THORNDIKE STREET - CAMBRIDGE, MA - FIRST FLOOR - 3,174 RSF**

Scale: 1/8" = 1'-0"



## EXHIBIT B

### RULES AND REGULATIONS

1. The sidewalks, entrances, passages, corridors, vestibules, halls, elevators or stairways in or about the Building shall not be obstructed by Tenant or its employees, contractors or vendors.
2. Tenant shall not place objects against glass partitions, doors or windows which would be unsightly from the Building corridor or from the exterior of the Building. No sign, advertisement, notice or other lettering shall be exhibited, inscribed, painted or fixed by Tenant on any window or part of the outside or inside of the Buildings without prior consent of Landlord.
3. Tenant shall not place a load upon any floor of the Building exceeding the lesser of the floor load which such floor was designed to carry or that allowed by law.

4. Tenant shall not waste electricity or water in the Building and shall cooperate fully with Landlord to assure the most effective operation of the Building HVAC system. All regulating and adjusting of HVAC equipment shall be done by the Landlord's agents or employees.

5. No additional or different locks or bolts shall be affixed on doors by Tenant. Tenant shall return all keys to Landlord upon termination of Tenant's lease. Tenant shall not allow peddlers, solicitors or beggars in the Building and shall report such persons to the Landlord's agent.

6. Tenant shall not use the Premises so as to cause any increase above normal insurance premiums on the Building.

7. No bicycles, vehicles or animals of any kind shall be brought into or kept in or about the Premises without Landlord's prior written consent. No space in the Building shall be used for manufacturing or for the sale of merchandise of any kind at auction or for storage thereof preliminary to such sale.

8. Tenant shall not engage or pay any employees of the Building without approval from the Landlord. Tenant shall not employ any persons other than the janitor or employees of Landlord for the purpose of cleaning Premises without the prior written consent of Landlord.

9. All removals from the Building or the carrying in or out of the Building or the Premises of any freight, furniture or bulky matter of any description must take place at such time and in such manner as Landlord may determine from time to time. Landlord reserves the right to inspect all freight to be brought into the Building and to exclude from the Building all freight which violates any of the rules and regulations or provisions of Tenant's lease.

10. Normal Building Operating Hours are 7:00 a.m. to 6:00 p.m. Mondays through Fridays and 8:00 a.m. to 4:00 p.m. on Saturdays excluding New Years Day, Martin Luther King's Birthday, President's Day, Patriot's Day, Memorial Day, Independence Day, Labor Day,

Columbus Day, Veterans Day, Thanksgiving Day, Christmas Day (and the applicable weekday when any such day occurs on a weekend day) and all other federal, state, county or municipal holidays and all Sundays, except that Landlord reserves the option (at its sole election) to expand or alter Normal Building Operating Hours. Any day (other than a Saturday) on which Normal Building Operating Hours shall occur shall be a "Business Day".

10. Tenant shall cooperate with Landlord in minimizing loss and risk thereof from fire and associated perils.

11. Tenant shall, at Tenant's expense, provide artificial light and electric current for the Landlord and/or its contractors, agents and employees during the making of repairs, alterations, additions or improvements in or to the demised premises.

12. The water and wash closets and other plumbing fixtures shall not be used for any purposes other than those for which they were designed and constructed and no sweepings, rubbish, rags, acid or like substance shall be deposited therein. All damages resulting from any misuse of the fixtures shall be borne by Tenant.

13. All refuse from the Premises shall be disposed of in accordance with the requirements established therefor by Landlord and no dumpster shall be overloaded by Tenant.

14. Tenant shall not make or permit to be made by its employees, agents or contractors, any noises which shall disturb or interfere with other tenants or occupants of the Building or neighboring buildings or premises.

