

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

**FORM 10-K**

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

For the fiscal year ended December 31, 2017

Or

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

Commission File Number 033-80623

**Achieve Life Sciences, Inc.**

(Exact name of the registrant as specified in its charter)

**Delaware**  
(State or other jurisdiction of  
incorporation or organization)

95-4343413  
(I.R.S. Employer  
Identification No.)

**1001 W. Broadway, Suite 400, Vancouver, British Columbia, V6H 4B1**  
(Address of principal executive offices, including zip code)

**(604) 736-3678**

(Registrant's telephone number, including area code)

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

**Title of Each Class**  
Common Stock, par value \$0.001 per share

**Name of Exchange on Which Registered**  
The NASDAQ Capital Market

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

None

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

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

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

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

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

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

Large accelerated filer  Accelerated filer

Non-accelerated filer  Smaller reporting company

Emerging growth company

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

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

As of June 30, 2017, the aggregate market value of the registrant's Common Stock held by non-affiliates of the registrant was \$10,680,134. As of March 1, 2018, 12,747,932 shares of the registrant's Common Stock were outstanding.

**DOCUMENTS INCORPORATED BY REFERENCE**

Portions of the Registrant's Definitive Proxy Statement for its 2018 Annual Meeting of Stockholders ("Proxy Statement"), to be filed within 120 days of the Registrant's fiscal year ended December 31, 2017, is incorporated by reference into Part III of this Annual Report on Form 10-K

Table of Contents

<b><u>PART I</u></b>		
ITEM 1.	<a href="#"><u>BUSINESS</u></a>	3
ITEM 1A.	<a href="#"><u>RISK FACTORS</u></a>	16
ITEM 1B.	<a href="#"><u>UNRESOLVED STAFF COMMENTS</u></a>	37
ITEM 2.	<a href="#"><u>PROPERTIES</u></a>	37
ITEM 3.	<a href="#"><u>LEGAL PROCEEDINGS</u></a>	37
ITEM 4.	<a href="#"><u>MINE SAFETY DISCLOSURE</u></a>	37
<b><u>PART II</u></b>		
ITEM 5.	<a href="#"><u>MARKET FOR THE REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES</u></a>	38
ITEM 6.	<a href="#"><u>SELECTED FINANCIAL DATA</u></a>	40
ITEM 7.	<a href="#"><u>MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS</u></a>	41
ITEM 7A.	<a href="#"><u>QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK</u></a>	51
ITEM 8.	<a href="#"><u>FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA</u></a>	52
ITEM 9.	<a href="#"><u>CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE</u></a>	82
ITEM 9A.	<a href="#"><u>CONTROLS AND PROCEDURES</u></a>	82
ITEM 9B.	<a href="#"><u>OTHER INFORMATION</u></a>	82
<b><u>PART III</u></b>		
ITEM 10.	<a href="#"><u>DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE</u></a>	83
ITEM 11.	<a href="#"><u>EXECUTIVE COMPENSATION</u></a>	83
ITEM 12.	<a href="#"><u>SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS</u></a>	83
ITEM 13.	<a href="#"><u>CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE</u></a>	83
ITEM 14.	<a href="#"><u>PRINCIPAL ACCOUNTANT FEES AND SERVICES</u></a>	83
<b><u>PART IV</u></b>		
ITEM 15.	<a href="#"><u>EXHIBITS AND FINANCIAL STATEMENT SCHEDULES</u></a>	84

## PART I

References in this Form 10-K to "Achieve Life Sciences," "Achieve," the "Company," "we," "us" or "our" refer to Achieve Life Sciences, Inc. and its wholly owned subsidiaries. The information in this Annual Report on Form 10-K contains certain forward-looking statements, including statements related to clinical trials, regulatory approvals, markets for our products, new product development, capital requirements and trends in our business that involve risks and uncertainties. Our actual results may differ materially from the results discussed in the forward-looking statements. Factors that might cause such a difference include those discussed in "Business," "Risk Factors" and "Management's Discussion and Analysis of Financial Condition and Results of Operations," as well as those discussed elsewhere in this Annual Report on Form 10-K.

### ITEM 1. BUSINESS

#### OVERVIEW OF OUR BUSINESS AND RECENT DEVELOPMENTS

We are a clinical-stage pharmaceutical company committed to the global development and commercialization of cytisine for smoking cessation. Our focus is to address the global smoking health epidemic, which is a leading cause of preventable death and is responsible for approximately six million deaths annually worldwide.

Cytisine is an established 25-day smoking cessation treatment that has been approved and marketed in Central and Eastern Europe by Sopharma AD for over 20 years under the brand name Tabex™. It is estimated that over 20 million people have used cytisine to help treat nicotine addiction, including over 2,000 patients in investigator-conducted, Phase 3 clinical trials in Europe and New Zealand. Both trials were published in the New England Journal of Medicine in September 2011 and December 2014, respectively.

Cytisine is a naturally occurring, plant-based alkaloid from the seeds of the *Laburnum anagyroides* plant. Cytisine is structurally similar to nicotine and has a well-defined, dual-acting mechanism of action that is both agonistic and antagonistic. It is believed to aid in smoking cessation by interacting with nicotine receptors in the brain by reducing the severity of nicotine withdrawal symptoms through agonistic binding to nicotine receptors and by reducing the reward and satisfaction associated with smoking through antagonistic properties. The cytisine dosing schedule reflects that of an anti-addiction medication, with downward dose titration over a period of 25 days.

In late June 2017, we filed our Investigational New Drug, or IND, application for cytisine with the United States Food and Drug Administration, or FDA, which included National Center for Complementary and Integrative Health, or NCCIH, sponsored non-clinical studies. The IND was accepted in late July 2017.

In August 2017, we initiated a study evaluating the effect of food on the bioavailability of cytisine in normal healthy volunteers. We completed the food effect study and announced the results in November of 2017 demonstrating similar bioavailability of cytisine in fed and fasted subjects.

In October 2017, we initiated a study assessing the repeat-dose Pharmacokinetics, or PK, and Pharmacodynamics, or PD, effects of 1.5mg and 3mg cytisine in 36 healthy volunteer smokers aged 18-65 years when administered over the standard 25-day course of treatment. Preliminary results on 24 smokers were announced in February 2018. The PK results indicated expected increases in plasma concentration with higher doses of cytisine. Smokers in the study were not required to have a designated or predetermined quit date, however, 58% of the subjects in the trial achieved biochemically verified smoking abstinence by day 26. Half (6/12) of the subjects on the 1.5mg arm and 67% (8/12) of the subjects on the 3.0mg arm achieved abstinence on day 26. Subjects who did not achieve abstinence had a significant reduction in number of daily cigarettes smoked by day 26. The adverse events observed were mostly mild with transient headaches as the most commonly reported event. No serious adverse events were observed in the study.

In December 2017, we submitted a meeting request to hold a pre-Phase 3 meeting with the FDA to review our Phase 3 program and overall development plans for cytisine. We received confirmation from the FDA for a meeting date in the second quarter of 2018. We intend to commence a Phase 3 clinical program in mid-2018, subject to FDA guidance and the availability of capital. In addition to the Phase 3 program, we expect to run additional supportive clinical studies including, but not limited to urinary excretion of cytisine, renal impairment and QT interval prolongation studies as well as supportive New Drug Application, or NDA, non-clinical chronic toxicity and carcinogenicity studies.

While third party trials of cytisine have been conducted that may inform future Company-sponsored clinical trials, we have not yet conducted any large scale company-sponsored clinical trials for cytisine in the United States or any other jurisdiction.

Our management team has significant experience in growing emerging companies focused on the development of under-utilized pharmaceutical compounds to meet unmet medical needs. We intend to use this experience to develop and ultimately commercialize cytisine either directly or via strategic collaborations.

### **Recent Corporate History**

On August 1, 2017, OncoGenex Pharmaceuticals, Inc., or OncoGenex, completed a transaction, or the Arrangement, with Achieve Life Science, Inc., or Achieve, as contemplated by the Merger Agreement between Achieve and OncoGenex dated January 5, 2017, or the Merger Agreement. Under the terms of the Merger Agreement, OncoGenex changed its name to Achieve Life Sciences, Inc., instituted an one-for-eleven reverse stock split, issued 8,210,118 shares of its common stock (after accounting for the elimination of resulting fractional shares) in exchange for all of the outstanding preferred shares, common shares and convertible debentures of Achieve, and as a result Achieve became a wholly-owned subsidiary of OncoGenex, and is listed on the Nasdaq Capital Market under the ticker symbol ACHV. More information concerning the Arrangement is contained in our Current Report on Form 8-K filed on August 2, 2017 and our Amendment No. 3 to the Registration Statement on Form S-4/A filed with the SEC on June 6, 2017.

The financial results account for the Arrangement between OncoGenex and Achieve as a reverse merger, whereby Achieve is deemed to be the acquiring entity from an accounting perspective. Our consolidated results of operations for the year ended December 31, 2017 include the results of operations of only Achieve for the time period of January 1, 2017 through August 1, 2017 and include the results of the combined company following the completion of the Arrangement on August 1, 2017. The consolidated results of operations for the years ended December 31, 2016 and December 31, 2015 include only the consolidated results of operations of Achieve and do not include historical results of OncoGenex. This treatment and presentation is in accordance with ASC 805, "Business Combinations". Information relating to the number of shares, price per share and per share amounts of common stock are presented on a post- reverse stock split basis, as a reverse stock split in the ratio of one-for-eleven was effected in connection with the Arrangement.

We have no products approved for commercial sale and have not generated any revenue from product sales to date. We have never been profitable and have incurred operating losses in each year since inception. Our net loss was \$10.6 million, \$1.2 million and \$0.8 million for years end December 31, 2017, 2016 and 2015, respectively. As of December 31, 2017, we had an accumulated deficit of \$12.7 million, cash and cash equivalents balance of \$5.3 million and a positive working capital balance of \$3.7 million. Substantially all of our operating losses resulted from expenses incurred from general and administrative costs associated with our operations and research and development costs from our clinical development programs.

Substantial doubt exists as to our ability to continue as a going concern. Our ability to continue as a going concern is uncertain and dependent on our ability to obtain additional financing. We expect to incur significant expenses and increasing operating losses for at least the next several years as we continue our clinical development of, and seek regulatory approval for, cytisine and add personnel necessary to operate as a public company with an advanced clinical candidate. We expect that our operating losses will fluctuate significantly from quarter to quarter and year to year due to timing of clinical development programs and efforts to achieve regulatory approval. Without additional funds, we may be forced to delay, scale back or eliminate some of our research and development activities or other operations and potentially delay product development in an effort to provide sufficient funds to continue our operations. If any of these events occur, our ability to achieve our development and commercialization goals would be adversely affected.

Our current capital resources are insufficient to fund our planned operations for the next 12 months. We will continue to require substantial additional capital to continue our clinical development activities. Accordingly, we will need to raise substantial additional capital to continue to fund our operations, from the sale of our securities, partnering arrangements or other financing transactions in order to finance the commercialization of our product candidates. The amount and timing of our future funding requirements will depend on many factors, including the pace and results of our clinical development efforts. Failure to raise capital as and when needed, on favorable terms or at all, will have a negative impact on our financial condition and our ability to develop our product candidate.

The accompanying financial results have been prepared assuming we will continue to operate as a going concern, which contemplates the realization of assets and liabilities and commitments in the normal course of business. The financial results do not include any adjustments to the amounts and classification of assets and liabilities that might be necessary should we be unable to continue as a going concern. Such adjustments could be material.

### **Product Candidate Overview**

Our product candidate, cytisine, is a naturally occurring plant-based alkyloid from the seeds of the *Laburnum anagyroides* plant. Cytisine is a smoking cessation aid that interacts with nicotine receptors in the brain and is believed to help reduce the severity of nicotine withdrawal symptoms and the reward and satisfaction associated with smoking.

Cytisine is an established 25-day smoking cessation treatment that has been approved and marketed in Central and Eastern Europe by a third party for over 20 years under the brand name Tabex™. It is estimated that over 20 million people have used cytisine to help treat nicotine addiction, including over 2,000 patients in investigator-conducted, Phase 3 clinical trials in Europe and New Zealand. Both trials were published in the New England Journal of Medicine in September 2011 and December 2014.

#### *Apatorsen*

In August 2017, we discontinued further development of apatorsen. We provided a notice of discontinuance to our former development partners for apatorsen, Ionis Pharmaceuticals, Inc., or Ionis, and a letter of termination to the University of British Columbia, or UBC, notifying them that we have discontinued development of apatorsen resulting in termination of all licensing agreements related to this product candidate. We believe that all financial obligations, other than continuing mutual indemnification obligations and our requirement to pay for out-of-pocket patent expenses incurred up to the date of termination and for abandoning the apatorsen patents and patent applications, under all apatorsen related agreements with Ionis and UBC, are no longer owed and no further payments are due.

### **OUR PRODUCT CANDIDATE - CYTISINE**

#### **Overview of Cytisine**

Our product candidate, cytisine, is a naturally occurring plant-based alkaloid from the seeds of the *Laburnum anagyroides* plant. Cytisine is a smoking cessation aid that interacts with nicotine receptors in the brain and is believed to help reduce the severity of nicotine withdrawal symptoms and the reward and satisfaction associated with smoking.

Cytisine is an established 25-day smoking cessation treatment that has been approved and marketed in Central and Eastern Europe by a third party for over 20 years under the brand name Tabex™. It is estimated that over 20 million people have used cytisine to help treat nicotine addiction, including over 2,000 patients in investigator-conducted, Phase 3 clinical trials in Europe and New Zealand. Both trials were published in the New England Journal of Medicine in September 2011 and December 2014. Tabex™ is currently marketed in a number of countries in Central and Eastern Europe, as well as in other geographic regions, as Over-the-Counter drug, or OTC.

#### *Cytisine Mechanism of Action*

Cytisine is a partial agonist that binds with high affinity to the alpha-4 beta-2, or a4b2, nicotinic acetylcholine receptors in the brain. Through dual-acting partial agonist/partial antagonist activity, cytisine is believed to help reduce nicotine cravings, withdrawal symptoms and reward and satisfaction associated with smoking. The a4b2 nicotinic receptor is a well-understood target in addiction. When nicotine binds to this receptor, it causes dopamine to be released in the mid brain, reinforcing the dopamine reward system. This receptor has been implicated in the development and maintenance of nicotine dependence. Cytisine is believed to act as a partial agonist at the a4b2 nicotinic receptor, preventing nicotine from binding and releasing dopamine.

#### *Cytisine Opportunity*

We have an exclusive license and supply agreement with Sopharma for the development and commercialization of cytisine outside of Sopharma's territory, which consists of certain countries in Central and Eastern Europe, Scandinavia, North Africa, the Middle East and Central Asia, as well as Vietnam. We intend to develop and commercialize cytisine in the United States and intend thereafter to target other markets outside of Sopharma's territory, such as Western Europe, Japan, Australasia, Southeast Asia and Latin and South America.

We are developing cytisine as an aid to smoking cessation and nicotine dependence to address the limitations of both prescription drugs and OTC products. We believe that a substantial market exists in the United States, European Union, or EU, and the rest of the world for a safe and effective smoking cessation treatment. Increasingly constrained healthcare budgets have focused government attention on drug pricing, which we believe cytisine can address by serving as a cost-effective alternative to existing treatments, with the potential for better efficacy than nicotine replacement therapies, or NRTs, and a potentially superior side effect profile than existing prescription smoking cessation products. Our goal is to obtain approval from the FDA and from other regulatory agencies for the sale and distribution of cytisine in the United States and subsequently to other countries outside of Sopharma's territory.

We have met with the United States Food and Drug Administration, or FDA, and with other national regulatory authorities in Europe to identify the steps required for the approval of cytisine. The FDA requested results from non-clinical studies, additional human

pharmacokinetic studies and adequate demonstration of safety and efficacy from randomized, placebo-controlled, Phase 3 clinical trials.

The non-clinical studies requested by the FDA have been sponsored and completed by the National Center for Complementary and Integrative Health, or NCCIH, division of the U.S. National Institutes of Health, in addition to the National Cancer Institute. In July 2017, we filed our Investigational New Drug, or IND, application for cytisine with the FDA, which included NCCIH sponsored non-clinical studies. The IND was accepted in late July 2017.

In August 2017, we initiated a study evaluating the effect of food on the bioavailability of cytisine in normal healthy volunteers. We completed the food effect study and announced the results in November of 2017 demonstrating similar bioavailability of cytisine in fed and fasted subjects.

In October 2017, we initiated a study assessing the repeat-dose Pharmacokinetics, or PK, and Pharmacodynamics, or PD, effects of 1.5mg and 3mg cytisine in 36 healthy volunteer smokers aged 18-65 years when administered over the standard 25-day course of treatment. Preliminary results on 24 smokers were announced in February 2018. The PK results indicated expected increases in plasma concentration with higher doses of cytisine. Smokers in the study were not required to have a designated or predetermined quit date, however, 58% of the subjects in the trial achieved biochemically verified smoking abstinence by day 26. Half (6/12) of the subjects on the 1.5mg arm and 67% (8/12) of the subjects on the 3.0mg arm achieved abstinence on day 26. Subjects who did not achieve abstinence had a significant reduction in number of daily cigarettes smoked by day 26. The adverse events observed were mostly mild with transient headaches as the most commonly reported event. No serious adverse events were observed in the study.

In December 2017, we initiated a number of in vitro drug to drug interaction studies of cytisine and expect data from these studies to be available in the first half of 2018. Also in December 2017, we submitted a meeting request to hold a pre-Phase 3 meeting with the FDA to review our Phase 3 program and overall development plans for cytisine. We received confirmation from the FDA for a meeting date in the second quarter of 2018. We intend to commence a Phase 3 clinical program in mid-2018, subject to FDA guidance and the availability of capital. In addition to the Phase 3 program, we expect to run additional supportive clinical studies including, but not limited to urine excretion, renal impairment and QT interval prolongation studies as well as supportive NDA non-clinical chronic toxicity and carcinogenicity studies.

While third party trials of cytisine have been conducted that may inform future Company-sponsored clinical trials, we have not yet conducted any large scale company-sponsored clinical trials for cytisine in the United States or any other jurisdiction.

### **Cytisine Clinical Trials**

Cytisine has been tested in two large, randomized Phase 3 clinical trials conducted according to Good Clinical Practice, or GCP, in more than 2,000 participants. The objective was to evaluate the efficacy and safety of cytisine according to current clinical development standards.

#### *TASC Trial*

The Tabex Smoking Cessation, or TASC, trial, was sponsored by the UK Centre for Tobacco Control Studies and evaluated cytisine versus placebo in 740 primarily moderate-to-heavy smokers treated for 25 days in a single center in Warsaw, Poland. The primary outcome measure was sustained, biochemically verified smoking abstinence for 12 months after the end of treatment. The TASC trial was conceived by Professor Robert West (Department of Epidemiology and Public Health, University College London) and was funded by the a grant from the National Prevention Research Initiative, including contributions from Cancer Research UK, Medical Research Council, United Kingdom Department of Health and others. We, through our partner Sopharma, provided the study drug used in this trial.

The results of the TASC trial were published in the New England Journal of Medicine in September 2011. The rate of sustained 12-month abstinence was 8.4% in the cytisine arm as compared with 2.4% in the placebo group ( $p=0.001$ ). These results showed that cytisine was 3.4 times more likely than a placebo to help participants stop smoking and remain non-smokers for one year. The rate of sustained 6-month abstinence was 10.0% in the cytisine arm as compared with 3.5% in the placebo group ( $p<0.001$ ). Cytisine was well tolerated with a slight but significant increase in combined gastrointestinal adverse events (upper abdominal pain, nausea, dyspepsia and dry mouth; cytisine 51/370 (13.8%) and placebo 30/370 (8.1%). The safety profile of cytisine was similar to that of a placebo with no other significant differences in the rate of side effects in the two trial arms.

A summary of adverse events reported in 10 or more subjects in the TASC trial is included in the table below.

**TASC - Adverse Events Reported by 10 or More Study Participants<sup>(1)</sup>**

Event	Cytisine (N=370)	Placebo (N=370)
	percent (number)	
Any gastrointestinal event	13.8% (51)	8.1% (30)
Upper abdominal pain	3.8 (14)	3.0 (11)
Nausea	3.8 (14)	2.7 (10)
Dyspepsia	2.4 (9)	1.1 (4)
Dry mouth	2.2 (8)	0.5 (2)
Any psychiatric event	4.6% (17)	3.2% (12)
Dizziness	2.2 (8)	1.1 (4)
Somnolence	1.6 (6)	1.1 (4)
Any nervous system event	2.7% (10)	2.4% (9)
Headache	1.9 (7)	2.2 (8)
Skin and subcutaneous tissue	1.6% (6)	1.4% (5)

(1) The incidence of events was analyzed according to the *Medical Dictionary for Regulatory Activities* System Organ Class, or SOC, categorization and preferred terms. Participants who reported more than one event in a system category were counted only once for the category. SOC categories for other events (those reported by fewer than 10 participants) were as follows: general (five events within cytisine and five with placebo), cardiac (four with cytisine and two with placebo), musculoskeletal and connective tissue (three with cytisine and three with placebo), infections (one with placebo), immune system (one with placebo) and metabolism and nutrition (one with placebo).

*CASCAID Trial*

The second Phase 3 trial, the Cytisine As a Smoking Cessation Aid, or CASCAID, non-inferiority trial, was an open-label trial that randomized 1,310 adult daily smokers. Patients were randomized to receive either cytisine for 25 days or NRT for 8 weeks. Both treatment groups were offered low intensity telephone behavioral support during trial treatment. The primary outcome measure was continuous self-reported abstinence from smoking one month after quit date. The CASCAID trial was conducted by the Health Research Council of New Zealand. We, through our partner Sopharma, provided the cytisine in form of commercial Tabex™ used in this trial.

The results of the CASCAID trial, which were published in the *New England Journal of Medicine* in December 2014, showed that cytisine was superior to NRT for smoking cessation and, specifically, that cytisine was 1.43 times more likely than nicotine gums or patches to help participants stop smoking and remain non-smokers for six months. The rate of continuous one-month abstinence was 40% in the cytisine arm as compared with 31% in the NRT arm (p<0.001). A secondary outcome included the rate of continuous six-month abstinence which was 22% in the cytisine arm as compared with 15% in the NRT arm (p=0.002). Cytisine was generally well tolerated, although self-reported adverse events were slightly higher in the cytisine arm compared with the NRT arm. The most frequent adverse events for cytisine were nausea and vomiting (30/665 (4.6%)) and sleep disorders (28/665 (4.2%)). Reports of these same adverse events in the NRT arm were as follows: nausea and vomiting (2/655 (0.3%)) and sleep disorders (2/655 (0.3%)).