15. Landlord reserves the right at any time to rescind, alter or waive any rule or regulation at any time prescribed for the Building and to impose additional rules and regulations when in its judgment Landlord deems it necessary, desirable or proper for its best interest and for the best interest of tenants and other occupants and invitees thereof. No alteration or waiver of any rule or regulation in favor of one tenant shall operate as an alteration or waiver in favor of any other tenant. Landlord shall not be responsible to any tenant for the non-observance or violation by any other tenant however resulting of any rules or regulations at any time prescribed for the Building.

**AMENDMENT TO LEASE**

This Amendment to Lease (this "Amendment") is made as of June 30, 2015 by and between BULFINCH SQUARE LIMITED PARTNERSHIP, a Massachusetts limited partnership ("Landlord") and Healthcare Ventures, LLC a Delaware limited liability company ("Tenant").

WHEREAS, Landlord and Tenant are parties to that certain Lease dated, March 30, 2012 pursuant to which Tenant has leased from Landlord certain premises on the first (1st) floor of the Building located at 47 Thomdike Street, Cambridge, Massachusetts, as more particularly described in the Lease; and

WHEREAS, the term of the Lease is scheduled to expire on March 31, 2016; and

WHEREAS, Landlord and Tenant desire to extend the term of the Lease upon the terms and conditions hereinafter set forth;

NOW, THEREFORE, in consideration of the foregoing and for other consideration the mutual receipt and sufficiency of which are hereby acknowledged, Landlord and Tenant agree that the Lease is hereby amended as follows:

1. Capitalized terms used and not otherwise defined in this Amendment shall have the meanings attributed to them in the Lease.
2. The definition of "Original Term" in Section 1.1 of the Lease is hereby deleted and replaced with the following:

The period commencing on the Commencement Date and expiring on June 30, 2016.

3. The definition of "Annual Fixed Rent" in Section 1.1 of the Lease is hereby amended to reflect that the Annual Fixed Rent for the period commencing on April 1, 2016 and expiring on June 30, 2016 shall be as follows:

<b>Period</b>	<b>Rent Per Square Foot of Premises Rentable Area Per Annum</b>		<b>Annual Fixed Rent</b>		<b>Monthly Installment</b>	
5/1/16 — 7/31/16	\$	31.00	\$	98,394.00	\$	8,199.50

4. Tenant currently occupies the Premises and is agreeing to an extension of the term as herein provided with the Premises being in "as is" condition.
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5. The date of the "Extension Notice" in Section 2.3 is hereby amended to reflect January 15, 2016 as the final notice date for Tenant to notify Landlord of its intent to extend its Lease.

6. Tenant warrants and represents that it has dealt with no broker in connection with the execution of this Amendment other than Transwestern, RBJ, representing Tenant, and Hammond Real Estate, representing Landlord (the "Brokers"), and in the event of any brokerage claims or liens, other than by the Brokers, against Landlord or the Property predicated upon or arising out of prior dealings with Tenant, Tenant agrees to defend the same and indemnify and hold Landlord harmless against any such claim, and to discharge any such lien. Landlord shall pay the brokerage commission due the Brokers in connection with this Amendment pursuant to a separate agreement between Landlord and Hammond Real Estate.

7. As amended hereby, the Lease is hereby ratified and confirmed.

IN WITNESS WHEREOF, the parties have hereto executed this Amendment as of the date first above appearing.

LANDLORD:

BULFINCH SQUARE LIMITED PARTNERSHIP

By: Courthouse Associates, Inc., its general partner

By: /s/ Kenneth Krozy  
Kenneth Krozy  
Vice President

TENANT:

Healthcare Ventures, LLC

By: /s/ Robert Steinberg  
Name: Robert Steinberg  
Vice President - Operations

**FIRST AMENDMENT TO LEASE**

This First Amendment to Lease (this "Amendment") is made as of January 4, 2016 by and between Bulfinch Square Limited Partnership, a Massachusetts limited partnership ("Landlord"), and Healthcare Ventures LLC, a Delaware limited liability company ("Tenant").