A summary of adverse events reported in subjects in the CASCAID trial is included in the table below.

**CASCAID - Summary of All-Cause Adverse Events**

Event	Cytisine (N=655)	NRT (N=655)
	percent (number)	
Participants with any adverse event no. (%)	31% (204)	20% (134)
Adverse events — no.		
Any	44% (288)	27% (174)
In those who complied with treatment <sup>(1)</sup>	25 (161)	17 (113)
In those who did not comply with treatment	19 (127)	9 (61)
Participants with serious adverse event — no. (%)	7% (45)	39 (6%)
Serious adverse events — no. <sup>(2)(3)</sup>	9% (56)	7 (45)

Deaths <sup>4</sup>	0.2 (1)	0.2 (1)
Life-threatening events	0	0.2 (1) <sup>5</sup>
Hospitalizations	3 (18)	3 (18)
Otherwise medically important events	6 (37)	4 (25)
Severity of all adverse events — no. <sup>(4)</sup>		
Mild	21% (139)	12% (78)
Moderate	17 (111)	12 (77)
Severe	6 (38)	3 (19)
Most frequent adverse events — no. <sup>(5)</sup>		
Nausea and vomiting	5% (30)	0.3% (2)
Sleep disorders	4 (28)	0.3 (2)

- (1) In the cytisine group, compliance was defined as having taken 80% or more of the required number of tablets within 1 month after the quit date (i.e., 80 or more tablets). In the NRT group, compliance was defined as having used NRT at 1 week and 1 month after the quit date. It was assumed that participants with missing data were not compliant.
- (2) A serious event was defined as death, a life-threatening event, an event requiring hospitalization, or otherwise medically important event (i.e., the event does not belong in any of the other categories but may jeopardize the patient and may require medical or surgical intervention to prevent the occurrence of one or more other serious events).
- (3) The categories are mutually exclusive.
- (4) The severity of events was not medically verified.
- (5) The list of most frequent adverse events excludes signs and symptoms of cold and influenza. Adverse events were categorized in accordance with the *International Statistical Classification of Diseases and Related Health Problems*, Tenth Revision (ICD-10), Australian Modification.

### Safety Reporting

As cytisine has been marketed in Central and Eastern Europe for over 20 years, substantial safety reporting exists for cytisine including over 15 million cases. The most recent periodic safety update report, PSUR, submitted to the European authorities by Sopharma in 2016 did not contain new safety signals with cytisine.

## OVERVIEW OF MARKET AND TREATMENT

### Overview of the Tobacco Epidemic

The NIH and the World Health Organization, or WHO, estimated in January 2017 that approximately 1.1 billion people globally are smokers and that 6 million people die annually from diseases related to tobacco use including 600,000 from passive smoke. This figure is projected to grow to 8 million by 2030. Tobacco use is estimated to cause 12% of deaths among persons aged 30 years and over worldwide, including deaths from cancer, diabetes, cardiovascular disease and lung diseases such as tuberculosis and lower respiratory tract infections. According to the American Cancer Society, smoking is a direct cause of approximately 80% of lung cancer deaths and is linked to 30% of all cancers.

The U.S. Centers for Disease Control, or CDC, estimate that in 2015 approximately 15.1% of all U.S. adults (36.5 million people) were cigarette smokers. Smoking remains the single largest preventable cause of death worldwide and in the United States.

CDC estimates that the annual cost of smoking related illnesses in the United States is more than \$300 billion annually in direct medical care and lost productivity. Over 16 million people in the United States are living with a disease caused by smoking. Smoking causes cancer, heart disease, stroke, lung diseases, diabetes and chronic obstructive pulmonary disease, or COPD, which includes emphysema and chronic bronchitis. Smoking also increases risk for tuberculosis, certain eye diseases and problems of the immune system, including rheumatoid arthritis.

Tobacco smoking is highly addictive and research suggests that nicotine may be as addictive as heroin, cocaine or alcohol. The CDC estimates that more people are addicted to nicotine than any other drug and report that nearly 70% of smokers desire to quit and 55% make a quit attempt each year. Despite the high number of attempts, only about 4% to 7% of people are successful in their quit attempt each year.

### The Global Smoking Cessation Market



Coherent Market Insights Report “Smoking Cessation and Nicotine De-addiction Products Market, 2016-2017” estimated that global revenues for smoking cessation and nicotine de-addiction products in 2016 was approximately \$12.8 billion including NRT, e-cigarettes and drug therapy. In 2017, in the U.S. alone, sales for NRT and drug therapy were estimated to be \$3.8 billion and is expected to grow to \$5.7 billion by 2024.

Two prescription oral treatments for smoking cessation are currently available in the United States: Chantix® (varenicline) marketed by Pfizer and Zyban® (bupropion) marketed by GlaxoSmithKline (as well as generic manufacturers). Both of these prescription treatments have been proven effective in aiding smoking cessation, however, both are also associated with significant side effects. Chantix’s labeling indicates elevated instances of nausea, abnormal dreams, constipation, flatulence and vomiting may be experienced by Chantix-treated patients compared to placebo-treated patients, and Zyban’s labeling discloses potential adverse reactions including insomnia, rhinitis, dry mouth, dizziness, nervous disturbance, anxiety, nausea, constipation, arthralgia and seizures.

The vast majority of OTC smoking cessation aids are NRTs. NRTs come in many forms, including gums, lozenges and patches, and although they are marketed at a lower price point, they have been shown to be less effective than prescription drugs. For example, a Cochrane Group independent database review of nicotine receptor partial agonists published in 2016 compared varenicline (Chantix) with a number of NRTs and found that varenicline appeared to be more effective than the NRTs.

## LICENSE & SUPPLY AGREEMENTS

### *Sopharma AD*

In 2009 and 2010, we entered into a license agreement, or the Sopharma License Agreement, and a supply agreement, or the Sopharma Supply Agreement, with Sopharma, AD, or Sopharma. Pursuant to the Sopharma License Agreement, we were granted access to all available manufacturing, efficacy and safety data related to cytosine, as well as a granted patent in several European countries including Germany, France and Italy related to new oral dosage forms of cytosine providing enhanced stability. Additional rights granted under the Sopharma License Agreement include the exclusive use of, and the right to sublicense, the trademark Tabex in all territories—other than certain countries in Central and Eastern Europe, Scandinavia, North Africa, the Middle East and Central Asia, as well as Vietnam, where Sopharma or its affiliates and agents already market Tabex—in connection with the marketing, distribution and sale of products. Under the Sopharma License Agreement, we agreed to pay a nonrefundable license fee. In addition, we agreed to make certain royalty payments equal to a mid-teens percentage of all net sales of Tabex branded products in our territory during the term of the Sopharma License Agreement, including those sold by a third party pursuant to any sublicense which may be granted by us. We have agreed to cooperate with Sopharma in the defense against any actual or threatened infringement claims with respect to Tabex. Sopharma has the right to terminate the Sopharma License Agreement upon the termination or expiration of the Sopharma Supply Agreement. The Sopharma License Agreement will also terminate under customary termination provisions including bankruptcy or insolvency and material breach. To date, we have paid Sopharma \$10 pursuant to the Sopharma License Agreement.

A cross-license exists between us and Sopharma whereby we grant to Sopharma rights to any patents or patent applications or other intellectual property rights filed by us in Sopharma territories.

On May 14, 2015, we and Sopharma entered into an amendment to the Sopharma License Agreement. Among other things, the amendment to the Sopharma License Agreement reduced the royalty payments payable by us to Sopharma from a percentage in the mid-teens to a percentage in the mid-single digits and extended the term of the Sopharma License Agreement until May 26, 2029.

On July 28, 2017, we and Sopharma entered into the amended and restated Sopharma Supply Agreement. Pursuant to the amended and restated Sopharma Supply Agreement, we will exclusively purchase all of our cytosine from Sopharma, Sopharma agrees to exclusively supply all such cytosine requested by us, for territories as detailed in the licensing agreement, and we extended the term to 2037. In addition, we will have full access to the cytosine supply chain and Sopharma will manufacture sufficient cytosine to meet a forecast for a specified demand of cytosine for the five years commencing shortly after the commencement of the agreement, with the forecast to be updated regularly thereafter. We and Sopharma may terminate the Sopharma Supply Agreement in the event of the other party’s material breach or bankruptcy or insolvency.

### *University of Bristol*

In July 2016, we entered into a license agreement with the University of Bristol, or the University of Bristol License Agreement. Under the University of Bristol License Agreement, we received exclusive and nonexclusive licenses from the University of Bristol to certain patent and technology rights resulting from research activities into cytosine and its derivatives, including a number of patent applications related to novel approaches to cytosine binding at the nicotinic receptor level. Any patents issued in connection with these applications would be scheduled to expire on February 5, 2036 at the earliest.

In consideration of rights granted by the University of Bristol, we paid a nominal license fee and agreed to pay amounts of up to \$3.2 million, in the aggregate, tied to a financing milestone and to specific clinical development and commercialization milestones resulting from activities covered by the University of Bristol License Agreement. Additionally, if we successfully commercialize product candidates subject to the University of Bristol License Agreement, we are responsible for royalty payments in the low-single digits and payments up to a percentage in the mid-teens of any sublicense income, subject to specified exceptions, based upon net sales of such licensed products.

On January 22, 2018, we and the University of Bristol entered into an amendment to the University of Bristol License Agreement. Pursuant to the amended University of Bristol License Agreement we received exclusive rights for all human medicinal uses of cytosine across all therapeutic categories from the University of Bristol from research activities into cytosine and its derivatives. In consideration of rights granted by the amended University of Bristol License Agreement, we agreed to pay an initial amount of \$37,500 upon the execution of the amended University of Bristol License Agreement, and additional amounts of up to \$1.7 million, in the aggregate, tied to a financing milestone and to specific clinical development and commercialization milestones resulting from activities covered by the amended University of Bristol License Agreement, in addition to amounts under the original University of Bristol License Agreement of up to \$3.2 million in the aggregate, tied to specific financing, development and commercialization milestones. Additionally, if we successfully commercialize any product candidate subject to the amended University of Bristol License Agreement or to the original University of Bristol License Agreement, we will be responsible, as provided in the original University of Bristol License Agreement, for royalty payments in the low-single digits and payments up to a percentage in the mid-teens of any sublicense income, subject to specified exceptions, based upon net sales of such licensed products. To date, we have paid the University of Bristol \$50,000 pursuant to the University of Bristol License Agreement.

Unless otherwise terminated, the University of Bristol License Agreement will continue until the earlier of July 2036 or the expiration of the last patent claim subject to the University of Bristol License Agreement. We may terminate the University of Bristol License Agreement for convenience upon a specified number of days' prior notice to the University of Bristol. The University of Bristol License Agreement will terminate under customary termination provisions including bankruptcy or insolvency or its material breach of the agreement. Under the terms of the University of Bristol License Agreement, we had provided 100 grams of cytosine to the University of Bristol as an initial contribution. To date, we have not paid any further sums to the University of Bristol pursuant to the University of Bristol License Agreement.

**Summary of Milestone Obligations by Product Candidate**

The following table sets forth the milestones that we may be required to pay to third parties under the license agreements described above. As described above, we will also be required to pay certain revenue-based royalties with respect to our product candidate.

<u>Milestone Obligations to Third Parties</u>	<u>Amount Payable</u>
University of Bristol	Up to \$4,837,500 (1)

(1) Payable in connection with specific financing, development and commercialization milestones.

**GOVERNMENT REGULATIONS**

We are heavily regulated in most of the countries in which we operate. In the United States, the principal regulating authority is the FDA. The FDA regulates the safety and efficacy of product candidates and research, quality, manufacturing processes, product approval and promotion, advertising and product labeling. In the EU, the European Medicines Agency, or EMA, and national regulatory agencies regulate the scientific evaluation, supervision and safety monitoring of product candidates, and over-see the procedures for approval of drugs for the EU and European Economic Area countries. In Japan, the Pharmaceuticals and Medical Devices Agency is involved in a wide range of regulatory activities, including clinical trials, approvals, post-marketing reviews and pharmaceutical safety. Similar regulations exist in most other countries, and in many countries the government also regulates prices. Health authorities in many middle and lower income countries require marketing approval by a recognized regulatory authority, such as the FDA or EMA, before they begin to conduct their application review process and/or issue their final approval.

**United States**

We intend to focus initially on clinical development of cytosine in the United States. It is anticipated that cytosine tablets would receive a minimum five years of data exclusivity under the Drug Price Competition and Patent Term Restoration Act, also known as the Hatch-Waxman Act.

Before a new pharmaceutical product may be marketed in the United States, the FDA must approve an NDA, for a new drug. The steps required before the FDA will approve an NDA generally include non-clinical studies followed by multiple stages of clinical

trials conducted by the trial sponsor; sponsor submission of the NDA application to the FDA for review; the FDA's review of the data to assess the drug's safety and effectiveness; and the FDA's inspection of the facilities where the product will be manufactured.

As a condition of product approval, the FDA may require a sponsor to conduct post-marketing clinical trials, known as Phase 4 trials, and surveillance programs to monitor the effect of the approved product. The FDA may limit further marketing of a product based on the results of these post-market trials and programs. Any modifications to a drug, including new indications or changes to labeling or manufacturing processes or facilities, may require the submission and approval of a new or supplemental NDA before the modification can be implemented, which may require that we generate additional data or conduct additional non-clinical studies and clinical trials. Our ongoing manufacture and distribution of drugs is subject to continuing regulation by the FDA, including recordkeeping requirements, reporting of adverse experiences associated with the product, and adherence to current Good Manufacturing Practices, or cGMPs, which regulate all aspects of the manufacturing process. We are also subject to numerous regulatory requirements relating to the advertising and promotion of drugs, including, but not limited to, standards and regulations for direct-to-consumer advertising. Failure to comply with the applicable regulatory requirements governing the manufacture and marketing of our products may subject us to administrative or judicial sanctions, including warning letters, product recalls or seizures, injunctions, fines, civil penalties and/or criminal prosecution.

*Sales and Marketing.* The marketing practices of U.S. pharmaceutical companies are generally subject to various federal and state healthcare laws that are intended to prevent fraud and abuse in the healthcare industry and protect the integrity of government healthcare programs. These laws include anti-kickback laws and false claims laws. Anti-kickback laws generally prohibit a biopharmaceutical or medical device company from soliciting, offering, receiving or paying any remuneration to generate business, including the purchase or prescription of a particular product. False claims laws generally prohibit anyone from knowingly and willingly presenting, or causing to be presented, any claims for payment for reimbursed drugs or services to third-party payors (including Medicare and Medicaid) that are false or fraudulent. Although the specific provisions of these laws vary, their scope is generally broad and there may not be regulations, guidance or court decisions that apply the laws to any particular industry practices, including the marketing practices of pharmaceutical and medical device companies. Violations of fraud and abuse laws may be punishable by criminal or civil sanctions and/or exclusion from federal health care programs (including Medicare and Medicaid). The U.S. federal government and various states have also enacted laws to regulate the sales and marketing practices of pharmaceutical or medical device companies. These laws and regulations generally limit financial interactions between manufacturers and health care providers; require disclosure to the federal or state government and public of such interactions; and/or require the adoption of compliance standards or programs. Many of these laws and regulations contain ambiguous requirements or require administrative guidance for implementation. Given the lack of clarity in laws and their implementation, our activities could be subject to penalties under the pertinent laws and regulations.

*Pricing and Reimbursement.* Pricing for our pharmaceutical products will depend in part on government regulation. We will likely be required to offer discounted pricing or rebates on purchases of pharmaceutical products under various federal and state healthcare programs, such as the Medicaid Drug Rebate Program, the "federal ceiling price" drug pricing program, the 340B drug pricing program and the Medicare Part D Program. We will also be required to report specific prices to government agencies under healthcare programs, such as the Medicaid Drug Rebate Program and Medicare Part B. The calculations necessary to determine the prices reported are complex and the failure to report prices accurately may expose us to penalties.

In the United States, Medicaid currently covers all smoking cessation products including Chantix and Zyban. In March 2010, the Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act, or collectively, the Health Care Reform Law, was passed, which substantially changes the way health care is financed by both governmental and private insurers, and significantly impacts the U.S. pharmaceutical industry. Section 2502 of the Patient Protection and Affordable Care Act, or ACA, specifies that tobacco cessation medications will be removed from the list of optional medications and required for inclusion in states' prescription drug benefit. On May 2, 2014 the Department of Health and Human Services, or HHS, provided guidance into insurance coverage policy that health plans would be in compliance if they cover, among other items, screening for tobacco use, individual, group and phone counseling, all FDA approved tobacco cessation medications (both prescription and OTC) when prescribed by a healthcare provider, at least two quit attempts per year, four sessions of counseling and 90 days of treatment, with no cost sharing (co-pay) required.

Government and private third-party payers routinely seek to manage utilization and control the costs of our products. For example, the majority of states use preferred drug lists to restrict access to certain pharmaceutical products under Medicaid. Given certain states' current and potential ongoing fiscal crises, a growing number of states are considering a variety of cost-control strategies, including capitated managed care plans that typically contain cost by restricting access to certain treatments.

*Healthcare Reform.* The U.S. and state governments continue to propose and pass legislation designed to regulate the healthcare industry. In March 2010, the U.S. Congress enacted the ACA, which included changes that significantly affected the pharmaceutical industry, such as:

- increasing drug rebates paid to state Medicaid programs under the Medicaid Drug Rebate Program for brand name and generic prescription drugs and extending those rebates to Medicaid managed care;
- Requiring pharmaceutical manufacturers to provide discounts on brand name prescription drugs sold to Medicare beneficiaries whose prescription drug costs cause the beneficiaries to be subject to the Medicare Part D coverage gap; and
- Imposing an annual fee on manufacturers and importers of brand name prescription drugs reimbursed under certain government programs, including Medicare and Medicaid.

The ACA includes provisions designed to increase the number of Americans covered by health insurance. Specifically, since 2014, the ACA has required most individuals to maintain health insurance coverage or potentially to pay a penalty for noncompliance and has offered states the option of expanding Medicaid coverage to additional individuals. Additionally, policy efforts designed specifically to reduce patient out-of-pocket costs for medicines could result in new mandatory rebates and discounts or other pricing restrictions. Adoption of other new legislation at the federal or state level could further affect demand for, or pricing of, our products.

On January 20, 2017, President Donald Trump issued an Executive Order to initiate the repeal of the Health Care Reform Law and we expect that additional state and federal healthcare measures under the Trump administration will be adopted in the future, any of which could limit the amounts that federal and state governments will pay for healthcare products and services, which could result in reduced demand or lower pricing for our product candidates, or additional pricing pressures. Currently, the Health Care Reform Law provides coverage for smoking cessation-related activities, including two counseling attempts for smoking cessation per year and prescription drugs for smoking cessation, but not OTC treatments. If these provisions are repealed, in whole or in part, our business, financial condition or results of operations could be negatively affected.

*Anti-Corruption.* The Foreign Corrupt Practices Act of 1977, as amended, or FCPA, prohibits U.S. corporations and their representatives from offering, promising, authorizing or making payments to any foreign government official, government staff member, political party or political candidate in an attempt to obtain or retain business abroad. The scope of the FCPA includes interactions with certain healthcare professionals in many countries. Other countries have enacted similar anti-corruption laws and/or regulations. Individual states, acting through their attorneys general, have become active as well, seeking to regulate the marketing of prescription drugs under state consumer protection and false advertising laws.

#### ***Outside the United States***

We expect to encounter similar regulatory and legislative issues in most other countries in which we seek to develop and commercialize cytosine.

*New Drug Approvals and Pharmacovigilance.* In the EU, the approval of new drugs may be achieved using the Mutual Recognition Procedure, the Decentralized Procedure or the EU Centralized Procedure. These procedures apply in the EU member states, plus the EEA countries, Norway, Iceland and Liechtenstein. The use of these procedures generally provides a more rapid and consistent approval process across the EU and EEA than was the case when the approval processes were operating independently within each country.

In 2012, new pharmacovigilance legislation came into force in the EU. Key changes include the establishment of a new Pharmacovigilance Risk Assessment Committee within the EMA, with responsibility for reviewing and making recommendations on product safety issues for the EU authorities. It also introduces the possibility for regulators to require pharmaceutical companies to conduct post-authorization efficacy studies at the time of approval, or at any time afterwards in light of scientific developments. There are also additional requirements regarding adverse drug reaction reporting and additional monitoring of products. Outside developed markets such as the EU and Japan, pharmacovigilance requirements vary and are typically less extensive.

The United Kingdom, or UK, is currently a member state of the EU. However, the UK has signaled its intention to withdraw from the EU, which is commonly known as BREXIT. Following BREXIT, if it occurs, the UK would no longer be a member state within the EU. Since a significant portion of the regulatory framework in the UK is derived from the regulations of the EU, BREXIT could materially change the regulatory framework applicable to the approval of our product candidates and other aspects of our business in the UK, such as the pricing and importation of prescription products. However, at this time it is not known what new regulatory

framework will be in place to govern the review and approval of new medicines in the UK. Further, the EMA is currently located in the UK. It is possible that BREXIT will result in a relocation of the EMA or disruption to the EMA's review process.

Health authorities in many middle and lower income countries require marketing approval by a recognized regulatory authority (i.e., similar to the authority of the FDA or the EMA) before they begin to conduct their application review process and/or issue their final approval. Many authorities also require local clinical data in the country's population in order to receive final marketing approval. These requirements delay marketing authorization in those countries relative to the United States and Europe.

#### **CONTRACT RESEARCH AGREEMENTS**

Our strategy is to outsource certain product development activities and have established contract research agreements for, preclinical, clinical, manufacturing and some data management services. We choose which business or institution to use for these services based on their expertise, capacity and reputation and the cost of the service.

We also provide or have provided quantities of our product candidates to academic research institutions to investigate the mechanism of action and evaluate novel combinations of product candidates with other cancer therapies in various cancer indications. These collaborations expand our research activities for our product candidates with modest contribution from us.

#### **RESEARCH AND DEVELOPMENT EXPENDITURES**

For the years ended December 31, 2017, 2016 and 2015, our expenditures for research and development activities were \$3.1 million, \$0.3 million and \$0.1 million, respectively. Such research and development expenses primarily related to the advancement of our product candidate cytisine.

#### **MANUFACTURING**

We do not own or operate manufacturing facilities for the production of cytisine, nor do we have plans to develop our own manufacturing operations in the foreseeable future. We currently depend on Sopharma as supplier and contract manufacturer for all of our required raw materials, active pharmaceutical ingredients and finished product candidates for our clinical trials. Other than the Sopharma relationship, we do not have any current contractual arrangements for the manufacture of clinical or commercial supplies of cytisine. We currently employ internal resources and third-party consultants to manage our clinical manufacturing activities.

Sopharma sources cytisine from the *Laburnum anagyroides* plant, a shrub or small tree native to, and widely distributed throughout, Bulgaria, south Central Europe and the northwestern Balkan Peninsula. The seed pods are harvested from the shrubs and dried. Sopharma currently has planted approximately 225 acres of *Laburnum* trees, saplings and seedlings in multiple locations in Central and Eastern Bulgaria and is in the process of planting another 150 acres. Sopharma plans to plant additional trees to manage supply for major markets. Each tree takes approximately four to five years to reach maturity for harvesting and has a productive life expectancy of 20 to 25 years. Seeds are harvested annually, dried and stored for processing into cytisine. *Laburnum* seeds in their natural state are highly toxic and the extraction process removes the toxins to produce highly purified cytisine. Sopharma is stockpiling *Laburnum* seeds to meet the projected demand from us upon commercial launch.

The active pharmaceutical ingredient, or API, manufacturing process utilizes a series of techniques including milling, solvent extraction, filtration and purification. Critical control steps and manufacturing intermediates have been identified and are controlled by internally developed specifications and methods to ensure a consistent and reproducible process. The highly purified cytisine is dried, sieved and packed for storage until further processing into drug product. The cytisine API manufacturing process has been developed and refined over many years of manufacture by Sopharma, which has significant expertise in manufacturing cytisine.

Sopharma manufactures cytisine API in its facilities in Bulgaria, which are near the capital, Sofia. The API processing facility complies with EU cGMP requirements and has been inspected by the Bulgarian Drug Agency.

#### **SALES AND MARKETING**

Our commercial strategy may include the use of strategic partners, distributors, a contract sale force or the establishment of our own commercial and specialty sales force. We plan to further evaluate these alternatives. We intend to seek partners in territories where we have no commercial experience and intend to directly market in niche markets where a small cost-effective commercial capability can generate direct revenues.

## **INTELLECTUAL PROPERTY**

The U.S. Supreme Court has held that certain claims to naturally-occurring substances are not patentable. Cytisine is a naturally-occurring product and is therefore not patentable in the United States. Furthermore, cytosine has been in use in other parts of the world for decades, and is not susceptible to patenting in its current form.

Our development and commercialization of cytosine is protected by our exclusive supply agreement with Sopharma and Sopharma's proprietary technology, experience and expertise in cytosine extraction. In addition, we intend to utilize market exclusivity laws including those under the Hatch-Waxman Act in the United States and exclusivity under Directive 2004/27/EC in the EU.

Additionally, we are actively building an intellectual property portfolio around our clinical-stage product candidate and research programs. A key component of this portfolio strategy is to seek international patent protection with patent applications in the UK and in major market countries that we consider important to the development of our business worldwide. As of December 31, 2017, we had a portfolio of two international PCT applications of six priority patent applications pending in the UK. This portfolio includes method of use, formulation and composition of matter patents on cytosine and derivatives thereof.

We intend to make further international patent submissions, including in the United States, all of which will take patent filing priority dates from the UK applications referred to above. Our success depends in part on our ability to obtain and maintain proprietary protection for our product candidates and other discoveries, inventions, trade secrets and know-how that are critical to our business operations. Our success also depends in part on our ability to operate without infringing the proprietary rights of others, and in part, on our ability to prevent others from infringing our proprietary rights. A comprehensive discussion on risks relating to intellectual property is provided under "Risk Factors—Risks Related to Our Intellectual Property."

In addition to patent protection, we rely on trade secrets, trademark protection and know-how to expand our proprietary position around our chemistry, technology and other discoveries and inventions that we consider important to our business. We also seek to protect our intellectual property in part by entering into confidentiality agreements with our employees, consultants, scientific advisors, clinical investigators and other contractors and also by requiring our employees, commercial contractors and certain consultants and investigators, to enter into invention assignment agreements that grant us ownership of any discoveries or inventions made by them.

## **COMPETITION**

The development and commercialization of new products is highly competitive. We face competition from major pharmaceutical companies, specialty pharmaceutical companies, biotechnology companies, universities and other research institutions worldwide with respect to smoking cessation and other product candidates that it may seek to develop or commercialize in the future. We are aware that many companies have therapeutics marketed or in development for smoking cessation, including, Pfizer, GlaxoSmithKline, Merck, Novartis, Invion, Embera Neurotherapeutics, Redwood Scientific Technologies, 22nd Century Group, Quit4Good, Chrono Therapeutics, NAL Pharmaceuticals, Selecta Biosciences, Aradigm and others. We expect that our competitors and potential competitors have historically dedicated, and will continue to dedicate, significant resources to aggressively develop and commercialize their products in order to take advantage of the significant market opportunity.

### ***Prescription Treatments***

To our knowledge, two oral prescription drugs for smoking cessation are currently available in the United States – Chantix and Zyban. Both have been proven effective in aiding smoking cessation, however, each is associated with a number of adverse effects.

We believe that cytosine may have similar efficacy to Chantix with potential fewer adverse events and could be more cost-effective to patients. A Cochrane Group independent database review of nicotine receptor partial agonists published in 2016, or the Cochrane Report, compared cytosine with Chantix and found no apparent difference in efficacy between cytosine and Chantix, in that the database review found that the risk ratio for cytosine and Chantix was in the same order of magnitude. In addition, it should be noted that only two studies were used to calculate the risk ratio for cytosine versus 27 trials for varenicline, and that evidence for varenicline was considered of high and moderate quality while the evidence for cytosine was considered low quality. However, a head-to-head comparative trial of these two treatments has not been performed. Furthermore, a report by the National Institute of Health Research in the United Kingdom comparing Chantix and cytosine concluded that cytosine appears to be more clinically effective and cost effective than varenicline (Chantix) based on expected costs and quality-adjusted life-year, or QALY, values.

The Cochrane Report researchers searched for randomized controlled trials testing varenicline, cytosine or dianicline, finding 39 studies of varenicline compared to placebo, bupropion or nicotine patches. The Cochrane Report researchers also found four trials of cytosine, one of which compared it to nicotine replacement therapy. The Cochrane Report also included one trial of dianicline, which is no longer in development, and so not available to use as a smoking cessation aid. To be included, trials had to report quit rates at

least six months from the start of treatment. The Cochrane Report preferred the strictest available definition of quitting, and focused on results which had been biochemically confirmed by testing blood or bodily fluids. The Cochrane Report researchers conducted full searches up to May 2015, although several key trials published after that date were also included. The first cytisine trial included in the Cochrane Report was conducted in 1971. Since there are only two phase 3 studies with cytisine, the researchers that conducted the meta analysis included in the Cochrane report determined that their meta analysis was of poor quality.

#### ***Over-the-Counter Treatments***

The most common OTC treatments bought in pharmacies for smoking cessation in the United States and worldwide are NRTs such as nicotine patches, nicotine gums and nicotine lozenges. Each of these products delivers nicotine to the body although they generally do so at different rates and to different parts of the body than does a traditional cigarette. As concluded by the authors of several published clinical trials conducted by others, these therapies are generally less effective than prescription treatments. Recognized brands include Niquitin<sup>®</sup>, Nicotinell<sup>®</sup>, Nicorette<sup>®</sup> and Nicoderm<sup>®</sup>. Depending on the duration of treatment, the average cost of certain OTC smoking cessation treatments can exceed prescription treatments.

Pharmaceutical companies, including larger companies in the industry, who have extensive expertise in pre-clinical and clinical testing and in obtaining regulatory approvals for products, may develop other OTC treatments for smoking cessation. In addition, academic institutions, government agencies and other public and private organizations conducting research may seek patent protection with respect to potentially competitive products or technologies. These organizations may also establish exclusive collaborative or licensing relationships with our competitors.

#### **EMPLOYEES**

As of December 31, 2017, we had a total of 13 employees, of whom five were engaged in research and development functions, including clinical development, regulatory affairs and manufacturing, and eight were engaged in general and administrative functions, including accounting and finance, administration, and corporate communications.

All of our employees have entered into non-disclosure agreements regarding our intellectual property, trade secrets and other confidential information. None of our employees are represented by a labor union or covered by a collective bargaining agreement, nor have we experienced any work stoppages. We believe that we maintain satisfactory relations with our employees.

From time to time, we also use outside consultants to provide advice on our clinical development plans, research programs, administration and potential acquisitions of new technologies.

#### **FINANCIAL INFORMATION**

We manage our operations and allocate resources as a single reporting segment. Financial information regarding our operations, assets and liabilities, including our total revenue and net loss for the years ended December 31, 2017, 2016 and 2015 and our total assets as of December 31, 2017 and 2016, is included in our Consolidated Financial Statements in Part II, Item 8 of this Annual Report on Form 10-K.

#### **COMPANY INFORMATION**

We were incorporated in California in October 1991 and subsequently reorganized as a Delaware corporation in March 1995. Our principal executive offices are located at 400 – 1001 W. Broadway Vancouver, B.C. V6H 4B1, and our telephone number is (604) 736-3678.

In August 2017, our company, then named OncoGenex Pharmaceuticals, Inc., completed its merger, or the Arrangement, with Achieve, as contemplated by the Merger Agreement between the companies. We then changed our name to Achieve Life Sciences, Inc. As a result of the Arrangement, Achieve became our wholly owned subsidiary. Achieve was formed in 2015 as a Delaware corporation and has one direct wholly-owned subsidiary, Extab Corporation, a Delaware corporation, which was formed in 2009. Extab Corporation in turn has one direct wholly-owned subsidiary, Achieve Pharma UK Limited, a United Kingdom company, which was formed in 2009. As used in this Annual Report on Form 10-K, the term “OncoGenex” refers to our business prior to August 1, 2017.

#### **AVAILABLE INFORMATION**

We maintain a website at <http://www.achievelifesciences.com>. The information contained on or accessible through our website is not part of this Annual Report on Form 10-K. Our Annual Report on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on

Form 8-K and amendments to reports filed or furnished pursuant to Sections 13(a) and 15(d) of the Securities Exchange Act of 1934, as amended, or Exchange Act, are available free of charge on our website as soon as reasonably practicable after we electronically file such reports with, or furnish those reports to, the SEC. Any information we filed with the SEC may be accessed and copied at the SEC's Public Reference Room at 100 F Street NE, Washington, DC 20549. Information may be obtained by calling the SEC at 1-800-SEC-0330. The SEC also maintains an Internet site that contains reports, proxy and information statements, and other information regarding issuers that file electronically with the SEC at <http://www.sec.gov>.

## ITEM 1A. RISK FACTORS

*Investing in our common stock involves a high degree of risk. You should consider carefully the risks and uncertainties described below, together with all of the other information contained in this Annual Report on Form 10-K and in the other periodic and current reports and other documents we file with the Securities and Exchange Commission, before deciding to invest in our common stock. If any of the following risks materialize, our business, financial condition, results of operation and future prospects will likely be materially and adversely affected. In that event, the market price of our common stock could decline and you could lose all or part of your investment. This list is not exhaustive and the order of presentation does not reflect management's determination of priority or likelihood.*

### **Risks Related to Our Financial Condition and Capital Requirements**

***We have incurred losses since inception, have a limited operating history on which to assess our business and anticipate that we will continue to incur losses for the foreseeable future. We have never had any products available for commercial sale and we may never achieve or sustain profitability.***

We are a clinical development-stage specialty pharmaceutical company with a limited operating history, are not profitable, have incurred losses in each year since our inception and do not expect to become profitable in the foreseeable future. We have never had any products available for commercial sale, and we have not generated any revenue from product sales, nor do we anticipate that we will generate revenue from product sales in the near future.

Pharmaceutical product development is a highly speculative undertaking and involves a substantial degree of risk. We have devoted substantially all of our financial resources to identify, acquire, and develop cytosine, including providing general and administrative support for our operations. To date, we have financed our operations primarily through the sale of equity securities and convertible promissory notes. The amount of our future net losses will depend, in part, on the rate of our future expenditures and our ability to obtain funding through equity or debt financings, strategic collaborations, or grants.

We expect to continue to incur significant expenses and increasing operating losses for the foreseeable future. We further expect that our expenses will increase substantially if and as we:

- continue the clinical development of cytosine;
- advance cytosine development into larger, more expensive clinical trials;
- initiate additional pre-clinical, clinical, or other trials or studies for cytosine;
- seek to attract and retain skilled personnel;
- undertake the manufacturing of cytosine or increase volumes manufactured by third parties;
- seek regulatory and marketing approvals and reimbursement for cytosine;
- make milestone, royalty or other payments under third-party license and/or supply agreements;
- establish a sales, marketing, and distribution infrastructure to commercialize any product for which we may obtain marketing approval and market for ourselves;
- continue efforts to discover new product candidates;
- seek to identify, assess, acquire, and/or develop other product candidates;
- seek to establish, maintain, protect, and expand our intellectual property portfolio; and
- experience any delays or encounter issues with the development and potential for regulatory approval of cytosine such as safety issues, clinical trial accrual delays, longer follow-up for planned studies, additional major studies, or supportive studies necessary to support marketing approval.



Further, the net losses we incur may fluctuate significantly from quarter to quarter and year to year, such that a period-to-period comparison of our results of operations may not be a good indication of our future performance.

***Substantial doubt exists as to our ability to continue as a going concern. Our ability to continue as a going concern is uncertain and dependent on our success at raising additional capital sufficient to meet our obligations on a timely basis. If we fail to obtain additional financing when needed, we may be unable to complete the development, regulatory approval and commercialization of our product candidates.***

Substantial doubt exists as to our ability to continue as a going concern. Our ability to continue as a going concern is uncertain and dependent on our ability to obtain additional financing. We have expended and continue to expend substantial funds in connection with our product development activities and clinical trials and regulatory approvals. In addition, we expect to incur significant expenses and increasing operating losses for at least the next several years as we continue our clinical development of, and seek regulatory approval for, cytosine and add personnel necessary to operate as a public company with an advanced clinical candidate. We expect that our operating losses will fluctuate significantly from quarter to quarter and year to year due to timing of clinical development programs and efforts to achieve regulatory approval.

Our current capital resources are insufficient to fund our planned operations for the next 12 months. We will continue to require substantial additional capital to continue our clinical development activities. Accordingly, we will need to raise substantial additional capital to continue to fund our operations from the sale of our securities, partnering arrangements or other financing transactions in order to finance the commercialization of our product candidates. The current financing environment in the United States, particularly for biotechnology companies like us, is exceptionally challenging and we can provide no assurances as to when such environment will improve. For these reasons, among others, we cannot be certain that additional financing will be available when and as needed or, if available, that it will be available on acceptable terms. If financing is available, it may be on terms that adversely affect the interests of our existing stockholders. If adequate financing is not available, we may need to continue to reduce or eliminate our expenditures for research and development of cytosine, and may be required to suspend development of cytosine. Our actual capital requirements will depend on numerous factors, including:

- our commercialization activities and arrangements;
- the progress and results of our research and development programs;
- the progress of our pre-clinical and clinical testing;
- the time and cost involved in obtaining regulatory approvals for our product candidates;
- the cost of filing, prosecuting, defending and enforcing any patent claims and other intellectual property rights with respect to our intellectual property;
- the effect of competing technological and market developments;
- the effect of changes and developments in our existing collaborative, licensing and other relationships; and
- the terms of any new collaborative, licensing and other arrangements that we may establish.

We may not be able to secure sufficient financing on acceptable terms, or at all. Without additional funds, we may be forced to delay, scale back or eliminate some of our research and development activities or other operations and potentially delay product development in an effort to provide sufficient funds to continue our operations. If any of these events occur, our ability to achieve our development and commercialization goals would be adversely affected.

***We have never generated any revenue from product sales and may never be profitable.***

We have no products approved for commercialization and have never generated any revenue from product sales. Our ability to generate revenue and achieve profitability depends on our ability, alone or with strategic collaborators, to successfully complete the development of, and obtain the regulatory and marketing approvals necessary to commercialize cytosine. We do not anticipate generating revenue from product sales for the foreseeable future. Our ability to generate future revenue from product sales depends heavily on our success in many areas, including but not limited to:

- completing research and development of cytosine;
- obtaining regulatory and marketing approvals for cytosine;
- manufacturing product and establishing and maintaining supply and manufacturing relationships with third parties that are commercially feasible, satisfy regulatory requirements and meet our supply needs in sufficient quantities to satisfy market demand for cytosine, if approved;

- marketing, launching and commercializing any product for which we obtain regulatory and marketing approval, either directly or with a collaborator or distributor;
- obtaining reimbursement or pricing for cytosine that supports profitability;
- gaining market acceptance of cytosine as a treatment option;
- addressing any competing products including the potential for generic cytosine products;
- protecting and enforcing our intellectual property rights, if any, including patents, trade secrets, and know-how;
- negotiating favorable terms in any collaboration, licensing, or other arrangements into which we may enter; and
- attracting, hiring, and retaining qualified personnel.

Even if a product candidate that we develop is approved for commercial sale, we anticipate incurring significant costs associated with commercializing that candidate. Additionally, if we are not able to generate sufficient revenue from the sale of any approved products to cover our operating costs, we may never become profitable. If we obtain regulatory approval to market a product candidate, our future revenue will depend upon the size of any markets in which our product candidates may receive approval, and our ability to achieve sufficient market acceptance, pricing, reimbursement from third-party payors, and adequate market share for our product candidates in those markets

***We are dependent upon a single company for the manufacture and supply of cytosine.***

Our single product candidate, cytosine, has been in-licensed from a third party. We are required to continue to contract with Sopharma AD, or Sopharma, to continue our development and commercialization, if any, of cytosine pursuant to a supply agreement with Sopharma. If the supply agreement with Sopharma is terminated, we will need to develop or acquire alternative supply and manufacturing capabilities for cytosine, which we may not be able to do on commercially viable terms or at all.

If we are unable to successfully commercialize cytosine due to failure to obtain regulatory approval or due to other risk factors outlined herein, our business, financial condition, and results of operations will be materially harmed as cytosine is currently our sole product candidate.

***We recently completed the merger with OncoGenex Pharmaceuticals, Inc. and the failure to integrate successfully the operations of the combined company could adversely affect our future results.***

Our success will depend, in significant part, on our ability to realize the anticipated benefits from combining the operations of the combined Achieve-OncoGenex enterprise. The failure to integrate successfully and to manage successfully the challenges presented by the integration process may result in our failure to achieve some or all of the anticipated benefits of the merger. Potential difficulties that may be encountered in the integration process include the following:

- using our cash and assets efficiently to develop our business;
- appropriately managing our liabilities;
- potential unknown or currently unquantifiable liabilities associated with the merger and our operations;
- operating as a public company under our combined management team, some members of which have limited public company experience; and
- performance shortfalls as a result of the diversion of the management's attention caused by integrating the companies' operations.

***We will incur costs and demands upon management as a result of complying with the laws and regulations affecting public companies.***

We incur significant legal, accounting and other expenses associated with public company reporting requirements. We also incur costs associated with corporate governance requirements, including requirements under the Sarbanes-Oxley Act, as well as rules implemented by the SEC and The NASDAQ Capital Market. These rules and regulations impose significant legal and financial compliance costs and make some activities more time-consuming and costly. For example, our management team consists of certain executive officers of Achieve prior to the merger, some of whom have not previously managed and operated a public company. These executive officers and other personnel will need to devote substantial time to gaining expertise regarding operations as a public company and compliance with applicable laws and regulations. In addition, it may be more difficult for us to attract and retain

qualified individuals to serve on our board of directors or as executive officers, which may adversely affect investor confidence in our post-merger company and could cause our business or stock price to suffer.

***Recently enacted comprehensive tax reform bills could increase our tax burden and adversely affect our business and financial condition.***

The U.S. government has recently enacted comprehensive tax legislation that includes significant changes to the taxation of business entities. These changes include, among others, (i) a permanent reduction to the corporate income tax rate, (ii) a partial limitation on the deductibility of business interest expense, (iii) a shift of the U.S. taxation of multinational corporations from a tax on worldwide income to a territorial system (along with certain rules designed to prevent erosion of the U.S. income tax base) and (iv) a one-time tax on accumulated offshore earnings held in cash and illiquid assets, with the latter taxed at a lower rate.

In addition, beginning in 2022, the newly enacted tax legislation will require research and experimental expenditures to be capitalized and amortized ratably over a five-year period. Any such expenditures attributable to research conducted outside the U.S. must be capitalized and amortized over a 15-year period.

Notwithstanding the reduction in the corporate income tax rate, the overall impact of this tax reform is uncertain, and our business and financial condition could be adversely affected. In addition, it is uncertain if and to what extent various states will conform to the newly enacted federal tax law

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

Our principal stockholders and their affiliates currently beneficially own approximately 53.1% of our outstanding voting stock. Therefore, these stockholders have the ability, and may continue to have the ability, to influence us through this ownership position. These stockholders are able to determine some or all matters involving us that require stockholder approval. For example, these stockholders, acting together, are able to control elections of directors, amendments of organizational documents, or approval of any merger, sale of assets, or other major corporate transaction. This control may prevent or discourage unsolicited acquisition proposals or offers for our common stock.

**Risks Related to the Development of Our Product Candidates**

***Cytisine is currently our sole product candidate and there is no guarantee that we will be able to successfully develop and commercialize cytisine.***

We are currently dependent on the potential development of a single product candidate, cytisine. We are still developing our sole product candidate, and cytisine cannot be marketed or sold in the United States or in foreign markets until regulatory approval has been obtained from the U.S. Food and Drug Administration, or the FDA, or applicable foreign regulatory agencies. The process of obtaining regulatory approval is expensive and time consuming. The FDA and foreign regulatory authorities may never approve cytisine for sale and marketing, and even if cytisine is ultimately approved, regulatory approval may be delayed or limited in the United States or in other jurisdictions. Even if we are authorized to sell and market cytisine in one or more markets, there is no assurance that we will be able to successfully market cytisine or that cytisine will achieve market acceptance sufficient to generate profits. Failure to develop cytisine, to obtain regulatory approval for cytisine, to successfully market cytisine, or to generate profits from the sale of cytisine would have material adverse effects on our business, financial condition, and results of operations.

***Results of earlier clinical trials of cytisine are not necessarily predictive of future results, and any advances of cytisine into clinical trials may not have favorable results or receive regulatory approval.***

Even if our clinical trials are completed as planned, we cannot be certain that their results will be consistent with the results of the earlier clinical trials of cytisine. Positive results in pre-clinical testing and past clinical trials with respect to the safety and efficacy of cytisine do not ensure that results from subsequent clinical trials will also be positive, and we cannot be sure that the results of subsequent clinical trials will replicate the results of prior clinical trials and pre-clinical testing. This failure may cause us to abandon cytisine, which would negatively affect our ability to generate any product revenues.