WHEREAS, Landlord and Tenant entered into that certain Lease dated 2012 (the "Lease") for certain premises designated as Suite B1-1 (the "Original Premises") in the building located at 47 Thorndike Street, Cambridge, Massachusetts, as more particularly described in the Lease; and

WHEREAS, Landlord and Tenant desire to amend the Lease to extend the term of the Lease, to expand the Premises to include additional certain office in the premises demised to Tenant under the Lease and to modify certain other provisions of the Lease, upon the terms and conditions hereinafter set forth;

NOW, THEREFORE, in consideration of the foregoing and for other consideration the mutual receipt and sufficiency of which are hereby acknowledged, Landlord and Tenant agree that the Lease is hereby amended as follows:

1. Capitalized terms not otherwise defined in this Amendment shall have the meanings attributed to such terms in the Lease.
  2. The definition of "Premises" in Section 1.1 of the Lease is hereby amended to reflect that effective as of the Expansion Date, hereinafter defined, the Premises shall be expanded to include the portion of the Building designated as Suite ***[SB-1-1]*** (the "Expansion Premises") containing 4,493 rentable square feet, substantially as shown on Exhibit A-1 hereto. The "Expansion Date" shall be April 15, 2016 or as soon thereafter as Landlord is able to deliver possession of the Expansion Premises to Tenant with Landlord's Expansion Premises Work completed. "Landlord's Expansion Premises Work" shall consist of repainting the Expansion Premises in a Building standard color selected by Tenant.
  3. The definition of "Premises Rentable Area" in Section 1.1 is amended to reflect that effective as of the Expansion Date, the Premises Rentable Area shall be 7,667 square feet.
  4. The definition of "Original Term" in Section 1.1 of the Lease is hereby amended to reflect that the Original Term is extended through, and shall expire on, April 30, 2019.
  5. The definition of "Annual Fixed Rent" in Section 1.1 of the Lease is hereby amended to reflect that (i) for the portion of the term from the Expansion Date through July 31, 2016, in addition to the Annual Fixed Rent for the Original Premises as specified in the Lease, Tenant shall pay Annual Fixed Rent for the Expansion Premises in the amount of \$169,610.75, payable in equal monthly installments of \$14,134.23, which shall be pro rated for any partial month following the Expansion Date if the Expansion Date is other than the first day of a month, and (ii) commencing on August 1, 2015, Annual Fixed Rent for the Premises (i.e. the Original Premises and Expansion Premises, collectively) shall be as follows:
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Dates	Rate Per Square Foot of Premises Rentable Area		Annual Fixed Rent	Monthly Payment
	Per Annum			
8/1/16 — 7/31/17	\$	37.75	\$ 289,429.25	\$ 24,119.10
8/1/17 — 7/31/18	\$	38.75	\$ 297,096.25	\$ 24,758.02
8/1/18 — 4/30/19	\$	39.75	\$ 304,763.25	\$ 25,396.94

6. The definitions of “Base Taxes” and “Base Operating Costs” in Section 1.1 of the Landlord are hereby amended to reflect that effective as of August 1, 2016, said definitions are changed to the following:

**Base Taxes:** The Taxes (as defined in Subsection 4.2.1) for the fiscal year ending June 30, 2016, as the same may be reduced by the amount of any abatement.

**Base Operating Costs:** The Operating Costs (as defined in Subsection 4.2.2) for the calendar year ending December 31, 2016.

7. The definition of “Tenant’s Percentage” in Section 1.1 of the Lease is hereby amended to reflect that effective as of the Expansion Date, Tenant’s Percentage shall be increased to ten and 1/100 percent (10.01%). Notwithstanding the foregoing, for purposes of Tenant’s obligation to pay Additional Rent for Taxes and Operating Costs pursuant to Section 4.2 of the Lease, Tenant’s Percentage shall be deemed to continue to be four and 14/100 (4.14%) until August 1, 2016, so that Tenant shall not be required to pay Additional Rent for Taxes with respect to the Expansion Premises until August 1, 2016 and shall not be required to pay Additional Rent for Operating Costs with respect to the Expansion Premises until January 1, 2017.