***Clinical trials are costly, time consuming and inherently risky, and we may fail to demonstrate safety and efficacy to the satisfaction of applicable regulatory authorities.***

Clinical development is expensive, time consuming and involves significant risk. We cannot guarantee that any clinical trial will be conducted as planned or completed on schedule, if at all. A failure of one or more clinical trials can occur at any stage of development. Events that may prevent successful or timely completion of clinical development include, but are not limited to:

- inability to generate satisfactory pre-clinical, toxicology, or other in vivo or in vitro data or diagnostics to support the initiation or continuation of clinical trials;
- delays in reaching agreement on acceptable terms with clinical research organizations, or CROs, and clinical trial sites, the terms of which can be subject to extensive negotiation and may vary significantly among different CROs and clinical trial sites;
- delays in obtaining required institutional review board, or IRB, approval at each clinical trial site;
- failure to permit the conduct of a clinical trial by regulatory authorities, after review of an investigational new drug or equivalent foreign application or amendment;
- delays in recruiting qualified patients in its clinical trials;
- failure by clinical sites, CROs or other third parties to adhere to clinical trial requirements;
- failure by clinical sites, CROs or other third parties to perform in accordance with the good clinical practices requirements of the FDA or applicable foreign regulatory guidelines;
- patients terminating enrollment in our clinical trials;
- adverse events or tolerability issues significant enough for the FDA or other regulatory agencies to put any or all clinical trials on hold;
- animal toxicology issues significant enough for the FDA or other regulatory agencies to disallow investigation in humans;
- occurrence of adverse events associated with our product candidate;
- changes in regulatory requirements and guidance that require amending or submitting new clinical protocols;
- the cost of clinical trials of cytosine;
- negative or inconclusive results from our clinical trials which may result in us deciding, or regulators requiring us, to conduct additional clinical trials or abandon development programs in other ongoing or planned indications for cytosine; and
- delays in the time for manufacture of sufficient quantities of cytosine for use in clinical trials.

Any inability to successfully complete clinical development and obtain regulatory approval for cytosine could result in additional costs to us or impair our ability to generate revenue. In addition, if we make manufacturing or formulation changes to cytosine, we may need to conduct additional pre-clinical trials or the results obtained from such new formulation may not be consistent with previous results obtained. Clinical trial delays could also shorten any periods during which our products have patent protection and may allow competitors to develop and bring products to market before we do, which could impair our ability to successfully commercialize cytosine and may harm our business and results of operations.

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

Undesirable side effects caused by cytosine could cause us or regulatory authorities to interrupt, delay, or terminate clinical trials or even if approved, result in a restrictive label or delay regulatory approval by the FDA or comparable foreign authorities.

Additionally, even if cytosine receives marketing approval, and we or others later identify undesirable side effects caused by cytosine, potentially significant negative consequences could result, including but not limited to:

- regulatory authorities may withdraw approvals of cytosine;
- regulatory authorities may require additional warnings on the cytosine label;

- we may be required to create a Risk Evaluation and Mitigation Strategy, or REMS, plan, which could include a medication guide outlining the risks of such side effects for distribution to patients, a communication plan for healthcare providers, and/or other elements to assure safe use;
- we could be sued and held liable for harm caused to patients; and
- our reputation may suffer.

Any of these events could prevent us from achieving or maintaining market acceptance of cytosine, even if approved, and could significantly harm our business, results of operations, and prospects.

***Our product development program may not uncover all possible adverse events that patients who take cytosine or our other product candidates may experience. The number of subjects exposed to cytosine or our other product candidates and the average exposure time in the clinical development program may be inadequate to detect rare adverse events, or chance findings, that may only be detected once the product is administered to more patients and for greater periods of time.***

Clinical trials by their nature utilize a sample of the potential patient population. However, we cannot be fully assured that rare and severe side effects of cytosine will be uncovered. Such rare and severe side effects may only be uncovered with a significantly larger number of patients exposed to cytosine. If such safety problems occur or are identified after cytosine reaches the market in the United States, or if such safety problems occur or are identified in foreign markets where cytosine is currently marketed, the FDA may require that we amend the labeling of cytosine or recall it, or may even withdraw approval for cytosine.

***If the use or misuse of cytosine harms patients, or is perceived to harm patients even when such harm is unrelated to cytosine, our regulatory approvals, if any, could be revoked or otherwise negatively impacted and we could be subject to costly and damaging product liability claims. If we are unable to obtain adequate insurance or are required to pay for liabilities resulting from a claim excluded from, or beyond the limits of, our insurance coverage, a material liability claim could adversely affect our financial condition.***

The use or misuse of cytosine in clinical trials and the sale of cytosine if marketing approval is obtained, exposes us to the risk of potential product liability claims. Product liability claims might be brought against us by consumers, healthcare providers, pharmaceutical companies or others selling or otherwise coming into contact with our product. There is a risk that cytosine may induce adverse events. If we cannot successfully defend against product liability claims, we could incur substantial liability and costs. During the course of treatment, patients may suffer adverse events for reasons that may be related to cytosine. Such events could subject us to costly litigation, require us to pay substantial amounts of money to injured patients, delay, negatively impact or end our opportunity to receive or maintain regulatory approval to market cytosine, if any, or require us to suspend or abandon our commercialization efforts. Even in a circumstance in which an adverse event is unrelated to cytosine, the investigation into the circumstance may be time-consuming or inconclusive. These investigations may delay our regulatory approval process or impact and limit the type of regulatory approvals cytosine receives or maintains. As a result of these factors, a product liability claim, even if successfully defended, could have a material adverse effect on our business, financial condition or results of operations.

If we obtain marketing approval for cytosine, we will need to expand our insurance coverage to include the sale of commercial products. There is no way to know if we will be able to continue to obtain product liability coverage and obtain expanded coverage if we require it, in sufficient amounts to protect us against losses due to liability, on acceptable terms, or at all. We may not have sufficient resources to pay for any liabilities resulting from a claim excluded from, or beyond the limits of, our insurance coverage. Where we have provided indemnities in favor of third parties under our agreements with them, there is also a risk that these third parties could incur liability and bring a claim under such indemnities. An individual may bring a product liability claim against us alleging that cytosine causes, or is claimed to have caused, an injury or is found to be unsuitable for consumer use. Any such product liability claims may include allegations of defects in manufacturing, defects in design, a failure to warn of dangers inherent in the product, negligence, strict liability, and a breach of warranties. Claims could also be asserted under state consumer protection acts. Any product liability claim brought against us, with or without merit, could result in:

- withdrawal of clinical trial volunteers, investigators, patients or trial sites or limitations on approved indications;
- the inability to commercialize, or if commercialized, decreased demand for, cytosine;
- if commercialized, product recalls, withdrawals of labeling, marketing or promotional restrictions or the need for product modification;
- initiation of investigations by regulators;
- loss of revenues;

- substantial costs of litigation, including monetary awards to patients or other claimants;
- liabilities that substantially exceed our product liability insurance, which we would then be required to pay ourselves;
- an increase in our product liability insurance rates or the inability to maintain insurance coverage in the future on acceptable terms, if at all;
- the diversion of management's attention from our business; and
- damage to our reputation and the reputation of our products and our technology.

Product liability claims may subject us to the foregoing and other risks, which could have a material adverse effect on our business, financial condition or results of operations.

***The development of our product candidate is dependent upon securing sufficient quantities of cytosine from the *Laburnum anagyroides* plant, which plant grows in a limited number of locations outside of the United States.***

The therapeutic component of our product candidate, cytosine, is derived from the seeds of the *Laburnum anagyroides* plant, which grows in the mountains of Southern Europe. We currently secure cytosine exclusively from Sopharma, a Bulgarian third-party supplier. Our current supply agreement with Sopharma expires on July 28, 2037, unless extended by mutual agreement of us and Sopharma. There can be no assurances that *Laburnum anagyroides* will continue to grow in sufficient quantities to meet commercial supply requirements or that the countries from which we can secure *Laburnum anagyroides* will continue to allow the exportation of cytosine. Sopharma currently has planted approximately 600,000 laburnum trees, saplings and seedlings in multiple locations in Central and Eastern Bulgaria. Each tree takes approximately four to five years to reach maturity for harvesting and has a productive life expectancy of 20 to 25 years. Although Sopharma has plans to plant significant numbers of additional trees, there is no guarantee that they will do so or that the trees will produce the anticipated yield of cytosine. In the event we are no longer able to obtain cytosine from Sopharma, or in sufficient quantities, we may not be able to produce our proposed products and our business will be adversely affected.

***Our business may be negatively affected by weather conditions and the availability of natural resources, as well as by climate change.***

In recent years, extreme weather events and changing weather patterns such as storms, flooding, drought, and temperature changes, appear to have become more common. The production of cytosine from the *Laburnum anagyroides* plant depends on the availability of natural resources, including sufficient rainfall. Our exclusive supplier of cytosine, Sopharma, could be adversely affected if it experiences a shortage of fresh water due to droughts or other weather conditions. As a result of such events, we could experience cytosine shortages from Sopharma, all of which could have a material adverse effect on our business, financial condition and results of operations.

In addition, the manufacturing and other operations of Sopharma are located near earthquake fault lines in Sofia, Bulgaria. In the event of a major earthquake, we could experience business interruptions from the disruption of our cytosine supplies, which could have a material adverse effect on our business, financial condition and results of operations.

***We may conduct clinical trials internationally, which may trigger additional risks.***

If we decide to conduct clinical trials in Europe or other countries outside of the United States, we will have additional regulatory requirements that we will have to meet in connection with our manufacturing, distribution, use of data and other matters. The failure of us to meet such regulatory requirements could delay our clinical trials, the approval, if any, of cytosine by the FDA, or the commercialization of cytosine, or result in higher costs or deprive us of potential product revenues.

***We may use our financial and human resources to pursue a particular research program or product candidate and fail to capitalize on programs or product candidates that may be more profitable or for which there is a greater likelihood of success.***

Because we have limited financial and human resources, we may forego or delay pursuit of opportunities with some programs or product candidates or for other indications that later prove to have greater commercial potential. Our resource allocation decisions may cause us to fail to capitalize on viable commercial products or more profitable market opportunities. Our spending on current and future research and development programs and future product candidates for specific indications may not yield any commercially viable products. We may also enter into additional strategic collaboration agreements to develop and commercialize some of our programs and potential product candidates in indications with potentially large commercial markets. If we do not accurately evaluate the commercial potential or target market for a particular product candidate, we may relinquish valuable rights to that product

candidate through strategic collaborations, licensing or other royalty arrangements in cases in which it would have been more advantageous for us to retain sole development and commercialization rights to such product candidate, or we may allocate internal resources to a product candidate in a therapeutic area in which it would have been more advantageous to enter into a partnering arrangement.

### **Risks Related to Regulatory Approval of Cytisine and Other Legal Compliance Matters**

***If we do not obtain the necessary regulatory approvals in the United States and/or other countries, we will not be able to sell cytisine.***

We will need approval from the FDA, to commercialize cytisine in the United States and approvals from similar regulatory authorities in foreign jurisdictions to commercialize cytisine in those jurisdictions. In order to obtain FDA approval of cytisine, we must submit an NDA to the FDA, demonstrating that cytisine is safe, pure and potent, and effective for its intended use. This demonstration requires significant research including completion of clinical trials. Satisfaction of the FDA's regulatory requirements typically takes many years, depending upon the type, complexity and novelty of the product candidate and requires substantial resources for research, development and testing. We cannot predict whether our clinical trials will demonstrate the safety and efficacy of cytisine or if the results of any clinical trials will be sufficient to advance to the next phase of development or for approval from the FDA. We also cannot predict whether our research and clinical approaches will result in data that the FDA considers safe and effective for the proposed indications of cytisine. The FDA has substantial discretion in the product approval process. The approval process may be delayed by changes in government regulation, future legislation or administrative action or changes in FDA policy that occur prior to or during our regulatory review. While we intend to begin a pivotal Phase 3 trial in the first half of 2018, the FDA may require us to conduct additional Phase 3 trials, including if it deems the earlier trials involving cytisine to be insufficient or not available to support a single additional Phase 3 trial. Even if we comply with all FDA requests, the FDA may ultimately reject one or more of our applications. We may never obtain regulatory approval for cytisine. Failure to obtain approval from the FDA or comparable regulatory authorities in foreign jurisdictions to commercialize cytisine will leave us without saleable products and therefore without any source of revenues. In addition, the FDA may require us to conduct additional clinical testing or to perform post-marketing studies, as a condition to granting marketing approval of a product or permit continued marketing, if previously approved. If conditional marketing approval is obtained, the results generated after approval could result in loss of marketing approval, changes in product labeling, and/or new or increased concerns about the side effects or efficacy of a product. The FDA has significant post-market authority, including the explicit authority to require post-market studies and clinical trials, labeling changes based on new safety information and compliance with FDA-approved risk evaluation and mitigation strategies. The FDA's exercise of its authority has in some cases resulted, and in the future could result, in delays or increased costs during product development, clinical trials and regulatory review, increased costs to comply with additional post-approval regulatory requirements and potential restrictions on sales of approved products. In foreign jurisdictions, the regulatory approval processes generally include the same or similar risks as those associated with the FDA approval procedures described above. We cannot be certain that we will receive the approvals necessary to commercialize cytisine for sale either within or outside the United States.

***Even if we obtain regulatory approval for cytisine, we will remain subject to ongoing regulatory requirements in connection with the sale and distribution of cytisine.***

Even if cytisine is approved by the FDA or comparable foreign regulatory authorities, we will be subject to ongoing regulatory requirements with respect to manufacturing, labeling, packaging, storage, advertising, promotion, sampling, record-keeping, conduct of post-marketing clinical trials, and submission of safety, efficacy and other post-approval information, including both federal and state requirements in the United States and the requirements of comparable foreign regulatory authorities. Compliance with such regulatory requirements will likely be costly and the failure to comply would likely result in penalties, up to and including, the loss of such approvals from the FDA or comparable foreign regulatory authorities.

Manufacturers and manufacturers' facilities are required to continuously comply with FDA and comparable foreign regulatory authority requirements, including ensuring that quality control and manufacturing procedures conform to current Good Manufacturing Practices, or cGMP, regulations and corresponding foreign regulatory manufacturing requirements. As such, we, Sopharma and other contract manufacturers, if any, will be subject to continual review and inspections to assess compliance with cGMP and adherence to commitments made in any NDA or marketing authorization application.

***Ongoing post-approval monitoring and clinical trial obligations may be costly to us and the failure to meet such obligations may result in the withdrawal of such approvals.***

Any regulatory approvals that we receive for cytisine, if any, may be subject to limitations on the approved indicated uses for which cytisine may be marketed or to the conditions of approval, or contain requirements for potentially costly post-marketing testing, including Phase 4 clinical trials, and surveillance to monitor the safety and efficacy of cytisine. We will be required to report adverse

reactions and production problems, if any, to the FDA and comparable foreign regulatory authorities. Any new legislation addressing product safety issues could result in delays in product development or commercialization, or increased costs to assure compliance. If our original marketing approval for cytosine was obtained through an accelerated approval pathway, we could be required to conduct a successful post-marketing clinical trial in order to confirm the clinical benefit for our products. An unsuccessful post-marketing clinical trial or failure to complete such a trial could result in the withdrawal of marketing approval.

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

- issue warning letters;
- impose civil or criminal penalties;
- suspend or withdraw regulatory approval;
- suspend any of our ongoing clinical trials;
- refuse to approve pending applications or supplements to approved applications submitted by us;
- impose restrictions on our operations, including closing our contract manufacturers' facilities; or
- require a product recall.

Any government investigation of alleged violations of law would be expected to require us to expend significant time and resources in response and could generate adverse publicity. Any failure to comply with ongoing regulatory requirements may significantly and adversely affect our ability to develop and commercialize our products and the value of us and our operating results would be adversely affected.

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

If we obtain FDA approval for cytosine and begin commercializing it in the United States, our operations may be subject to various federal and state fraud and abuse laws, including, without limitation, the federal Anti-Kickback Statute, the federal False Claims Act, and physician sunshine laws and regulations. These laws may impact, among other things, our proposed sales, marketing, and education programs. In addition, we may be subject to patient privacy regulation by both the federal government and the states in which we conduct our business. The laws that may affect our ability to operate include:

- the federal Anti-Kickback Statute, which prohibits, among other things, persons from knowingly and willfully soliciting, receiving, offering or paying remuneration, directly or indirectly, to induce, or in return for, the purchase or recommendation of an item or service reimbursable under a federal healthcare program, such as the Medicare and Medicaid programs;
- federal civil and criminal false claims laws and civil monetary penalty laws, which prohibit, among other things, individuals or entities from knowingly presenting, or causing to be presented, claims for payment from Medicare, Medicaid, or other third-party payors that are false or fraudulent;
- the federal Health Insurance Portability and Accountability Act of 1996, or HIPAA, which created new federal criminal statutes that prohibit executing a scheme to defraud any healthcare benefit program and making false statements relating to healthcare matters;
- HIPAA, as amended by the Health Information Technology and Clinical Health Act, and its implementing regulations, which imposes specified requirements relating to the privacy, security, and transmission of individually identifiable health information;
- HIPAA, as amended by the Health Information Technology and Clinical Health Act, and its implementing regulations, which imposes specified requirements relating to the privacy, security, and transmission of individually identifiable health information;
- the federal physician sunshine requirements under the Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act, or the Health Care Reform Law, requires manufacturers of products,



devices, biologics, and medical supplies to report annually to the U.S. Department of Health and Human Services information related to payments and other transfers of value to physicians, other healthcare providers, and teaching hospitals, and ownership and investment interests held by physicians and other healthcare providers and their immediate family members and applicable group purchasing organizations; and

- state law equivalents of each of the above federal laws, such as anti-kickback and false claims laws that may apply to items or services reimbursed by any third-party payor, including governmental and private payors, to comply with the pharmaceutical industry's voluntary compliance guidelines and the relevant compliance guidance promulgated by the federal government, or otherwise restrict payments that may be made to healthcare providers and other potential referral sources; state laws that require product manufacturers to report information related to payments and other transfers of value to physicians and other healthcare providers or marketing expenditures, and state laws governing the privacy and security of health information in specified circumstances, many of which differ from each other in significant ways and may not have the same effect, thus complicating compliance efforts.

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

If our operations are found to be in violation of any of the laws described above or any other governmental regulations that apply to us, we may be subject to penalties, including civil and criminal penalties, damages, fines, exclusion from participation in government health care programs, such as Medicare and Medicaid, imprisonment, and the curtailment or restructuring of our operations, any of which could adversely affect our ability to operate our business and its results of operations.

***Healthcare legislative and executive reform measures may have a material adverse effect on our business, financial condition or results of operations.***

In the United States, there have been and continue to be a number of legislative initiatives to contain healthcare costs. For example, in March 2010, the Health Care Reform Law was passed, which substantially changes the way health care is financed by both governmental and private insurers, and significantly impacts the U.S. pharmaceutical industry. The Health Care Reform Law, among other things, addresses a new methodology by which rebates owed by manufacturers under the Medicaid Drug Rebate Program are calculated for products that are inhaled, infused, instilled, implanted, or injected, increases the minimum Medicaid rebates owed by manufacturers under the Medicaid Drug Rebate Program and extends the rebate program to individuals enrolled in Medicaid managed care organizations, establishes annual fees and taxes on manufacturers of specified branded prescription products, and promotes a new Medicare Part D coverage gap discount program.

On January 20, 2017, President Donald Trump issued an Executive Order to initiate the repeal of the Health Care Reform Law and we expect that additional state and federal healthcare measures under the Trump administration will be adopted in the future, any of which could limit the amounts that federal and state governments will pay for healthcare products and services, which could result in reduced demand or lower pricing for cytosine, or additional pricing pressures. Currently, the Health Care Reform Law provides coverage for smoking cessation-related activities, including two counseling attempts for smoking cessation per year and prescription drugs for smoking cessation, but not over-the-counter treatments. If these provisions are repealed, in whole or in part, our business, financial condition, or results of operations could be negatively affected.

The United Kingdom is currently a member state of the European Union. However, the United Kingdom has signaled its intention to withdraw from the European Union (commonly known as BREXIT). If BREXIT, which is likely to occur in 2019, does occur, the United Kingdom will no longer be a member state within the European Union. Since a significant portion of the regulatory framework in the United Kingdom is derived from the regulations of the European Union, BREXIT could materially change the regulatory framework applicable to the approval of cytosine, which could have a material adverse effect on us and our operations. BREXIT may also result in other significant regulatory and legislative changes in the United Kingdom, which could, for example, affect the pricing of pharmaceutical products in the United Kingdom, which could in turn result in diminished performance for us. Even if the substance of regulatory changes resulting from BREXIT does not have a significant impact on our operations, it is reasonable to expect that we would incur potentially significant costs in connection with complying with any new regulations. Further, the European Medicines Agency is currently located in the United Kingdom. It is possible that BREXIT would result in the relocation of the European Medicines Agency or disruption to the European Medicines Agency's review process, either of which could have an adverse effect on our operations in the United Kingdom and the European Union.

BREXIT may also have adverse effects on potential customers and collaborators of ours, which could indirectly have an adverse effect on us.

### **Risks Related to our Business Operations**

***It is difficult to evaluate our current business, predict our future prospects and forecast our financial performance and growth.***

To date our business activities have been focused primarily on the development and regulatory approval of cytosine and its various alternative forms. Although we have not generated revenue to date, we expect that, after any regulatory approval, any receipt of revenue will be attributable to sales of cytosine, primarily in the United States, the European Union (including the United Kingdom) and Japan. Because we devote substantially all of our resources to the development of cytosine and rely on cytosine as our sole source of potential revenue for the foreseeable future, any factors that negatively impact this product, or result in decreasing product sales, would materially and adversely affect our business, financial condition and results of operations.

***Our future success depends in part on our ability to attract, retain, and motivate other qualified personnel.***

We will need to expand and effectively manage our managerial, operational, financial, development and other resources in order to successfully pursue our development and commercialization efforts for our existing and future product candidates. We expect to need additional scientific, technical, operational, financial and other personnel. Our success depends on our continued ability to attract, retain and motivate highly qualified personnel, such as management, clinical and preclinical personnel, including our executive officers Richard Stewart, John Bencich, Cindy Jacobs, Anthony Clarke and Jaime Welch. In addition, although we have entered into employment agreements with each of Mr. Stewart, Mr. Bencich, Dr. Jacobs, Dr. Clarke and Ms. Welch, such agreements permit those executives to terminate their employment with us at any time, subject to providing us with advance written notice.

We may not be able to attract and retain personnel on acceptable terms, if at all, given the competition among numerous pharmaceutical and biotechnology companies for individuals with similar skill sets. In addition, failure to succeed in development and commercialization of cytosine may make it more challenging to recruit and retain qualified personnel. The inability to recruit and retain qualified personnel, or the loss of the services of our current personnel may impede the progress of our research, development, and commercialization objectives and would negatively impact our ability to succeed in our product development strategy.

***We will need to expand our organization and we may experience difficulties in managing this growth, which could disrupt our operations.***

We may need to divert a disproportionate amount of our attention away from our day-to-day activities and devote a substantial amount of time to managing these growth activities. We may not be able to effectively manage the expansion of our operations, which may result in weaknesses in its infrastructure, operational mistakes, loss of business opportunities, loss of employees, and reduced productivity among remaining employees. Our expected growth could require significant capital expenditures and may divert financial resources from other projects, such as the development of additional product candidates. If we are unable to effectively manage our growth, our expenses may increase more than expected, our ability to generate and/or grow revenue could be reduced and we may not be able to implement our business strategy. Our future financial performance and our ability to commercialize product candidates and compete effectively will depend, in part, on our ability to effectively manage any future growth.

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

***We expect to continue to rely on third parties to manufacture cytosine for use in clinical trials, and we intend to exclusively rely on Sopharma to produce and process cytosine, if approved. Our commercialization of cytosine could be stopped, delayed or made less profitable if Sopharma fails to obtain approval of government regulators, fails to provide us with sufficient quantities of product, or fails to do so at acceptable quality levels or prices.***

We do not currently have nor do we currently plan to develop the infrastructure or capability internally to manufacture our clinical supplies for use in the conduct of our clinical trials, and we lack the resources and the capability to manufacture cytosine on a clinical or commercial scale. We currently exclusively rely on Sopharma to manufacture cytosine for use in clinical trials and plan to continue relying on Sopharma to manufacture cytosine on a commercial scale, if approved.

Our reliance on Sopharma exposes us to the following additional risks:

- Sopharma might be unable to timely manufacture cytosine or produce the quantity and quality required to meet our clinical and commercial needs, if any;
- we may be unable to identify manufacturers other than Sopharma on acceptable terms or at all;
- Sopharma may not be able to execute our manufacturing procedures appropriately;

- Sopharma may not perform as agreed or may not remain in the contract manufacturing business for the time required to supply our clinical trials or to successfully produce, store and distribute our products;
- Sopharma is or will be subject to ongoing periodic unannounced inspection by the FDA and corresponding state agencies to ensure strict compliance with cGMPs and other government regulations and corresponding foreign standards. We do not have control over Sopharma's compliance with these regulations and standards;
- we may not own, or may have to share, the intellectual property rights to any improvements made by Sopharma in the manufacturing process for cytosine;
- we do not own the intellectual property rights to cytosine, and Sopharma could license such rights to third parties or begin supplying other third parties with cytosine; and
- Sopharma could breach or terminate their agreement with us.

Each of these risks could delay our clinical trials, the approval, if any of cytosine by the FDA or the commercialization of cytosine or result in higher costs or deprive us of potential product revenue.

The manufacture of medical products is complex and requires significant expertise and capital investment, including the development of advanced manufacturing techniques and process controls. Manufacturers of medical products often encounter difficulties in production, particularly in scaling up and validating initial production and absence of contamination. These problems include difficulties with production costs and yields, quality control, including stability of the product, quality assurance testing, operator error, shortages of qualified personnel, as well as compliance with strictly enforced federal, state and foreign regulations. Furthermore, if contaminants are discovered in the supply of cytosine or in the Sopharma manufacturing facilities, such manufacturing facilities may need to be closed for an extended period of time to investigate and remedy the contamination. We cannot be assured that any stability or other issues relating to the manufacture of cytosine will not occur in the future. Additionally, Sopharma may experience manufacturing difficulties due to resource constraints or as a result of labor disputes or political instability in the countries in which Sopharma conducts its operations. If Sopharma were to encounter any of these difficulties, or otherwise fail to comply with its contractual obligations, our ability to provide our product candidates to patients in clinical trials could be delayed or suspended. Any delay or interruption in the supply of clinical trial supplies could delay the completion of clinical trials, increase the costs associated with maintaining clinical trial programs and, depending upon the period of delay, require us to commence new clinical trials at additional expense or terminate clinical trials completely. Similar political instability could also harm the commercial production and supply of cytosine in the event that cytosine is ultimately approved for commercial sale.

***We rely on third parties to conduct our clinical trials and perform other services. If these third parties do not successfully perform and comply with regulatory requirements, we may not be able to successfully complete clinical development, obtain regulatory approval or commercialize cytosine and our business could be substantially harmed.***

We plan to rely upon third-party CROs to conduct, monitor and manage our ongoing clinical programs. We rely on these parties for execution of clinical trials and manage and control only some aspects of their activities. We remain responsible for ensuring that each of our trials 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. We and our CROs and other vendors are required to comply with all applicable laws, regulations and guidelines, including those required by the FDA and comparable foreign regulatory authorities for all of our product candidates in clinical development. If we or any of our CROs or vendors fail to comply with applicable laws, regulations and guidelines, the results 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 before approving our marketing applications. We cannot be assured that our CROs and other vendors will meet these requirements, or that upon inspection by any regulatory authority, such regulatory authority will determine that efforts, including any of our clinical trials, comply with applicable requirements. Our failure to comply with these laws, regulations and guidelines may require us to repeat clinical trials, which would be costly and delay the regulatory approval process.

If any of our relationships with these third-party CROs terminate, we may not be able to enter into arrangements with alternative CROs in a timely manner or do so on commercially reasonable terms. In addition, our CROs may not prioritize our clinical trials relative to those of other customers and any turnover in personnel or delays in the allocation of CRO employees by the CRO may negatively affect our clinical trials. If CROs do not successfully carry out their contractual duties or obligations or meet expected deadlines, continued development of cytosine may be delayed or terminated and we may not be able to meet our current plans with respect to cytosine. CROs may also involve higher costs than anticipated, which could negatively affect our financial condition and operations.

***We may not be able to establish or maintain the third-party relationships that are necessary to develop or potentially commercialize cytosine.***

Our business plan relies heavily on third party collaborators, partners, licensees, clinical research organizations, clinical investigators, vendors or other third parties to support our research and development efforts and to conduct clinical trials for cytosine. We cannot guarantee that we will be able to successfully negotiate agreements for, or maintain relationships with, these third parties on a commercially reasonable basis, if at all. If we fail to establish or maintain such third-party relationships as anticipated, our business could be adversely affected.

***We may be unable to realize the potential benefits of any collaborations which we may enter into with other companies for the development and commercialization of cytosine.***

We may enter into a collaboration with third parties concerning the development and/or commercialization of cytosine; however, there is no guarantee that any such collaboration will be successful. Collaborations may pose a number of risks, including:

- collaborators often have significant discretion in determining the efforts and resources that they will apply to the collaboration, and may not commit sufficient resources to the development, marketing or commercialization of cytosine;
- collaborators may not perform their obligations as expected;
- any such collaboration may significantly limit our share of potential future profits from the associated program, and may require us to relinquish potentially valuable rights to cytosine, or other potential products or proprietary technologies or grant licenses on terms that are not favorable to us;
- collaborators may cease to devote resources to the development or commercialization of cytosine if the collaborators view cytosine as competitive with their own products or product candidates;
- disagreements with collaborators, including disagreements over proprietary rights, contract interpretation or the course of development, might cause delays or termination of the development or commercialization of cytosine, and might result in legal proceedings, which would be time consuming, distracting and expensive;
- collaborators may be impacted by changes in their strategic focus or available funding, or business combinations involving them, which could cause them to divert resources away from the collaboration;
- collaborators may infringe the intellectual property rights of third parties, which may expose us to litigation and potential liability;
- the collaborations may not result in us achieving revenues to justify such transactions; and
- collaborations may be terminated and, if terminated, may result in a need for us to raise additional capital to pursue further development or commercialization of cytosine.

As a result, a collaboration may not result in the successful development or commercialization of cytosine.

***We enter into various contracts in the normal course of our business in which we indemnify the other party to the contract. In the event we have to perform under these indemnification provisions, it could have a material adverse effect on our business, financial condition and results of operations.***

In the normal course of business, we enter into academic, commercial, service, collaboration, licensing, consulting and other agreements that contain indemnification provisions. With respect to our academic and other research agreements, we typically indemnify the institution and related parties from losses arising from claims relating to the products, processes or services made, used, sold or performed pursuant to the agreements for which we have secured licenses, and from claims arising from our or our sublicensees' exercise of rights under the agreement. With respect to our collaboration agreements, we indemnify our collaborators from any third-party product liability claims that could result from the production, use or consumption of the product, as well as for alleged infringements of any patent or other intellectual property right by a third party. With respect to consultants, we indemnify them from claims arising from the good faith performance of their services.

Should our obligation under an indemnification provision exceed applicable insurance coverage or if we were denied insurance coverage, our business, financial condition and results of operations could be adversely affected. Similarly, if we are relying on a collaborator to indemnify us and the collaborator is denied insurance coverage or the indemnification obligation exceeds the applicable insurance coverage, and if the collaborator does not have other assets available to indemnify us, our business, financial condition and results of operations could be adversely affected.

## **Risks Related to Commercialization of Cytisine**

***We face substantial competition and our competitors may discover, develop or commercialize products faster or more successfully than us.***

The development and commercialization of new products is highly competitive. We face competition from major pharmaceutical companies, specialty pharmaceutical companies, biotechnology companies, universities and other research institutions worldwide with respect to cytisine and the other product candidates that we may seek to develop or commercialize in the future. We are aware that many companies have therapeutics marketed or in development for smoking cessation, including, Pfizer Inc., GlaxoSmithKline Plc, Merck & Co., Novartis, Invion, Embera Neurotherapeutics, Redwood Scientific Technologies, Inc., 22nd Century Group, Inc., Quit4Good, Chrono Therapeutics, NAL Pharmaceuticals, Selecta Biosciences, Aradigm and others.

Many of our competitors have substantially greater financial, name recognition, manufacturing, marketing, research, technical and other resources than us. Additional mergers and acquisitions in the biotechnology and pharmaceutical industries may result in even more resources being concentrated in our competitors. Further, our competitors may develop new products that are safer, more effective or more cost-efficient than cytisine. Large pharmaceutical companies in particular have extensive expertise in pre-clinical and clinical testing and in obtaining regulatory approvals for products. In addition, academic institutions, government agencies, and other public and private organizations conducting research may seek patent protection with respect to potentially competitive products or technologies. These organizations may also establish exclusive collaborative or licensing relationships with our competitors. Failure of cytisine to effectively compete against established treatment options or in the future with new products currently in development would harm our business, financial condition, results of operations and prospects.

***The commercial success of cytisine will depend upon the degree of market acceptance by physicians, patients, third-party payors, and others in the medical community. Failure to obtain or maintain adequate reimbursement or insurance coverage for products, if any, could limit our ability to market cytisine and decrease our ability to generate revenue.***

Even with the approvals from the FDA and comparable foreign regulatory authorities, the commercial success of cytisine will depend in part on the health care providers, patients, and third-party payors accepting cytisine as medically useful, cost-effective, and safe. Cytisine may not gain market acceptance by physicians, patients and third-party payors. The degree of market acceptance of cytisine will depend on a number of factors, including but not limited to:

- the efficacy, if any, of cytisine as demonstrated in clinical trials and potential advantages over competing treatments, if any;
- the clinical indications for which approval is granted, if any, including any limitations or warnings contained in cytisine's approved labeling;
- the cost of treatment;
- the perceived ratio of risk and benefit of these therapies by physicians and the willingness of physicians to recommend the product to patients based on such risks and benefits;
- the marketing, sales and distribution support for cytisine;
- the publicity concerning cytisine or competing products and treatments;
- the pricing and availability of third-party insurance coverage and reimbursement; and
- negative perceptions or experiences with our competitor's products may be ascribed to cytisine.

Even if cytisine displays a favorable efficacy and safety profile upon approval, market acceptance of cytisine remains uncertain. Efforts to educate the medical community and third-party payors on the benefits of cytisine, if any, may require significant investment and resources and may never be successful. Additionally, third-party payors, including governmental and private insurers, may also encourage the use of generic products instead of cytisine, which require a prescription. If our products fail to achieve an adequate level of acceptance by physicians, patients, third-party payors, and other health care providers, we will not be able to generate sufficient revenue to become or remain profitable.

The pricing, coverage, and reimbursement of cytisine, if any, must be sufficient to support our commercial efforts and other development programs and the availability and adequacy of coverage and reimbursement by third-party payors, including governmental and private insurers, are essential for most patients to be able to afford treatments. Sales of cytisine, if any, will depend substantially, both domestically and abroad, on the extent to which the costs of cytisine will be paid for or reimbursed by health maintenance, managed care, pharmacy benefit and similar healthcare management organizations, or government payors and private

payors. If coverage and reimbursement are not available, or are available only in limited amounts, we may have to subsidize or provide cytisine for free or we may not be able to successfully commercialize cytisine.

In addition, there is significant uncertainty related to the insurance coverage and reimbursement for newly approved products. In the United States, the principal decisions about coverage and reimbursement for new products are typically made by the Centers for Medicare and Medicaid Services, or CMS, an agency within the U.S. Department of Health and Human Services, as CMS decides whether and to what extent a new product will be covered and reimbursed under Medicare. Private payors tend to follow the coverage reimbursement policies established by CMS to a substantial degree. It is difficult to predict what CMS will decide with respect to reimbursement for novel product candidates such as cytisine and what reimbursement codes cytisine may receive if approved.

Outside the United States, selling operations are generally subject to extensive governmental price controls and other price-restrictive regulations, and we believe the increasing emphasis on cost-containment initiatives in Europe, Canada, and other countries has and will continue to put pressure on the pricing and usage of products. In many countries, the prices of products are subject to varying price control mechanisms as part of national health systems. Price controls or other changes in pricing regulation could restrict the amount that we are able to charge for our products, if any. Accordingly, in markets outside the United States, the potential revenue may be insufficient to generate commercially reasonable revenue and profits.

Moreover, increasing efforts by governmental and private payors in the United States and abroad to limit or reduce healthcare costs may result in restrictions on coverage and the level of reimbursement for new products and, as a result, they may not cover or provide adequate payment for our products. We expect to experience pricing pressures in connection with products due to the increasing trend toward managed healthcare, including the increasing influence of health maintenance organizations and additional legislative changes. The downward pressure on healthcare costs in general, particularly prescription products has and is expected to continue to increase in the future. As a result, profitability of cytisine, if any, may be more difficult to achieve even if regulatory approval is received.

***Sopharma may breach its supply agreement with us and sell cytisine into our territories or permit third parties to export cytisine into our territories and negatively affect our commercialization efforts of our products in our territories.***

We are currently dependent on the exclusivity provisions of our supply agreement with Sopharma to conduct our business and to prevent Sopharma from competing, directly and indirectly, with us in the United States and Western Europe. If Sopharma were to breach the exclusivity provisions of the supply agreement with us and sell or distribute cytisine directly into our territories or permit third parties to export cytisine into our territories, among other things, the increase in competition within our anticipated markets could have a material adverse effect on our business, results of operations and financial condition.

***The illegal distribution and sale by third parties of counterfeit versions of cytisine, stolen products, or alternative third party distribution and sale of cytisine could have a negative impact on our financial performance or reputation.***

Cytisine is not patentable in the United States as it is a naturally occurring substance. As such, third parties are able to manufacture, sell or distribute cytisine without royalties or other payments to us and compete with our products in the United States and potentially worldwide and negatively impact our commercialization efforts of our products. Other than regulatory exclusivity or other limitations, there may be little to nothing to stop these third parties from manufacturing, selling or distributing cytisine. Because we have no ability to set rigorous safety standards or control processes over third party manufacturers, sellers or distributors of cytisine, excluding Sopharma, these formulations of cytisine may be unsafe or cause adverse effects to patients and negatively impact the reputation of cytisine as a safe and effective smoking cessation aid.

Third parties could illegally distribute and sell counterfeit versions of cytisine, especially on online marketplaces, which do not meet the rigorous manufacturing and testing standards under cGMP. Counterfeit products are frequently unsafe or ineffective, and may even be life-threatening. Counterfeit medicines may contain harmful substances, the wrong dose of the active pharmaceutical ingredient or no active pharmaceutical ingredients at all. However, to distributors and users, counterfeit products may be visually indistinguishable from the authentic version.

Reports of adverse reactions to counterfeit products, increased levels of counterfeiting, or unsafe cytisine products could materially affect patient confidence in our cytisine product. It is possible that adverse events caused by unsafe counterfeit or other non-Achieve cytisine products will mistakenly be attributed to our cytisine product. In addition, thefts of inventory at warehouses, plants or while in-transit, which are not properly stored and which are sold through unauthorized channels could adversely impact patient safety, our reputation, and our business. Public loss of confidence in the integrity in cytisine as a result of counterfeiting, theft, or improper manufacturing processes could have a material adverse effect on our business, results of operations, and financial condition.

It is illegal to sell unapproved prescription medicines in the United States. Sopharma's cytisine brand, Tabex, is currently approved for sale in certain Central and Eastern European countries. Cytisine has not yet received a marketing approval from the FDA or the

European Medicines Agency, and we intend to conduct the requisite clinical trials to obtain approval for the marketing of cytosine in the United States and in Europe. We are aware that products purporting to be Tabex are available, via third party internet sites, for importation in the United States and European Union. We have no control over the authenticity of products purchased through these sites, which may be counterfeit or sourced from distributors in Central and Eastern Europe without authorization to sell into the United States or European Union.

***We may attempt to form collaborations in the future with respect to cytosine, but we may not be able to do so, which may cause us to alter our development and commercialization plans.***

We may attempt to form strategic collaborations, create joint ventures or enter into licensing arrangements with third parties with respect to our programs that we believe will complement or augment our existing business. We may face significant competition in seeking appropriate strategic collaborators, and the negotiation process to secure appropriate terms is time consuming and complex. We may not be successful in our efforts to establish such a strategic collaboration for cytosine on terms that are acceptable to us, or at all. This may be because cytosine may be deemed to be at too early of a stage of development for collaborative effort, our research and development pipeline may be viewed as insufficient, the competitive or intellectual property landscape may be viewed as too intense or risky, or cytosine's patent protection insufficient, and/or third parties may not view cytosine as having sufficient potential for commercialization, including the likelihood of an adequate safety and efficacy profile.

Any delays in identifying suitable collaborators and entering into agreements to develop and/or commercialize cytosine could delay the development or commercialization of cytosine, which may reduce our competitiveness even if we reach the market. Absent a strategic collaborator, we would need to undertake development and/or commercialization activities at our own expense. If we elect to fund and undertake development and/or commercialization activities on our own, we may need to obtain additional expertise and additional capital, which may not be available to us on acceptable terms or at all. If we are unable to do so, we may not be able to develop our product candidates or bring them to market and our business may be materially and adversely affected.

***We may not be successful in any efforts to identify, license, discover, develop, or commercialize additional product candidates.***

Although a substantial amount of our effort will focus on clinical testing, approval, and potential commercialization of cytosine, our sole product candidate, the success of our business is also expected to depend in part upon our ability to identify, license, discover, develop, or commercialize additional product candidates. Research programs to identify new product candidates require substantial technical, financial, and human resources. We may focus our efforts and resources on potential programs or product candidates that ultimately prove to be unsuccessful. Our research programs or licensing efforts may fail to yield additional product candidates for clinical development and commercialization for a number of reasons, including but not limited to the following:

- Our research or business development methodology or search criteria and process may be unsuccessful in identifying potential product candidates;
- we may not be able or willing to assemble sufficient resources to acquire or discover additional product candidates;
- our product candidates may not succeed in pre-clinical or clinical testing;
- our potential product candidates may be shown to have harmful side effects or may have other characteristics that may make the products unmarketable or unlikely to receive marketing approval;
- competitors may develop alternatives that render our product candidates obsolete or less attractive;
- product candidates we develop may be covered by third parties' patents or other exclusive rights;
- the market for a product candidate may change during our program so that such a product may become unreasonable to continue to develop;
- a product candidate may not be capable of being produced in commercial quantities at an acceptable cost, or at all; and
- a product candidate may not be accepted as safe and effective by patients, the medical community, or third-party payors.

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

## **Risks Related to our Intellectual Property**

***We may not be successful in obtaining or maintaining necessary rights to cytosine, product compounds and processes for our development pipeline through acquisitions and in-licenses.***

Presently, we have rights to the intellectual property through trade secrets, licenses from third parties and patent applications that we own. Our product candidates may require specific formulations to work effectively and efficiently and these rights may be held by others. We may be unable to acquire or in-license any compositions, methods of use, processes or other third-party intellectual property rights from third parties that we identify. The licensing and acquisition of third-party intellectual property rights is a competitive area, and a number of more established companies are also pursuing strategies to license or acquire third-party intellectual property rights that we may consider attractive. These established companies may have a competitive advantage over us due to their size, cash resources and greater clinical development and commercialization capabilities. In addition, companies that perceive us to be a competitor may be unwilling to assign or license rights to us. We also may be unable to license or acquire third-party intellectual property rights on terms that would allow us to make an appropriate return on our investment. If we are unable to successfully obtain rights to third-party intellectual property rights, our business, financial condition and prospects for growth could suffer.

***If we are unable to maintain effective proprietary rights for our product candidates or any future product candidates, we may not be able to compete effectively in our proposed markets.***

We currently rely primarily on trade secret protection and on confidentiality agreements to protect proprietary know-how that is not patentable or that we elect not to patent, processes for which patents are difficult to enforce and any other elements of our product candidate discovery and development processes that involve proprietary know-how, information or technology that is not covered by patents. Trade secrets can be difficult to protect, however, and even where they are protected they generally provide less intellectual property protection to the holder of the trade secret than to a holder of a patent. We seek to protect our proprietary technology and processes, in part, by entering into confidentiality agreements with our employees, consultants, scientific advisors, and contractors. We also seek to preserve the integrity and confidentiality of our data and trade secrets by maintaining physical security of our premises and physical and electronic security of our information technology systems. While we have confidence in these individuals, organizations and systems, agreements or security measures may be breached, and we may not have adequate remedies for any breach. In addition, our trade secrets may otherwise become known or be independently discovered by competitors.