8. Tenant acknowledges that is currently occupies the Original Premises and is agreeing to an extension of the Lease term as herein provided with the Original Premises being in “as is” condition, except that Landlord shall touch up the painted surfaces in the Original Premises as necessary. Tenant agrees to accept the Expansion Premises on the Expansion Date with the Expansion Premises being in “as is” condition except as affected by Landlord’s Expansion Work.

9. The definition of “Security Deposit” in Section 1.1 of the Lease is hereby amended to be \$24,119.10. Tenant shall deposit with Landlord the difference between the original Security Deposit and the Security Deposit as so amended, in the amount of \$9,307.10, concurrently with Tenant’s execution of this Amendment.

10. Tenant shall continue to have the extension option set forth in Section 2.3 of the Lease except that said Section 2.3 is hereby amended to reflect that (i) the Extended Term shall three (3) years and not four (4) years, and (ii) the Annual Fixed Rent for the Extended Term shall be one hundred percent (100%) of the Market Rate and not 95% of the Market Rate.



11. Tenant warrants and represents that it has dealt with no broker in connection with the consummation of this Amendment, other than Transwestern RBJ, representing Tenant, and Hammond Commercial, representing Landlord (the "Brokers"). In the event of any brokerage claims or liens other than by the Brokers, against Landlord or the Property predicated upon or arising out of prior dealings with Tenant, Tenant agrees to defend the same and indemnify and hold Landlord harmless against any such claim, and to discharge any such lien. Landlord represents that it has dealt with no brokers in connection with this Amendment other than the Brokers. Landlord shall pay the commission of the Brokers in connection with this Lease pursuant to a separate agreement between Landlord and Hammond Commercial, and Landlord hereby agrees to indemnify and hold Tenant harmless against any claims by the Brokers or any other brokers arising out of prior dealings with Landlord in connection with this Amendment.

12. Tenant warrants and represents that it has not assigned the Lease or subleased all or any portion of the Premises.

13. Exhibit A-1 to this Amendment is hereby added to the Lease as Exhibit A-1 to the Lease.

14. As amended hereby, the Lease is hereby ratified and confirmed.

IN WITNESS WHEREOF, the parties have hereto executed this Amendment as of the date first above appearing.

Landlord:

Bulfinch Square Limited Partnership

By: Courthouse Associate, Inc., its general partner

By: /s/ Kenneth Krozy

Kenneth Krozy  
Vice President

Tenant:

Health Care Ventures LLC

/s/ Augustine Lawlor

Name: Augustine Lawlor  
Title: General Partner

CONSENT TO ASSIGNMENT AND ASSUMPTION OF LEASE

This Consent to Assignment and Assumption of Lease (this "Agreement") is made as of the 19th day of December, 2016 by and among Bulfinch Square Limited Partnership, a Massachusetts limited partnership ("Landlord"), HealthCare Ventures LLC, a Delaware limited liability company ("Tenant") and Leap Therapeutics, Inc., a Delaware corporation ("Assignee").

WHEREAS, Landlord and Tenant have entered into that certain Lease dated March 30, 2012, as amended by amendments dated June 30, 2015 and January 4, 2016 (as so amended, the "Lease") for the lease of certain premises (the "Premises") known as Suite B1-1 in the building located at 47 Thorndike Street, Cambridge, Massachusetts, as more particularly described in the Lease; and

WHEREAS, Tenant desires to assign its interest in the Lease to Assignee and Assignee desires to assume Tenant's obligations under the Lease; and

WHEREAS, to effectuate such assignment and assumption Tenant and Assignee have entered into an Assignment and Assumption Agreement (the "Assignment") a copy of which is attached hereto as Exhibit A; and

WHEREAS, Landlord has agreed to consent to the Assignment subject to the terms and conditions of this Agreement.