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

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

We are currently developing cytosine for smoking cessation. Our commercial success depends in part on our ability to develop, manufacture, market and sell our product candidates and use our proprietary technology without infringing the patent rights of third parties. We are not aware of any patents or patent applications that would prevent the development, manufacture or marketing of cytosine for smoking cessation.

We are aware of U.S. and foreign patents and pending patent applications owned by third parties that cover certain other therapeutic uses of cytosine. We are currently monitoring these patents and patent applications. We may in the future pursue available proceedings in the U.S. and foreign patent offices to challenge the validity of these patents and patent applications. In addition, or alternatively, we may consider whether to seek to negotiate a license of rights to technology covered by one or more of such patents and patent applications for these certain additional therapeutic uses. If any third party patents or patent applications cover our product candidates or technologies in other therapeutic uses, we may not be free to manufacture or market our product candidates for additional therapeutic uses, absent such a license, which may not be available to us on commercially reasonable terms, or at all.

It is also possible that we have failed to identify relevant third-party patents or applications. For example, applications filed before November 29, 2000 and applications filed after that date that will not be filed outside the United States remain confidential until patents issue. Moreover, it is difficult for industry participants, including us, to identify all third-party patent rights that may be relevant to our product candidates and technologies because patent searching is imperfect due to differences in terminology among patents, incomplete databases and the difficulty in assessing the meaning of patent claims. We may fail to identify relevant patents or patent applications or may identify pending patent applications of potential interest but incorrectly predict the likelihood that such



patent applications may issue with claims of relevance to our technology. In addition, we may be unaware of one or more issued patents that would be infringed by the manufacture, sale or use of a current or future product candidate, or we may incorrectly conclude that a third-party patent is invalid, unenforceable or not infringed by our activities. Additionally, pending patent applications that have been published can, subject to specified limitations, be later amended in a manner that could cover our technologies, our product candidates or the use of our product candidates.

There have been many lawsuits and other proceedings involving patent and other intellectual property rights in the pharmaceutical industries, including patent infringement lawsuits, interferences, oppositions, and reexamination proceedings before the USPTO and corresponding foreign patent offices. U.S. and foreign issued patents and pending patent applications, which are owned by third parties, exist in the fields in which we are developing product candidates. As the biotechnology and pharmaceutical industries expand and more patents are issued, the risk increases that our product candidates may be subject to claims of infringement of the patent rights of third parties.

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

***We intend to rely on patent rights for certain aspects of our product candidates and certain future product candidates. If we are unable to obtain or maintain an adequate proprietary position from this approach, we may not be able to compete effectively in our markets.***

Although we rely or will rely primarily on trade secret protection as part of our intellectual property rights strategies, we also intend to rely on patent rights to protect certain aspects of our technologies and upon the patent rights of third parties from which we license certain of our technologies.

We have sought to protect our proprietary position by filing patent applications in the United Kingdom and intend to file patent applications in the United States related to future product candidates. This process is expensive and time consuming, and we may not be able to file and prosecute all necessary or desirable patent applications at a reasonable cost or in a timely manner or at all. It is also possible that we will fail to identify patentable aspects of our research and development output before it is too late to obtain patent protection.

The patent position of pharmaceutical companies generally is highly uncertain and involves complex legal and factual questions for which legal principles remain unsolved. The patent applications that we own may fail to result in issued patents with claims that cover our product candidates in the United States or in other foreign countries. There is no assurance that all potentially relevant prior art relating to our patent applications or our patents (once issued) have been found, which can invalidate a patent or prevent a patent from issuing from a pending patent application. Even if patents do successfully issue, and even if such patents cover our future product candidates, third parties may challenge their validity, enforceability, or scope, which may result in such patents being narrowed, found unenforceable or invalidated. Furthermore, even if they are unchallenged, our patents and patent applications may not adequately protect our intellectual property, provide exclusivity for our future product candidates, or prevent others from designing around our claims. Any of these outcomes could impair our ability to prevent competition from third parties, which may have an adverse impact on our business.

We cannot offer any assurances about which, if any, patents will issue, the breadth of any such patent or whether any issued patents will be found invalid and unenforceable or will be threatened by third parties. Any successful opposition to these patents or any other patents owned by or licensed to us after patent issuance could deprive us of rights necessary for the successful commercialization of any future product candidates that we may develop. Further, if we encounter delays in regulatory approvals, the period of time during which we could market a future product candidate under patent protection could be reduced.

If we cannot obtain and maintain effective protection of exclusivity from our regulatory efforts and intellectual property rights, including patent protection or data exclusivity, for our product candidates, we may not be able to compete effectively and our business and results of operations would be harmed.

***Changes in patent law could diminish the value of patents in general, thereby impairing our ability to protect our product candidates.***

Obtaining and enforcing patents in the biopharmaceutical industry involves both technological and legal complexity, and is therefore costly, time-consuming, and inherently uncertain. In addition, the United States has recently enacted and is currently implementing wide-ranging patent reform legislation. Recent U.S. Supreme Court rulings have narrowed the scope of patent protection available in certain circumstances and weakened the rights of patent owners in certain situations. In addition to increasing uncertainty with regard to our ability to obtain patents in the future, this combination of events has created uncertainty with respect to the value of patents once obtained, if any. Depending on decisions by the U.S. Congress, the federal courts and the U.S. Patent and Trademark Office, or the USPTO, the laws and regulations governing patents could change in unpredictable ways that would weaken our ability to obtain new patents or to enforce our existing patents and patents that we might obtain in the future.

In a recent case, *Assoc. for Molecular Pathology v. Myriad Genetics, Inc.*, the U.S. Supreme Court held that certain claims to naturally-occurring substances are not patentable. Cytisine is a naturally-occurring product and is not patentable. Our intellectual property strategy involves novel formulations of cytosine and there is no guarantee that such patents will be issued or if issued, will be broad enough to prevent competitors from developing competing cytosine products. Although we do not believe that any patents that may issue from our pending patent applications directed at our product candidates, if issued in their currently pending forms, as well as patent rights licensed by us, will be found invalid based on this decision, we cannot predict how future decisions by the courts, the U.S. Congress or the USPTO may impact the value of our patent rights. There could be similar changes in the laws of foreign jurisdictions that may impact the value of our patent rights or our other intellectual property rights.

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

We employ individuals who were previously employed at other biotechnology or pharmaceutical companies. Although we have written agreements and make every effort to ensure that our employees, consultants, and independent contractors do not use the proprietary information or intellectual property rights of others in their work for us, we may in the future be subject to any claims that our employees, consultants, or independent contractors have wrongfully used or disclosed confidential information of third parties. Litigation may be necessary to defend against these claims. If we fail in defending any such claims, in addition to paying monetary damages, we may lose valuable intellectual property rights or personnel, which could adversely impact our business. Even if we are successful in defending against such claims, litigation could result in substantial costs and be a distraction to management and other employees.

**Risks Related to our Common Stock**

***The price for our common stock is volatile.***

The market prices for our common stock and that of early-stage pharmaceutical, biotechnology and other life sciences companies have historically been particularly volatile. Some of the factors that may cause the market price of our common stock to fluctuate include:

- the ability of us or our partners to develop cytosine and other product candidates and conduct clinical trials that demonstrate such product candidates are safe and effective;
- our ability to raise additional capital, the terms of such capital, and our ability to continue as a going concern;
- our ability or our partners to obtain regulatory approvals for cytosine or other product candidates, and delays or failures to obtain such approvals;
- failure of any of our product candidates to demonstrate safety and efficacy, receive regulatory approval and achieve commercial success;
- failure to maintain our existing third party license, manufacturing and supply agreements;
- failure by us or our licensors to prosecute, maintain, or enforce our intellectual property rights;
- changes in laws or regulations applicable to our candidates;
- any inability to obtain adequate supply of product candidates or the inability to do so at acceptable prices;
- adverse regulatory authority decisions;
- introduction of new or competing products by our competitors;

- failure to meet or exceed financial and development projections we may provide to the public;
- the perception of the pharmaceutical industry by the public, legislatures, regulators and the investment community;
- announcements of significant acquisitions, strategic partnerships, joint ventures, or capital commitments by us or our competitors;
- disputes or other developments relating to proprietary rights, including patents, litigation matters, and our ability to obtain intellectual property protection for our technologies;
- additions or departures of key personnel;
- significant lawsuits, including intellectual property or stockholder litigation;
- if securities or industry analysts do not publish research or reports about us, or if they issue an adverse or misleading opinions regarding our business and stock;
- changes in the market valuations of similar companies;
- general market or macroeconomic conditions;
- sales of our common stock us or our stockholders in the future;
- trading volume of our common stock;
- adverse publicity relating to our markets generally, including with respect to other products and potential products in such markets;
- changes in the structure of health care payment systems; and
- period-to-period fluctuations in our financial results.

Moreover, the stock markets in general have experienced substantial volatility that has often been unrelated to the operating performance of individual companies. These broad market fluctuations may also adversely affect the trading price of our common stock. An increase in the market price of our common stock, which is uncertain and unpredictable, may be the sole source of gain from an investment in our common stock. An investment in our common stock may not be appropriate for investors who require dividend income. We have never declared or paid cash dividends on our capital stock and do not anticipate paying any cash dividends on our capital stock in the foreseeable future. We currently intend to retain all available funds and any future earnings to fund the development and growth of our business. As a result, capital appreciation, if any, of our common stock will be the sole source of gain for stockholders for the foreseeable future. Accordingly, an investment in our common stock may not be appropriate for investors who require dividend income or investors who are not prepared to bear a significant risk of losses from such an investment.

***We are at risk of securities class action litigation.***

In the past, securities class action litigation has often been brought against a company following a decline in the market price of its securities, including in circumstances where such declines occur in close proximity to the announcement of clinical trial results. Additionally, our stock price and those of other biotechnology and biopharmaceutical companies have experienced significant stock price volatility in recent years. If we face such litigation, it could result in substantial costs and a diversion of management's attention and resources, which could harm our business.

***If the ownership of our common stock is highly concentrated, it may prevent you and other stockholders from influencing significant corporate decisions and may result in conflicts of interest that could cause our stock price to decline.***

Executive officers and directors and their affiliates beneficially own or control a significant percentage of the outstanding shares of our common stock. Accordingly, these executive officers, directors and their affiliates, acting as a group, will have substantial influence over the outcome of corporate actions requiring stockholder approval, including the election of directors, any merger, consolidation or sale of all or substantially all of our assets or any other significant corporate transactions. These stockholders may also delay or prevent a change of control, even if such a change of control would benefit the other stockholders. The significant concentration of stock ownership may adversely affect the trading price of our common stock due to investors' perception that conflicts of interest may exist or arise

***Because our recent merger resulted in an ownership change under Section 382 of the Code for OncoGenex, pre-merger net operating loss carryforwards and certain other tax attributes are now subject to limitations.***

If a corporation undergoes an “ownership change” within the meaning of Section 382 of the Code, the corporation’s net operating loss carryforwards and certain other tax attributes arising from before the ownership change are subject to limitations on use after the ownership change. In general, an ownership change occurs if there is a cumulative change in the corporation’s equity ownership by certain stockholders that exceeds fifty percentage points over a rolling three-year period. Similar rules may apply under state tax laws. Our recent merger involving OncoGenex and Achieve Life Sciences, Inc. resulted in an ownership change for OncoGenex and, accordingly, OncoGenex’s net operating loss carryforwards and certain other tax attributes will be subject to limitations on their use after the merger. Additional ownership changes in the future could result in additional limitations on the combined organization’s net operating loss carryforwards. Consequently, even if we achieve profitability, we may not be able to utilize a material portion of our net operating loss carryforwards and other tax attributes, which could have a material adverse effect on cash flow and results of operations.

***Anti-takeover provisions under Delaware law could make an acquisition of us more difficult and may prevent attempts by our stockholders to replace or remove our management.***

Because we are incorporated in Delaware, we are governed by the provisions of Section 203 of the Delaware General Corporate Law, which prohibits stockholders owning in excess of 15% of our outstanding voting stock from merging or combining with us. Although we believe these provisions collectively will provide for an opportunity to receive higher bids by requiring potential acquirors to negotiate with our board of directors, they would apply even if the offer may be considered beneficial by some stockholders. In addition, these provisions may frustrate or prevent any attempts by our stockholders to replace or remove then current management by making it more difficult for stockholders to replace members of the board of directors, which is responsible for appointing the members of management.

***Our bylaws provide that the Court of Chancery of the State of Delaware is the exclusive forum for substantially all disputes between us and our stockholders, which could limit our stockholders’ ability to obtain a favorable judicial forum for disputes with us or our directors, officers or other employees.***

Our bylaws provide that the Court of Chancery of the State of Delaware is the sole and exclusive forum for any derivative action or proceeding brought on our behalf, any action asserting a breach of fiduciary duty owed by any of our directors, officers or other employees to us or our stockholders, any action asserting a claim against us arising pursuant to any provisions of the Delaware General Corporation Law, our certificate of incorporation or our bylaws, or any action asserting a claim against us that is governed by the internal affairs doctrine. The choice of forum provision may limit a stockholder’s ability to bring a claim in a judicial forum that it finds favorable for disputes with us or our directors, officers or other employees, which may discourage such lawsuits against us and our directors, officers and other employees. If a court were to find the choice of forum provision contained in the bylaws to be inapplicable or unenforceable in an action, we may incur additional costs associated with resolving such action in other jurisdictions.

***The sale of additional shares of common stock to LPC may cause the price of our common stock to decline and result in dilution to our existing stockholders***

Pursuant to our purchase agreement with LPC, we have the right, from time to time, in our sole discretion and subject to certain conditions, to direct LPC to purchase additional shares of common stock having an aggregate value of \$10.0 million and we have exercised this right. We have directed LPC to purchase additional shares and may further direct LPC to purchase additional shares as often as every business day over the 30-month term of the Purchase Agreement in increments of up to 80,000 shares of common stock, with such amounts increasing as the closing sale price of our common stock increases. The purchase price of shares of common stock pursuant to the Purchase Agreement have been and will be based on prevailing market prices of common stock at the time of sale without any fixed discount, and we have controlled and will control the timing and amount of any sales of common stock to LPC. In addition, we have directed and we may direct LPC in the future to purchase additional amounts as accelerated purchases if on the date of a regular purchase the closing sale price of the common stock is not below \$2.00 per share. The sale of additional shares of our common stock pursuant to our purchase agreement with LPC has or will have a dilutive impact on our existing stockholders. Sales by us to LPC could cause the market price of our common stock to decline significantly. Sales of our common stock under the purchase agreement, or the perception that such sales will occur, could also encourage short sales by third parties, which could contribute to the further decline of our stock price. Additionally, the sale of a substantial number of shares of our common stock under the purchase agreement, or the perception that such sales will occur, could make it more difficult for us to sell equity or equity-related securities in the future at a time and at a price that we might otherwise wish.

*If we raise additional capital, the terms of the financing transactions may cause dilution to existing stockholders or contain terms that are not favorable to us.*

In the future, we may seek to raise additional financing through private placements or public offerings of our equity or debt securities. We cannot be certain that additional funding will be available on acceptable terms, if at all. To the extent that we raise additional financing by issuing equity securities, we may do so at a price per share that represents a discount to the then-current per share trading price of our common stock and our stockholders may experience significant dilution. Any debt financing, if available, may involve restrictive covenants, such as limitations on our ability to incur additional indebtedness, limitations on our ability to acquire or license intellectual property rights and other operating restrictions that could adversely affect our ability to conduct our business.

**ITEM 1B. UNRESOLVED STAFF COMMENTS**

None.

**ITEM 2. PROPERTIES**

We have business offices located in Seattle, Washington and Vancouver, British Columbia.

Our lease agreement for office space in Bothell, Washington commenced on February 15, 2015 and had a three-year term with one three-year renewal option. Pursuant to this lease, we rented approximately 13,771 square feet of office space. The annual rent was approximately \$0.3 million. We did not exercise our renewal option under the lease agreement and the lease expires on April 30, 2018.

On December 11, 2017, we entered into a lease agreement for office space in Seattle, Washington, which commenced on March 1, 2018, and will expire at the end of the month on the third anniversary of the lease. Pursuant to this lease, we rent approximately 3,187 square feet of office space. The annual rent is approximately \$0.1 million.

We lease approximately 4,857 square feet in Vancouver, British Columbia, currently at an annual rent of approximately CND \$0.1 million, which lease expires on September 30, 2018.

We believe that the facilities we currently lease are sufficient for our anticipated near-term needs.

**ITEM 3. LEGAL PROCEEDINGS**

From time to time, we may be involved in litigation relating to claims arising out of our operations in the normal course of business. We are not currently a party to any legal proceedings, the adverse outcome of which, in management's opinion, individually or in the aggregate, would have a material adverse effect on the results of our operations or financial position. There are no material proceedings to which any director, officer or any of our affiliates, any owner of record or beneficially of more than five percent of any class of our voting securities, or any associate of any such director, officer, our affiliates, or security holder, is a party adverse to us or our consolidated subsidiary or has a material interest adverse thereto.

**ITEM 4. MINE SAFETY DISCLOSURE**

Not applicable.

PART II

**ITEM 5. MARKET FOR THE REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES**

Our common stock first began trading on the Nasdaq National Market under the symbol "SNUS" on October 12, 1995. In connection with a corporate transaction and name change, our common stock commenced trading on the Nasdaq Capital Market under the stock symbol "OGXI", effective August 21, 2008. Following the completion of the Arrangement discussed elsewhere in this Annual Report on Form 10-K, our common stock commenced trading on the Nasdaq Capital Market under the stock symbol "ACHV", effective August 2, 2017.

No cash dividends have been paid on our common stock, and we do not anticipate paying any cash dividends in the foreseeable future. As of February 15, 2018, there were approximately 53 stockholders of record and there were approximately 8,232 beneficial stockholders of our common stock. The high and low sales prices of our common stock as reported by the NASDAQ Capital Market for the periods indicated are as follows:

<u>Achieve Life Sciences, Inc.</u>	<u>HIGH</u>	<u>LOW</u>
<b>YEAR ENDED DECEMBER 31, 2016:</b>		
First quarter	\$ 13.53	\$ 5.01
Second quarter	15.62	7.48
Third quarter	11.33	5.06
Fourth quarter	7.72	3.64
<b>YEAR ENDED DECEMBER 31, 2017:</b>		
First quarter	\$ 10.18	\$ 4.73
Second quarter	5.06	3.61
Third quarter	6.27	2.03
Fourth quarter	3.85	1.15

(1) All amounts reported herein are presented on a post-one-for-eleven reverse stock split basis.

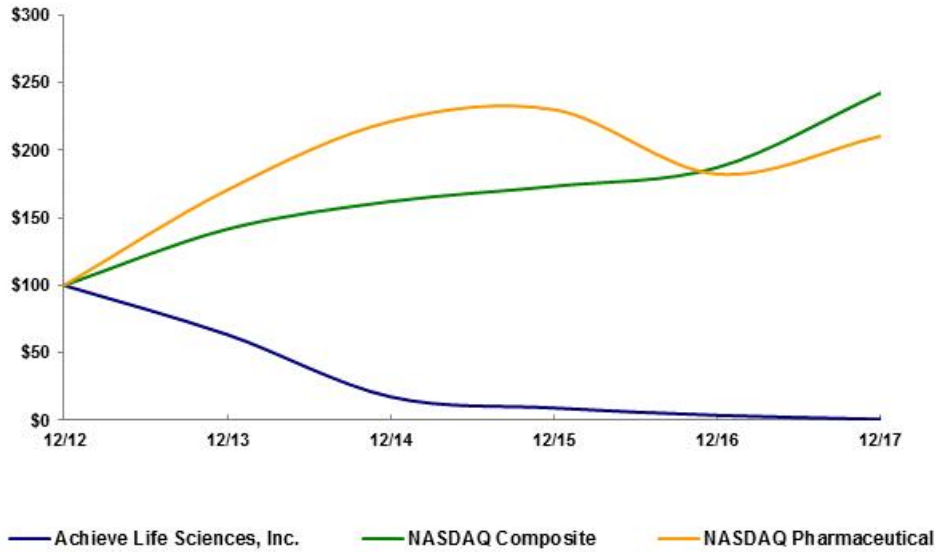
The information required by this item regarding equity compensation plan information is set forth in Part III, Item 12 of this Annual Report on Form 10-K. No purchases of equity securities during the year ended December 31, 2017 were made by us or on our behalf and we did not sell any unregistered securities during such year.

**Stock Performance Graph**

The following performance graph shall not be deemed “filed” for purposes of Section 18 of the Exchange Act, or incorporated by reference into any of our filings under the Securities Act or the Exchange Act, except as expressly set forth by specific reference in such filings. The graph compares the cumulative five-year total return provided to stockholders on our common stock relative to the cumulative total returns of the NASDAQ Composite Index and the NASDAQ Pharmaceutical Index. An investment of \$100 (with reinvestment of all dividends into additional shares of the same class of equity securities at the frequency with which dividends are paid on such securities during the applicable year) is assumed to have been made in our common stock and in each of the indexes on December 31, 2012 and its relative performance is tracked through December 31, 2017.

*The stock price performance included in this graph is not necessarily indicative of future stock price performance.*

**COMPARISON OF 5 YEAR CUMULATIVE TOTAL RETURN\***  
 Among Achieve Life Sciences, Inc., the NASDAQ Composite Index  
 and the NASDAQ Pharmaceutical Index



\*\$100 invested on 12/31/12 in stock or index, including reinvestment of dividends.  
 Fiscal year ending December 31.

	12/31/12	12/31/13	12/31/14	12/31/15	12/31/16	12/31/17
Achieve Life Sciences, Inc.	100.00	63.57	17.45	9.22	3.81	0.93
NASDAQ Composite	100.00	141.63	162.09	173.33	187.19	242.29
NASDAQ Pharmaceutical	100.00	170.57	221.26	229.97	182.33	210.44

**ITEM 6. SELECTED CONSOLIDATED FINANCIAL DATA**

The data set forth below should be read in conjunction with Item 7, “Management’s Discussion and Analysis of Financial Condition and Results of Operations” and the Consolidated Financial Statements and Notes thereto appearing at Item 8 of this Annual Report on Form 10-K. The selected consolidated statements of loss data for the years ended December 31, 2017, 2016 and 2015 and consolidated balance sheet data as of December 31, 2017 and 2016 set forth below have been derived from our audited consolidated financial statements included elsewhere in this Annual Report on Form 10-K. The selected statements balance sheet data as of December 31, 2015 set forth below have been derived from the audited consolidated financial statements for such years not included in this Annual Report on Form 10-K.

In connection with the Arrangement, Achieve was considered to be the acquiring company for accounting purposes. Accordingly, the assets and liabilities of OncoGenex were recorded, as of the effective time of the Arrangement, at their respective fair values and added to those of Achieve. The results of the operations and balance sheet data for the year ended December 31, 2017 reflect the results of only Achieve for the time period of January 1, 2017 through August 1, 2017 and the results of the combined company from August 2, 2017 through December 31, 2017. The historical results of operations and balance sheet data shown for years ended December 31, 2016 and 2015 reflect only those of Achieve prior to the Arrangement, and do not reflect the results of OncoGenex. The historical results presented are not necessarily indicative of future results.

	December 31,		
	2017	2016	2015
	(in thousands except share and per share amounts)		
<b>Statements of Loss Data:</b>			
Total expenses	\$ 6,632	\$ 1,714	\$ 1,223
Net loss	\$ (10,583)	\$ (1,234)	\$ (828)
Basic and diluted loss per common share	\$ (2.21)	\$ (58.13)	\$ (39.00)
<b>Shares used in calculation of net loss per share</b>			
Basic and diluted	4,794,421	21,230	21,230
	December 31,		
	2017	2016	2015
	(in thousands)		
<b>Balance Sheet Data:</b>			
Cash, cash equivalents and short-term investments	\$ 5,284	\$ 15	\$ 67
Total assets	\$ 9,892	\$ 3,807	\$ 4,078
Current liabilities	\$ 2,013	\$ 3,073	\$ 1,611
Total liabilities	\$ 2,013	\$ 3,197	\$ 2,238
Additional paid-in capital	\$ 20,556	\$ 2,667	\$ 2,667
Accumulated deficit	\$ (12,694)	\$ (2,062)	\$ (828)
Stockholders’ equity	\$ 7,879	\$ 610	\$ 1,840



## ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

### Forward-Looking Statements

This Annual Report on Form 10-K contains "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995. These forward-looking statements involve a number of risks and uncertainties. We caution readers that any forward-looking statement is not a guarantee of future performance and that actual results could differ materially from those contained in the forward-looking statement. These statements are based on current expectations of future events. Such statements include, but are not limited to, statements about future financial and operating results, plans, objectives, expectations and intentions, costs and expenses, interest rates, outcome of contingencies, financial condition, results of operations, liquidity, business strategies, cost savings, objectives of management and other statements that are not historical facts. You can find many of these statements by looking for words like "believes," "expects," "anticipates," "estimates," "may," "should," "will," "could," "plan," "intend," or similar expressions in this Annual Report on Form 10-K or in documents incorporated by reference into this Annual Report on Form 10-K. We intend that such forward-looking statements be subject to the safe harbors created thereby. Examples of these forward-looking statements include, but are not limited to:

- our ability to continue as a going concern, our anticipated future capital requirements and the terms of any capital financing agreements;
- progress and preliminary and future results of any clinical trials;
- anticipated regulatory filings, requirements and future clinical trials;
- timing and amount of future contractual payments, product revenue and operating expenses; and
- market acceptance of our products and the estimated potential size of these markets.

These forward-looking statements are based on the current beliefs and expectations of our management and are subject to significant risks and uncertainties. If underlying assumptions prove inaccurate or unknown risks or uncertainties materialize, actual results may differ materially from current expectations and projections. Factors that might cause such a difference include those discussed in Item 1A "Risk Factors," as well as those discussed elsewhere in the Annual Report on Form 10-K.

You are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date of this Annual Report on Form 10-K or, in the case of documents referred to or incorporated by reference, the date of those documents.

All subsequent written or oral forward-looking statements attributable to us or any person acting on our behalf are expressly qualified in their entirety by the cautionary statements contained or referred to in this section. We do not undertake any obligation to release publicly any revisions to these forward-looking statements to reflect events or circumstances after the date of this Annual Report on Form 10-K or to reflect the occurrence of unanticipated events, except as may be required under applicable U.S. securities law. If we do update one or more forward-looking statements, no inference should be drawn that we will make additional updates with respect to those or other forward-looking statements.

### Overview

We are a clinical-stage pharmaceutical company committed to the global development and commercialization of cytisine for smoking cessation. Our focus is to address the global smoking health epidemic, which is a leading cause of preventable death and is responsible for approximately six million deaths annually worldwide.

Cytisine is an established 25-day smoking cessation treatment that has been approved and marketed in Central and Eastern Europe by Sopharma AD for over 20 years under the brand name Tabex™. It is estimated that over 20 million people have used cytisine to help treat nicotine addiction, including over 2,000 patients in investigator-conducted, Phase 3 clinical trials in Europe and New Zealand. Both trials were published in the *New England Journal of Medicine* in September 2011 and December 2014, respectively.

Cytisine is a naturally occurring, plant-based alkaloid from the seeds of the *Laburnum anagyroides* plant. Cytisine is structurally similar to nicotine and has a well-defined, dual-acting mechanism of action that is both agonistic and antagonistic. It is believed to aid in smoking cessation by interacting with nicotine receptors in the brain by reducing the severity of nicotine withdrawal symptoms through agonistic binding to nicotine receptors and by reducing the reward and satisfaction associated with smoking through antagonistic properties. The cytisine dosing schedule reflects that of an anti-addiction medication, with downward dose titration over a period of 25 days.

In late June 2017, we filed our Investigational New Drug, or IND, application for cytisine with the FDA, which included NCCIH sponsored non-clinical studies. The IND was accepted in late July 2017.

In August 2017, we initiated a study evaluating the effect of food on the bioavailability of cytisine in normal healthy volunteers. We completed the food effect study and announced the results in November of 2017 demonstrating similar bioavailability of cytisine in fed and fasted subjects.

In October 2017, we initiated a study assessing the repeat-dose Pharmacokinetics, or PK, and Pharmacodynamics, or PD, effects of 1.5mg and 3mg cytisine in 36 healthy volunteer smokers aged 18-65 years when administered over the standard 25-day course of treatment. Preliminary results on 24 smokers were announced in February 2018. The PK results indicated expected increases in plasma concentration with higher doses of cytisine. Smokers in the study were not required to have a designated or predetermined quit date, however, 58% of the subjects in the trial achieved biochemically verified smoking abstinence by day 26. Half (6/12) of the subjects on the 1.5mg arm and 67% (8/12) of the subjects on the 3.0mg arm achieved abstinence on day 26. Subjects who did not achieve abstinence had a significant reduction in number of daily cigarettes smoked by day 26. The adverse events observed were mostly mild with transient headaches as the most commonly reported event. No serious adverse events were observed in the study.

In December 2017, we submitted a meeting request to hold a pre-Phase 3 meeting with the FDA to review our Phase 3 program and overall development plans for cytisine. We received confirmation from the FDA for a meeting date in the second quarter of 2018. We intend to commence a Phase 3 clinical program in mid-2018, subject to FDA guidance and the availability of capital. In addition to the Phase 3 program, we expect to run additional supportive clinical studies including, but not limited to urine excretion, renal impairment and QT interval prolongation studies as well as supportive New Drug Application, or NDA, non-clinical chronic toxicity and carcinogenicity studies.

While third party trials of cytisine have been conducted that may inform future Company-sponsored clinical trials, we have not yet conducted any large scale company-sponsored clinical trials for cytisine in the United States or any other jurisdiction.

We previously were developing apatosen, of which we discontinued further development in August 2017. We provided a notice of discontinuance to our former development partners for apatosen, Ionis Pharmaceuticals, Inc., or Ionis, and a letter of termination to the University of British Columbia, or UBC, notifying them that we have discontinued development of apatosen resulting in termination of all licensing agreements related to this product candidate. We believe that all financial obligations, other than continuing mutual indemnification obligations and our requirement to pay for out-of-pocket patent expenses incurred up to the date of termination and for abandoning the apatosen patents and patent applications, under all apatosen related agreements with Ionis and UBC, are no longer owed and no further payments are due.

Our management team has significant experience in growing emerging companies focused on the development of under-utilized pharmaceutical compounds to meet unmet medical needs. We intend to use this experience to develop and ultimately commercialize cytisine either directly or via strategic collaborations.

We have no products approved for commercial sale and have not generated any revenue from product sales to date. We have never been profitable and have incurred operating losses in each year since inception. Our net loss was \$10.6 million for the year ended December 31, 2017, and \$1.2 million for the year ended December 31, 2016. As of December 31, 2017, we had an accumulated deficit of \$12.7 million, cash and cash equivalents balance of \$5.3 million and a positive working capital balance of \$3.7 million. Substantially all of our operating losses resulted from expenses incurred from general and administrative costs associated with our operations and research and development costs from our clinical development programs.

Substantial doubt exists as to our ability to continue as a going concern. Our ability to continue as a going concern is uncertain and dependent on our ability to obtain additional financing. We expect to incur significant expenses and increasing operating losses for at least the next several years as we continue our clinical development of, and seek regulatory approval for, cytisine and add personnel necessary to operate as a public company with an advanced clinical candidate. We expect that our operating losses will fluctuate significantly from quarter to quarter and year to year due to timing of clinical development programs and efforts to achieve regulatory approval. Without additional funds, we may be forced to delay, scale back or eliminate some of our research and development activities or other operations and potentially delay product development in an effort to provide sufficient funds to continue our operations. If any of these events occurs, our ability to achieve our development and commercialization goals would be adversely affected.

Our current capital resources are insufficient to fund our planned operations for the next 12 months. We will continue to require substantial additional capital to continue our clinical development activities. Accordingly, we will need to raise substantial additional capital to continue to fund our operations from the sale of our securities, partnering arrangements or other financing transactions in order to finance the commercialization of our product candidates. The amount and timing of our future funding requirements will

depend on many factors, including the pace and results of our clinical development efforts. Failure to raise capital as and when needed, on favorable terms or at all, will have a negative impact on our financial condition and our ability to develop our product candidate.

The accompanying financial results have been prepared assuming we will continue to operate as a going concern, which contemplates the realization of assets and liabilities and commitments in the normal course of business. The financial results do not include any adjustments to the amounts and classification of assets and liabilities that might be necessary should we be unable to continue as a going concern. Such adjustments could be material.

### ***Recent Corporate History***

On August 1, 2017, OncoGenex Pharmaceuticals, Inc., or OncoGenex, completed a transaction, or the Arrangement, with Achieve Life Science, Inc., or Achieve, as contemplated by the Merger Agreement between Achieve and OncoGenex dated January 5, 2017, or the Merger Agreement. Under the terms of the Merger Agreement, OncoGenex changed its name to Achieve Life Sciences, Inc., instituted an one-for-eleven reverse stock split, issued 8,210,118 shares of its common stock (after accounting for the elimination of resulting fractional shares) in exchange for all of the outstanding preferred shares, common shares and convertible debentures of Achieve, and as a result Achieve became a wholly-owned subsidiary of OncoGenex, and is listed on the Nasdaq Capital Market under the ticker symbol ACHV. More information concerning the Arrangement is contained in our Current Report on Form 8-K filed on August 2, 2017 and our Amendment No. 3 to the Registration Statement on Form S-4/A filed with the SEC on June 6, 2017.

These consolidated financial statements account for the Arrangement between OncoGenex and Achieve as a reverse merger, whereby Achieve is deemed to be the acquiring entity from an accounting perspective. Our consolidated results of operations for the year ended December 31, 2017 include the results of operations of only Achieve for the time period of January 1, 2017 through August 1, 2017 and include the results of the combined company following the completion of the Arrangement on August 1, 2017. The consolidated results of operations for the years ended December 31, 2016 and December 31, 2015 include only the consolidated results of operations of Achieve and do not include historical results of OncoGenex. This treatment and presentation is in accordance with ASC 805, "Business Combinations". Information relating to the number of shares, price per share and per share amounts of common stock are presented on a post-reverse stock split basis, as a reverse stock split in the ratio of one-for-eleven was effected in connection with the Arrangement.

In connection with the Arrangement, OncoGenex issued contingent value rights, or CVRs, on July 31, 2017 to their existing stockholders as of July 27, 2017. One CVR was issued for each share of their common stock outstanding as of the record date for such issuance. The CVRs expired on August 17, 2017. A recovery of \$0.2 million was recognized on our Consolidated Statements of Loss and Comprehensive Loss.

### **License & Supply Agreements**

#### *Sopharma License and Supply Agreements*

We are party to a license agreement, or the Sopharma License Agreement, and a supply agreement, or the Sopharma Supply Agreement, with Sopharma, AD, or Sopharma. Pursuant to the Sopharma License Agreement, we were granted access to all available manufacturing, efficacy and safety data related to cytosine, as well as a granted patent in several European countries related to new oral dosage forms of cytosine providing enhanced stability. Additional rights granted under the Sopharma License Agreement include the exclusive use of, and the right to sublicense, the trademark Tabex in all territories described in the Sopharma License Agreement. Under the Sopharma License Agreement, we agreed to pay a nonrefundable license fee. In addition, we agreed to make certain royalty payments equal to a mid-single digit percentage of all net sales of Tabex branded products in our territory during the term of the Sopharma License Agreement, including those sold by a third party pursuant to any sublicense which may be granted by us. To date, we have paid Sopharma \$10 pursuant to the Sopharma License Agreement.

#### *University of Bristol License Agreement*

In July 2016, we entered into a license agreement with the University of Bristol, or the University of Bristol License Agreement. Under the University of Bristol License Agreement, we received exclusive and nonexclusive licenses from the University of Bristol to certain patent and technology rights resulting from research activities into cytosine and its derivatives, including a number of patent applications related to novel approaches to cytosine binding at the nicotinic receptor level.

In consideration of rights granted by the University of Bristol, we paid a nominal license fee and agreed to pay amounts of up to \$3.2 million, in the aggregate, tied to a financing milestone and to specific clinical development and commercialization milestones resulting from activities covered by the University of Bristol License Agreement. Additionally, if we successfully commercialize product candidates subject to the University of Bristol License Agreement, we are responsible for royalty payments in the low-single

digits and payments up to a percentage in the mid-teens of any sublicense income, subject to specified exceptions, based upon net sales of such licensed products.

On January 22, 2018, we and the University of Bristol entered into an amendment to the University of Bristol License Agreement. Pursuant to the amended University of Bristol License Agreement we received exclusive rights for all human medicinal uses of cytosine across all therapeutic categories from the University of Bristol from research activities into cytosine and its derivatives. In consideration of rights granted by the amended University of Bristol License Agreement, we agreed to pay an initial amount of \$37,500 upon the execution of the amended University of Bristol License Agreement, and additional amounts of up to \$1.7 million, in the aggregate, tied to a financing milestone and to specific clinical development and commercialization milestones resulting from activities covered by the amended University of Bristol License Agreement, in addition to amounts under the original University of Bristol License Agreement of up to \$3.2 million in the aggregate, tied to specific financing, development and commercialization milestones. Additionally, if we successfully commercialize any product candidate subject to the amended University of Bristol License Agreement or to the original University of Bristol License Agreement, we will be responsible, as provided in the original University of Bristol License Agreement, for royalty payments in the low-single digits and payments up to a percentage in the mid-teens of any sublicense income, subject to specified exceptions, based upon net sales of such licensed products. To date, we have paid the University of Bristol \$50,000 pursuant to the University of Bristol License Agreement.

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

Research and development, or R&D, expenses consist primarily of costs for clinical trials, contract manufacturing, personnel costs, milestone payments to third parties, facilities, regulatory activities, preclinical studies and allocations of other R&D-related costs. External expenses for clinical trials include fees paid to clinical research organizations, clinical trial site costs and patient treatment costs.

We manage our clinical trials through contract research organizations and independent medical investigators at our sites and at hospitals and expect this practice to continue. Due to the number of projects and our ability to utilize resources across several projects, we do not record or maintain information regarding the indirect operating costs incurred for our research and development programs on a program-specific basis. In addition, we believe that allocating costs on the basis of time incurred by our employees does not accurately reflect the actual costs of a project.

We expect our research and development expenses to increase for the foreseeable future as we continue to conduct our ongoing pre-clinical studies, and initiate new clinical trials and registration-enabling activities. The process of conducting clinical trials and pre-clinical studies necessary to obtain regulatory approval is costly and time consuming and we may never succeed in achieving marketing approval for cytosine. (See “Item 1A. Risk Factors—Risks Related to the Development of Our Product Candidates.”)

Successful development of cytosine is highly uncertain and may not result in an approved product. We cannot estimate completion dates for development activities or when we might receive material net cash inflows from our R&D projects, if ever. We anticipate we will make determinations as to which markets, and therefore, which regulatory approvals, to pursue and how much funding to direct toward achieving regulatory approval in each market on an ongoing basis in response to our ability to enter into new strategic alliances with respect to each program or potential product candidate, the scientific and clinical success of each future product candidate, and ongoing assessments as to each future product candidate’s commercial potential. We will need to raise additional capital and may seek additional strategic alliances in the future in order to advance our various programs.

Our projects or intended R&D activities may be subject to change from time to time as we evaluate results from completed studies, our R&D priorities and available resources.

#### **General and Administrative Expenses**

General and administrative, or G&A, expenses consist primarily of salaries and related costs for our personnel in executive, finance and accounting, corporate communications and other administrative functions, as well as consulting costs, including market research, business consulting, human resources and intellectual property. Other costs include professional fees for legal and auditing services, insurance and facility costs.

## Warrant Liability

The following is a summary of outstanding warrants to purchase common stock that are classified as liabilities at December 31, 2017:

	Total Outstanding and Exercisable	Exercise price per Share	Expiration Date
(1) Series A Warrants issued in July 2014 financing	252,721	44.00	July 2019
(2) Series B Warrants issued in July 2014 financing	60,933	44.00	July 2019

No warrants classified as liabilities were exercised during the years ended December 31, 2017 or 2016.

We reassess the fair value of the common stock warrants classified as liabilities at each reporting date utilizing a Black-Scholes pricing model. Inputs used in the pricing model include estimates of stock price volatility, expected warrant life and risk-free interest rate. The computation of expected volatility was based on the historical volatility of comparable companies from a representative peer group selected based on industry and market capitalization.

## Results of Operations

Years Ended December 31, 2017, 2016 and 2015

### Research and Development Expenses

Our research and development expenses for our clinical development programs were as follows (in thousands):

	Year ended December 31,		
	2017	2016	2015
Clinical development programs:			
Cytisine	\$ 1,590	\$ 286	\$ 107
Other research and development	1,511	—	—
Total research and development expenses	<b>\$ 3,101</b>	<b>\$ 286</b>	<b>\$ 107</b>

Research and development expenses for the years ended December 31, 2017, 2016 and 2015 were \$3.1 million, \$0.3 million and \$0.1 million, respectively. The increase in 2017 as compared to 2016 was due to increased research and development activity for our cytosine clinical development program, including the costs associated with filing the IND application, initiating and completing the food effects trial, initiating the repeat dose pharmacokinetics trial and initiating toxicology studies and increased employee expenses and higher facilities costs resulting from the reverse merger of OncoGenex. The increase in research and development expenses in 2016 as compared to 2015 was primarily related to increased activity in connection with coordinating regulatory and clinical development activities with the FDA, European Medicines Agency, or EMA, and the National Institute of Health, or NIH, and non-clinical updates.

### General and Administrative Expenses

G&A expenses for the years ended December 31, 2017, 2016 and 2015 were \$3.5 million, \$1.4 million and \$1.1 million, respectively. The increase in 2017 as compared to 2016 was due to increase in employee headcount, consulting fees, legal fees and professional fees as a result of the closing of the Arrangement and the integration of OncoGenex with our operations. The increase in general and administrative expenses in 2016 as compared to 2015 was primarily related to the fact that the company was incorporated in May 2015 and did not operate for a full year during the period ended December 31, 2015

### Gain / (loss) on warrants

We recorded a gain on the revaluation of our outstanding warrants for the year ended December 31, 2017 of \$0.1 million, which is included on our consolidated statement of loss as a gain on warrants. We revalue the warrants at each balance sheet date to fair value. For the years ended December 31, 2016 and 2015 we did not have any outstanding warrants.

#### *Bargain purchase gain*

In accordance with ASC 805, "Business Combinations," the excess of fair value of acquired net assets over purchase price (negative goodwill) of \$1.3 million, was recognized as a gain in the period the Arrangement was completed. We have reassessed whether all acquired assets and assumed liabilities have been identified and recognized and performed remeasurements to verify that the consideration paid, assets acquired, and liabilities assumed have been properly valued.

#### *Contingent value rights recovery*

The contingent value rights issued by Oncogenex to its shareholders prior to the closing of the Arrangement, expired on August 17, 2017, as we did not enter into any term sheets or agreement with third parties for the development or commercialization of apatorsen. A recovery of \$0.2 million was recognized on our Consolidated Statements of Loss and Comprehensive Loss.

#### *Loss on disposition of intangible asset and Recovery of deferred income taxes*

In August 2017, we discontinued further development of apatorsen. We recognized a loss on disposition of apatorsen of \$8.6 million and a deferred income tax recovery of \$2.9 million as a result of discontinuing the development program and providing a notice of discontinuance of the license agreements with Ionis.

### **Liquidity and Capital Resources**

We have incurred an accumulated deficit of \$12.7 million through December 31, 2017, and we expect to incur substantial additional losses in the future as we operate our business and continue or expand our R&D activities and other operations. We have not generated any revenue from product sales to date, and we may not generate product sales revenue in the near future, if ever. As of December 31, 2017, we had a cash and cash equivalents balance of \$5.3 million and a positive working capital balance of \$3.7 million.

The financial results have been prepared assuming we will continue to operate as a going concern, which contemplates the realization of assets and liabilities and commitments in the normal course of business.

Substantial doubt exists as to our ability to continue as a going concern. Our ability to continue as a going concern is uncertain and dependent on our ability to obtain additional financing. There is no assurance that we will obtain financing from other sources. We have, thus far, financed our operations through the closing of the Arrangement and equity financing. Without additional funds, we may be forced to delay, scale back or eliminate some of our research and development activities or other operations and potentially delay product development in an effort to provide sufficient funds to continue our operations. If any of these events occurs, our ability to achieve our development and commercialization goals would be adversely affected.

Our current capital resources are insufficient to fund our planned operations for the next 12 months. We will continue to require substantial additional capital to continue our clinical development activities. Accordingly, we will need to raise substantial additional capital to continue to fund our operations from the sale of our securities, partnering arrangements or other financing transactions in order to finance the commercialization of our product candidates. The amount and timing of our future funding requirements will depend on many factors, including the pace and results of our clinical development efforts. Failure to raise capital as and when needed, on favorable terms or at all, will have a negative impact on our financial condition and our ability to develop our product candidate.