NOW, THEREFORE, in consideration of the mutual covenants contained herein, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereto hereby agree as follows:

1. Assignee hereby acknowledges that it has been given a copy of the Lease, has read the Lease and is familiar with its contents, and agrees to be bound thereby. Assignee hereby assumes, for the benefit of Landlord, all of the obligations of Tenant under the Lease, whether arising before or after the date hereof, including but without limitation the obligation to pay timely all rent, additional rent and other charges due or to become due under the Lease, and agrees to be bound by all the provisions of the Lease, all to the same extent as if Assignee had signed the Lease originally as the tenant named therein. Tenant confirms that it has assigned all of its rights, as tenant under the Lease, to Assignee. In furtherance of the foregoing, Tenant confirms that Tenant's interest in the security deposit (if any) has been transferred to Assignee and Tenant releases Landlord from any and all claims with respect thereto.

2. Tenant represents and warrants that (a) the Lease is in full force and effect and constitutes the entire agreement between Landlord and Tenant with respect to the Premises; (b) Tenant has not previously assigned, mortgaged, pledged or otherwise transferred any interest under the Lease nor has it sublet, licensed or otherwise granted any occupancy rights to any third party currently occupying any portion of the Premises; (c) Tenant knows of no defense or counterclaim to the enforcement of the obligations of the Tenant under the Lease and has no knowledge of any default by Landlord; (d) Tenant is not entitled to any reduction, offset or abatement of the rent payable under the Lease; (e) a true and complete copy of the Assignment is attached hereto as Exhibit A, and the Assignment constitutes the complete agreement between Tenant and Assignee with respect to the subject matter thereof; and (f) Tenant is not in default of

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any of its obligations or covenants under the Lease, and has not breached any of its representations or warranties thereunder.

3. Tenant hereby reaffirms that it shall remain, jointly and severally with Assignee and its successors and assigns, fully responsible and primarily liable for the prompt payment of rent, additional rent, and all other amounts payable by the tenant under the Lease, and for the performance of all of the terms, covenants, conditions and provisions of the Lease required to be performed on the part of the tenant thereunder, and shall be bound by and liable for all actions of Assignee and its successors and assignees as they relate to the Lease or the Premises, as if they were undertaken by Tenant.

4. Landlord has executed this Agreement for the sole purpose of evidencing its consent to the Assignment. Neither Landlord's consent under this Agreement nor anything contained in the Assignment shall be construed to modify, waive, impair or affect any of the covenants, agreements, terms, provisions, obligations or conditions contained in the Lease (except as herein expressly provided), or to waive any breach thereof, or any rights of Landlord against any party liable or responsible for the performance thereof, or to increase the obligations or diminish the rights of Landlord under the Lease, or to increase the rights or diminish the obligations of Tenant thereunder, or to, in any way, be construed as giving Assignee any greater rights than those possessed by the original tenant named in the Lease.

5. Tenant and Assignee hereby covenant and agree that Landlord is not and will not be responsible for the payment of any commissions or fees in connection with the Assignment and they each agree to indemnify and hold Landlord harmless from and against any claims, liability, losses or expenses, including attorneys' fees and court costs, incurred by Landlord in connection with any claims for a commission or fee by any broker, agent or finder in connection with the Assignment.

6. Tenant and Assignee hereby agree that any option or right to extend or renew the term of the Lease or to expand the size of the Premises or to lease additional premises and any right of first offer or right of first refusal relating to space in the Building, any of which has not heretofore been exercised, is hereby deleted from the Lease.

7. Landlord shall be under no obligation to commence proceedings or exhaust any of its remedies against Assignee before proceeding against Tenant, or against Tenant before proceeding against Assignee, for any redress provided for in the Lease or this Agreement, or at law or in equity.

8. Any notice given by any party to another party hereto shall be in writing and shall be delivered by hand or mailed by certified or registered mail, return receipt requested, or by a nationally recognized courier service that provides a receipt for delivery such as Federal Express, United Parcel Service or U.S. Postal Service Express Mail to such other party at the address given below or such other address as such other party may from time to time designate in writing to the other parties in accordance with these provisions. Notices shall be effective on the date delivered to (or the first date such delivery is attempted and refused by) the parties to which such notice is required or permitted to be given or made under this Agreement.

Landlord:	Bulfinch Square Limited Partnership c/o Kenneth Krozy, CPA Krozy & Company, Inc. PO Box 4246 Andover, MA 01810
Tenant:	Healthcare Ventures LLC Robert Steinberg 47 Thomdike Street, Suite B1 Cambridge, MA 02141
Assignee:	Leap Therapeutics, Inc. Doug Onsi 47 Thomdike Street, Suite B1 Cambridge, MA 02141

9. Except as herein otherwise provided, this Agreement shall be binding upon and inure to the benefit of the parties, and their respective heirs, executors, administrators, successors and assigns.

IN WITNESS WHEREOF, the Landlord, Tenant and the Assignee have executed this Agreement under seal as of the date set forth above.

LANDLORD:

Bulfinch Square Limited Partnership

By: Courthouse Associates, Inc., its general partner

By: /s/ Kenneth Krozy

Name: Kenneth Krozy

Title: Vice President

TENANT:

HealthCare Ventures LLC

By: /s/ Robert Steinberg

Name: Robert Steinberg

Title: Vice President - Administration

ASSIGNEE:

Leap Therapeutics, Inc.

By: /s/ Douglas E. Onsi

Name: Douglas E. Onsi

Title: Chief Financial Officer

Exhibit A

Assignment and Assumption Agreement.

[See attached copy.]

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**ASSIGNMENT AND ASSUMPTION AGREEMENT**

**ASSIGNMENT AND ASSUMPTION AGREEMENT**, dated as of December , 2016, between HealthCare Ventures LLC, a Delaware limited liability company ("*Assignor*"), and Leap Therapeutics, Inc. a Delaware corporation ("*Assignee*").

**WITNESSETH**

**WHEREAS**, Assignee has agreed to assume certain liabilities and obligations of Assignor with respect to the lease of space at 47 Thorndike Street, Suite B1, Cambridge, MA pursuant to the Lease Agreement between Assignor and Bullfinch Square Limited Partnership, a Massachusetts limited partnership, dated March 30, 2012, as amended on June 30, 2015 and January 4, 2016 (as amended, the "Agreement");

**NOW, THEREFORE**, for good and lawful consideration, receipt and sufficiency of which is hereby acknowledged, Assignor and Assignee agree as follows:

1. (a) Effective as of January 1, 2017 (the "Effective Date"), Assignor does hereby transfer, assign and deliver to Assignee all of the right, title and interest of Assignor in, to and under the Agreement.

(b) As of the Effective Date, Assignee does hereby accept all the right, title and interest of Assignor in, to and under the Agreement, and Assignee assumes and agrees to pay, perform and discharge promptly and fully when due all of the liabilities and to perform all of the obligations of Assignor to be performed under the Agreement.

2. This Agreement shall be construed in accordance with and governed by the law of the Commonwealth of Massachusetts, without regard to its conflicts of law rules.

3. This Agreement may be executed in one or more counterparts, each of which shall be deemed to be an original, but all of which together shall constitute one and the same instrument.

**IN WITNESS WHEREOF**, the parties hereto have caused this Agreement to be duly executed as of the day and year first above written.

HEALTHCARE VENTURES LLC

By: /s/ Robert Steinberg  
Name: Robert Steinberg  
Title: VP — Administration

LEAP THERAPEUTICS, INC.

By: /s/ Douglas E. Onsi  
Name: Douglas E. Onsi  
Title: CFO

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Exhibit 21.1

**SUBSIDIARIES OF  
LEAP THERAPEUTICS, INC.**

<u>Subsidiary</u>	<u>Jurisdiction of Incorporation/Organization</u>
GITR, Inc.	Delaware
HealthCare Pharmaceuticals Pty Ltd	Australia
Leap Therapeutics Ltd.	Israel
Macrocare, Inc.	Delaware

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QuickLinks

[Exhibit 21.1](#)

[SUBSIDIARIES OF LEAP THERAPEUTICS, INC.](#)

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**Exhibit 23.1**

**CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

We consent to the incorporation by reference in the Registration Statement of Leap Therapeutics, Inc. on Form S-8 (No. 333-215787) of our report dated March 31, 2017, on our audits of the consolidated financial statements as of December 31, 2016 and 2015 and for each of the years then ended, which report is included in this Annual Report on Form 10-K to be filed on or about March 31, 2017.

/s/ EISNERAMPER LLP

Philadelphia, Pennsylvania  
March 31, 2017

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[Exhibit 23.1](#)

**CERTIFICATION PURSUANT TO  
SECURITIES EXCHANGE ACT RULES 13a-14(a) AND 15d-14(a)**

I, Christopher K. Mirabelli, Ph.D., certify that:

1. I have reviewed this Annual Report on Form 10-K of Leap Therapeutics, 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)) 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) (Paragraph omitted pursuant to SEC release Nos. 33-8238/34-47986 and 33-8392/34-49133);
  - 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.

March 31, 2017

Date

/s/ CHRISTOPHER K. MIRABELLI, PH.D.

Christopher K. Mirabelli, Ph.D.  
*Chief Executive Officer, President and  
Chairman of the Board  
(Principal Executive Officer)*

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[Exhibit 31.1](#)

[CERTIFICATION PURSUANT TO SECURITIES EXCHANGE ACT RULES 13a-14\(a\) AND 15d-14\(a\)](#)

**CERTIFICATION PURSUANT TO  
SECURITIES EXCHANGE ACT RULES 13a-14(a) AND 15d-14(a)**

I, Douglas E. Onsi, certify that:

1. I have reviewed this Annual Report on Form 10-K of Leap Therapeutics, 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)) 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) (Paragraph omitted pursuant to SEC release Nos. 33-8238/34-47986 and 33-8392/34-49133);
  - 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.

March 31, 2017

/s/ DOUGLAS E. ONSI

Date

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Douglas E. Onsi  
*Chief Financial Officer, General Counsel,  
Treasurer and Secretary  
(Principal Financial Officer)*

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QuickLinks

[Exhibit 31.2](#)

[CERTIFICATION PURSUANT TO SECURITIES EXCHANGE ACT RULES 13a-14\(a\) AND 15d-14\(a\)](#)



**CERTIFICATIONS PURSUANT TO  
18 U.S.C. SECTION 1350,  
AS ADOPTED PURSUANT TO  
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the Annual Report of Leap Therapeutics, Inc. (the "Corporation") on Form 10-K for the fiscal year ended December 31, 2016, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), Christopher K. Mirabelli, Ph.D., the President and Chief Executive Officer of the Corporation, and Douglas E. Onsi, the Chief Financial Officer, General Counsel, Treasurer and Secretary of the Corporation, hereby certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to their knowledge:

- (1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Corporation.

Date: March 31, 2017

By: /s/ CHRISTOPHER K. MIRABELLI, PH.D.

Christopher K. Mirabelli, Ph.D.  
*Chief Executive Officer, President and  
Chairman of the Board  
(Principal Executive Officer)*

Date: March 31, 2017

By: /s/ DOUGLAS E. ONSI

Douglas E. Onsi  
*Chief Financial Officer, General Counsel, Treasurer  
and Secretary  
(Principal Financial Officer)*

*A signed original of this written statement required by Section 906 has been provided to the Company and will be retained by the Company and furnished to the Securities and Exchange Commission or its staff upon request.*

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[Exhibit 32.1](#)

[CERTIFICATIONS PURSUANT TO 18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002](#)