The consolidated financial results do not include any adjustments to the amounts and classification of assets and liabilities that might be necessary should we be unable to continue as a going concern. Such adjustments could be material.

On September 14, 2017, we and Lincoln Park Capital Fund, LLC, or LPC, entered into a share and unit purchase agreement, or Purchase Agreement, pursuant to which we have the right to sell to LPC up to \$11.0 million in shares of our common stock, par value \$0.001 per share, subject to certain limitations and conditions set forth in the Purchase Agreement.

Pursuant to the Purchase Agreement, LPC initially purchased 328,947 of our units, or the Units, purchase price of \$3.04 per unit, with each Unit consisting of (a) one share of our Common Stock and (b) one warrant to purchase one-quarter of a share of Common Stock at an exercise price of \$3.496 per share, or Warrant. Each Warrant is exercisable six months following the issuance date until the date that is five years and six months after the issuance date and is subject to customary adjustments. The Warrants were issued only as part of the Units in the initial purchase of \$1.0 million and no warrants shall be issued in connection with any other purchases of common stock under the Purchase Agreement.

After the initial purchase, if our stock price is above \$1.00, as often as every other business day over the 30-month term of the Purchase Agreement, and up to an aggregate amount of an additional \$10.0 million (subject to certain limitations) of shares of common stock, we have the right, from time to time, in our sole discretion and subject to certain conditions to direct LPC to purchase up to 80,000 shares of common stock with such amounts increasing as the closing sale price of our common stock as reported on The NASDAQ Capital Market increases. The purchase price of shares of common stock pursuant to the Purchase Agreement will be based on prevailing market prices of common stock at the time of sales without any fixed discount, and we will control the timing and amount of any sales of common stock to LPC. In addition, we may direct LPC to purchase additional amounts as accelerated purchases if on the date of a regular purchase the closing sale price of the common stock is not below \$2.00 per share. As consideration for entering into the Purchase Agreement, we issued to LPC 123,516 shares of common stock; no cash proceeds were received from the issuance of these shares.

From September 14, 2017 through March 1, 2018, we offered and sold 1,673,778 shares of our common stock pursuant to our Purchase Agreement with LPC, including the 328,947 shares that were part of the initial purchase of Units. These sales resulted in gross proceeds to us of approximately \$3.4 million. As of March 1, 2018 shares of our common stock having an aggregate value of approximately \$7.6 million remained available for sale under this offering program.

## Cash Flows

### Operating Activities

For the years ended December 31, 2017, 2016 and 2015, net cash used in operating activities was \$9.1 million, \$0.2 million, and \$0.4 million, respectively. The increase in cash used in operations in 2017 as compared to 2016 was primarily attributable to increased personnel and facilities assumed in the Arrangement, increased research and development expenses for our cytosine development program and cash used to reduce liabilities assumed in the Arrangement. The decrease in cash used in operating activities in 2016 as compared to 2015 was primarily attributable to increases in accrued liabilities and accrued compensation during the year ended December 31, 2016.

### Financing Activities

For the years ended December 31, 2017, 2016 and 2015 net cash provided by financing activities was \$2.0 million, \$0.2 million and \$2.4 million, respectively. Net cash provided by financing activities for the year ended December 31, 2017 relates to proceeds received from our purchase agreement with LPC. Net cash provided by financing activities for the year ended December 31, 2016 related to proceeds from promissory notes payable to a certain shareholder. Net cash provided by financing activities for the year ended December 31, 2015 related to proceeds from a \$2.0 million convertible promissory note and a \$0.7 million promissory note payable to a certain shareholder, offset by a \$0.3 million loan payment to Sopharma, AD.

### Investing Activities

Net cash provided by financing activities for the years ended December 31, 2017 and 2016 was \$12.6 million and zero, respectively. Net cash used in investing activities for the year ended December 31, 2015 was \$2.0 million. Net cash provided by investing activities for the year ended December 31, 2017 was due to the reverse merger with OncoGenex. There were no investing activities for the year ended December 31, 2016. Net cash used in investing activities for the year ended December 31, 2015 related to the purchase price for the acquisition of Extab Corporation.

## Contractual Obligations

The following table summarizes our contractual obligations as of December 31, 2017 (in thousands):

	Total	Less than 1 year	1-3 years	3-5 years	More than 5 years
Bothell office operating lease (1)	\$ 95	\$ 95	\$ —	\$ —	\$ —
Vancouver office operating lease (2)	\$ 71	\$ 71	\$ —	\$ —	\$ —
Seattle office operating lease (3)	\$ 433	\$ 117	\$ 291	\$ 25	\$ —
Leased equipment	\$ 3	\$ 3	\$ —	\$ —	\$ —
<b>Total</b>	<b>\$ 602</b>	<b>\$ 286</b>	<b>\$ 291</b>	<b>\$ 25</b>	<b>\$ —</b>

- (1) This operating lease is effective May 1, 2015 and expires on April 30, 2018.
- (2) This operating lease expires in 2018.
- (3) This operating lease is effective March 1, 2018 and expires on February 28, 2021.

#### Off-Balance Sheet Arrangements

We do not have any off-balance sheet financing arrangements at December 31, 2017.

#### Inflation

We do not believe that inflation has had a material effect on our business and results of operations during the periods presented.

#### Material Changes in Financial Condition

(in thousands)	December 31,	
	2017	2016
Total Assets	\$ 9,892	\$ 3,807
Total Liabilities	2,013	3,197
Total Equity	7,879	610

The increase in assets as at December 31, 2017 as compared to December 31, 2016 primarily relates to increase in cash and cash equivalents following the Arrangement. The decrease in liabilities as at December 31, 2017 compared to December 31, 2016 was primarily due to lower stockholder loans with related parties and lower accrued compensation.

#### Critical Accounting Policies and Estimates

##### *Use of Estimates*

The preparation of consolidated financial statements in conformity with United States generally accepted accounting principles requires management to make estimates and assumptions that affect the amounts reported in the consolidated financial statements and notes thereto. Actual results could differ from these estimates. Estimates and assumptions principally relate to estimates of the fair value of our warrant liability, the initial fair value and forfeiture rates of stock options issued to employees and consultants, the estimated compensation cost on performance restricted stock unit awards and clinical trial and manufacturing accruals, estimated useful lives of property, plant and equipment and estimates and assumptions in contingent liabilities.

##### *Fair value of financial instruments*

The fair value of our cash equivalents and marketable securities is based on quoted market prices and trade data for comparable securities. We determine the fair value of our warrant liability based on the Black-Scholes pricing model and using considerable judgment, including estimating stock price volatility and expected warrant life. Other financial instruments including amounts receivable, accounts payable, accrued liabilities other, accrued clinical liabilities and accrued compensation are carried at cost, which we believe approximates fair value because of the short-term maturities of these instruments.

##### *Intangible Assets*

Our intangible assets are subject to amortization and are amortized using the straight-line method over their estimated period of benefit. We evaluate the carrying amount of intangible assets periodically by taking into account events or circumstances that may warrant revised estimates of useful lives or that indicate the asset may be impaired.

##### *Impairment of Long-Lived Assets*

We review long-lived assets for impairment whenever events or changes in circumstances indicate that the asset's carrying amount may not be recoverable. We conduct our long-lived asset impairment analyses in accordance with ASC 360-10-15, "Impairment or Disposal of Long-Lived Assets." ASC 360-10-15 requires us to group assets and liabilities at the lowest level for which identifiable cash flows are largely independent of the cash flows of other assets and liabilities and evaluate the asset group against the sum of the undiscounted future cash flows. If the undiscounted cash flows do not indicate the carrying amount of the asset is recoverable, an impairment charge is measured as the amount by which the carrying amount of the asset group exceeds its fair value based on discounted cash flow analysis or appraisals.



### *Goodwill*

Goodwill acquired in a business combination is assigned to the reporting unit that is expected to benefit from the combination as of the acquisition date. Goodwill is tested for impairment on an annual basis or, more frequently, if an event occurs or circumstances change that would more likely than not reduce the fair value of the reporting unit.

### *Income Taxes*

Income taxes are accounted for under the liability method. Deferred tax assets and liabilities are recognized for the differences between the carrying values of assets and liabilities and their respective income tax bases and for operating losses and tax credit carry forwards. A valuation allowance is provided for the portion of deferred tax assets that is more likely than not to be unrealized. Deferred tax assets and liabilities are measured using the enacted tax rates and laws.

### *Research and Development Costs*

Research and development costs are expensed as incurred, net of related refundable investment tax credits, with the exception of non-refundable advanced payments for goods or services to be used in future research and development, which are capitalized in accordance with ASC 730, "Research and Development" and included within Prepaid Expenses or Other Assets depending on when the assets will be utilized.

Clinical trial expenses are a component of research and development costs. These expenses include fees paid to contract research organizations and investigators and other service providers, which conduct certain product development activities on our behalf. We use an accrual basis of accounting, based upon estimates of the amount of service completed. In the event payments differ from the amount of service completed, prepaid expense or accrued liabilities amounts are adjusted on the balance sheet. These expenses are based on estimates of the work performed under service agreements, milestones achieved, patient enrollment and experience with similar contracts. We monitor each of these factors to the extent possible and adjusts estimates accordingly.

### *Stock-Based Compensation*

Effective January 1, 2006, we adopted the fair value recognition provisions of the ASC 718, "Stock Compensation", using the modified prospective method with respect to options granted to employees and directors. Under this transition method, compensation cost is recognized in the financial statements beginning with the effective date for all share-based payments granted after January 1, 2006 and for all awards granted prior to but not yet vested as of January 1, 2006. The expense is amortized on a straight-line basis over the graded vesting period.

### *Restricted Stock Unit Awards*

We grant restricted stock unit awards that generally vest and are expensed over a four-year period. We also granted restricted stock unit awards that vest in conjunction with certain performance conditions to certain executive officers and key employees. At each reporting date, we evaluate whether achievement of the performance conditions is probable. Compensation expense is recorded over the appropriate service period based upon our assessment of accomplishing each performance provision or the occurrence of other events that may have caused the awards to accelerate and vest.

### *Segment Information*

We follow the requirements of ASC 280, "Segment Reporting." We have one operating segment, dedicated to the development and commercialization of cytisine for smoking cessation, with operations located in Canada and the United States.

### *Warrants*

We account for warrants pursuant to the authoritative guidance on accounting for derivative financial instruments indexed to, and potentially settled in, a company's own stock, on the understanding that in compliance with applicable securities laws, the warrants require the issuance of registered securities upon exercise and therefore do not sufficiently preclude an implied right to net cash settlement. We classify warrants on the consolidated balance sheet as a liability which is revalued at each balance sheet date subsequent to the initial issuance. We also have warrants classified as equity and these are not reassessed for their fair value at the end of each reporting period. Warrants classified as equity are initially measured at their fair value and recognized as part of stockholders' equity. Determining the appropriate fair-value model and calculating the fair value of registered warrants requires considerable judgment, including estimating stock price volatility and expected warrant life. The computation of expected volatility was based on the historical volatility of comparable companies from a representative peer group selected based on industry and market

capitalization. A small change in the estimates used may have a relatively large change in the estimated valuation. We use the Black-Scholes pricing model to value the warrants. Changes in the fair value of the warrants classified as liabilities are reflected in the consolidated statement of loss as gain (loss) on revaluation of warrants.

#### *Reporting Currency and Foreign Currency Translation*

Effective August 2, 2017, we changed the functional currency of our UK subsidiary from the Great British Pound to the U.S. dollar. As a result of the Arrangement, the UK subsidiary's primary economic environment has now changed from the UK to the United States. This has resulted in significant changes in economic facts and circumstances that clearly indicate that the functional currency has changed. We accounted for the change in functional currency prospectively.

The consolidated financial statements for the years ended December 31, 2016 and 2015 and for the period of January 1, 2017 to August 2, 2017, are based on the UK subsidiary with a functional currency of GBP, and have been translated into the U.S. reporting currency using the current rate method as required by SFAS No. 52, "Foreign Currency Translation", ("SFAS 52") as follows: assets and liabilities using the rate of exchange prevailing at the balance sheet date; stockholders' deficiency using the applicable historic rate; and revenue and expenses using the monthly average rate of exchange. Translation adjustments have been included as part of the accumulated other comprehensive income

Our functional and reporting currency is the U.S. dollar. Revenues and expenses denominated in other than U.S. dollars are translated at average monthly rates.

The functional currency of our foreign subsidiary is the U.S. dollar. For this foreign operation, assets and liabilities denominated in other than U.S. dollars are translated at the period-end rates for monetary assets and liabilities and historical rates for non-monetary assets and liabilities. Revenues and expenses denominated in other than U.S. dollars are translated at average monthly rates. Gains and losses from this translation are recognized in the consolidated statement of loss.

#### **Pending Adoption of Recent Accounting Pronouncements**

On February 2016, the Financial Accounting Standards Board ("FASB") issued its new leases standard, ASU No. 2016-02, Leases (Topic 842) ("ASU 2016-02"). ASU 2016-02 is aimed at putting most leases on lessees' balance sheets, but it would also change aspects of lessor accounting. ASU 2016-02 is effective for public business entities for annual periods beginning after December 15, 2018 and interim periods within that year. This standard is expected to have a significant impact on our current accounting for our lease arrangements, particularly our current operating lease arrangements, as well as, disclosures. We are currently evaluating the impact of adoption on our financial position and results from operations.

In May 2014, the FASB, issued ASU No. 2014-09, Revenue from Contracts with Customers (Topic 606): Revenue from Contracts with Customers, which guidance in this update will supersede the revenue recognition requirements in Topic 605, Revenue Recognition, and most industry-specific guidance when it becomes effective. ASU No. 2014-09 affects any entity that enters into contracts with customers to transfer goods or services or enters into contracts for the transfer of nonfinancial assets unless those contracts are within the scope of other standards. The core principal of ASU No. 2014-09 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. In doing so, companies will need to use more judgment and make more estimates than under current guidance. These may include identifying performance obligations in the contract, estimating the amount of variable consideration to include in the transaction price and allocating the transaction price to each separate performance obligation. ASU No. 2014-09 is effective for annual reporting periods beginning after December 15, 2017, including interim periods within that reporting period, which will be our fiscal year 2018 (or December 31, 2018), and entities can transition to the standard either retrospectively or as a cumulative-effect adjustment as of the date of adoption. Early adoption is permitted. We are updating our policies and procedures to reflect the adoption of ASU No. 2014-09 and we anticipate that there is no impact on our financial statement in the year of adoption.

#### **Recently Adopted Accounting Policies**

In March 2016, the FASB issued ASU 2016-09, *Improvements to Employee Share-Based Payment Accounting*. ASU 2016-09 simplifies 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. Some of the areas for simplification apply only to nonpublic entities. For public business entities, the amendments in this Update are effective for annual periods beginning after 15 December 2016, and interim periods within those annual periods. For all other entities, the amendments are effective for annual periods beginning after 15 December 2017, and interim periods within annual periods beginning after 15 December 2018. The adoption of this standard did not have a significant impact on our financial position or results of operations.

In November 2015, the FASB issued ASU No. 2015-17, Income Taxes (Topic 740): Balance Sheet Classification of Deferred Taxes. The standard requires that deferred tax liabilities and assets be classified as noncurrent in a classified statement of financial position. Entities are currently required to separate deferred income tax liabilities and assets into current and noncurrent amounts in a classified statement of financial position. The amendments, which require non-current presentation only (by jurisdiction), are effective for financial statements issued for annual periods beginning after December 15, 2016 with earlier application permitted as of the beginning of an interim or annual reporting period. The guidance is to be applied either prospectively to all deferred tax liabilities and assets or retrospectively to all periods presented. The adoption of this standard did not have a significant impact on our financial position or results of operations.

In February 2015, the FASB issued ASU 2015-02, Consolidation (Topic 810) — Amendments to the Consolidation Analysis. ASU 2015-02 eliminates the deferral of FAS 167 and makes changes to both the variable interest model and the voting model. For public business entities, the guidance is effective for annual and interim periods beginning after 15 December 2015. For nonpublic business entities, it is effective for annual periods beginning after 15 December 2016, and interim periods beginning after 15 December 2017. The adoption of this standard did not have a significant impact on our financial position or results of operations.

In January 2015, the FASB issued ASU 2015-01, Income Statement—Extraordinary and Unusual Items (Subtopic 225-20): Simplifying Income Statement Presentation by Eliminating the Concept of Extraordinary Items. ASU 2015-01 eliminates the concept of reporting extraordinary items, but retains current presentation and disclosure requirements for an event or transaction that is of an unusual nature or of a type that indicates infrequency of occurrence. Transactions that meet both criteria would now also follow such presentation and disclosure requirements. For all entities, the guidance is effective for annual periods, and interim periods within those annual periods, beginning after 15 December 2015. The adoption of this standard did not have a significant impact on our financial position or results of operations.

In August 2014, the Financial Accounting Standards Board, or FASB issued Accounting Standards Updated, or ASU No. 2014-15, Presentation of Financial Statements-Going Concern (Subtopic 2015-40) (ASU 2014-15). ASU 2014-15 provides guidance to U.S. GAAP about management's responsibility to evaluate whether there is a substantial doubt about an entity's ability to continue as a going concern and to provide related footnote disclosures. This new rule requires management to assess an entity's ability to continue as a going concern by incorporating and expanding upon certain principles currently in the U.S. auditing standards. Specifically, ASU 2014-15 (1) defines the term substantial doubt, (2) requires an evaluation of every reporting period including interim periods, (3) provides principles for considering the mitigating effect of management's plans, (5) requires an express statement and other disclosures when substantial doubt is not alleviated, and (6) requires an assessment for a period of one year after the date that the financial statements are issued (or available to be issued). This guidance is effective for annual periods ending after December 15, 2016. The adoption of this standard did not have a significant impact on our financial statement disclosures.

## **ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK**

### **Interest Rate Risk**

Interest rate risk is the risk that the fair values and future cash flows of financial instruments will fluctuate because of the changes in market interest rates. We invest our cash in a variety of financial instruments, primarily in short-term bank deposits, money market funds, and domestic and foreign commercial paper and government securities. These investments are denominated in U.S. dollars, and we monitor our exposure to interest rate changes is monitored. We have very limited interest rate risk due to the few assets or liabilities subject to fluctuations in interest rates. Our investment portfolio includes only marketable securities with active secondary or resale markets to help ensure portfolio liquidity. Due to the nature of our highly liquid marketable securities, a change in interest rates would not materially change the fair market value. We have estimated the effect on our portfolio of a hypothetical increase in interest rates by one percent to be a reduction of \$40,000 in the fair value of our investments as of December 31, 2017.

### **Foreign Currency Exchange Risk**

We are exposed to risks associated with foreign currency transactions on certain contracts and payroll expenses related to our Canadian subsidiary, Achieve Life Sciences Technologies Inc., denominated in Canadian dollars and our United Kingdom subsidiary, Achieve Pharma UK Limited, denominated in Great British pounds, or GBP, and we have not hedged these amounts. As our unhedged foreign currency transactions fluctuate, our earnings might be negatively affected. Accordingly, changes in the value of the U.S. dollar relative to the Canadian dollar and the GBP might have an adverse effect on our reported results of operations and financial condition, and fluctuations in exchange rates might harm our reported results and accounts from period to period. We have estimated the effect on our reported results of operations of a hypothetical increase of 10 percent in the exchange rate of the Canadian dollar and the GBP against the U.S. dollar to be \$0.2 million for the year ended December 31, 2017.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

**INDEX TO FINANCIAL STATEMENTS:**

<a href="#">Report of Independent Registered Public Accounting Firm</a>	53
<a href="#">Consolidated Balance Sheets as of December 31, 2017 and 2016</a>	54
<a href="#">Consolidated Statements of Loss and Comprehensive Loss for the years ended December 31, 2017, 2016 and 2015</a>	55
<a href="#">Consolidated Statements of Stockholders' Equity for the years ended December 31, 2017, 2016 and 2015</a>	56
<a href="#">Consolidated Statements of Cash Flows for the years ended December 31, 2017, 2016 and 2015</a>	57
<a href="#">Notes to Consolidated Financial Statements</a>	58

**REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

To the Board of Directors and Stockholders of Achieve Life Sciences, Inc.

***Opinion on the Financial Statements***

We have audited the accompanying consolidated balance sheets of Achieve Life Sciences, Inc. and its subsidiaries as of December 31, 2017 and 2016, and the related consolidated statements of loss and comprehensive loss, statements of stockholders' equity, and statements of cash flows, for each of the three years in the period ended December 31, 2017, including the related notes (collectively referred to as the "consolidated financial statements"). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2017 and 2016, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2017 in conformity with accounting principles generally accepted in the United States of America.

***Substantial Doubt About the Company's Ability to Continue as a Going Concern***

The accompanying consolidated financial statements have been prepared assuming that the Company will continue as a going concern. As discussed in Note 1 to the consolidated financial statements, the Company has suffered recurring losses from operations and cash outflows from operating activities that raise substantial doubt about its ability to continue as a going concern. Management's plans in regard to these matters are also described in Note 1. The financial statements do not include any adjustments that might result from the outcome of this uncertainty.

***Basis for Opinion***

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

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

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

PricewaterhouseCoopers LLP (signed)  
**Vancouver, British Columbia**  
**March 1, 2018**

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

## Achieve Life Sciences, Inc.

## Consolidated Balance Sheets

(In thousands, except per share and share amounts)

	December 31,	
	2017	2016
<b>ASSETS</b>		
Current assets:		
Cash and cash equivalents <i>[note 8]</i>	\$ 5,284	\$ 15
Restricted cash <i>[note 8 and 14]</i>	222	—
Amounts receivable	9	—
Prepaid expenses	393	3
Total current assets	<u>5,908</u>	<u>18</u>
Restricted cash <i>[note 8]</i>	50	—
Property and equipment, net <i>[note 9]</i>	59	—
Other assets <i>[note 10]</i>	309	—
License agreement <i>[note 2, 5, 6 and 7]</i>	2,532	2,755
Goodwill <i>[note 2 and 6]</i>	1,034	1,034
Total assets	<u>\$ 9,892</u>	<u>\$ 3,807</u>
<b>LIABILITIES AND STOCKHOLDERS' EQUITY</b>		
Current liabilities:		
Accounts payable	\$ 213	\$ 95
Accrued liabilities other	438	1,121
Accrued clinical liabilities	877	—
Accrued compensation	458	—
Salaries Payable	—	1,028
Stockholder loans with related parties <i>[note 13]</i>	—	829
Current portion of long-term obligations <i>[note 14]</i>	27	—
Warrant liability <i>[note 8 and note 12]</i>	—	—
Total current liabilities	<u>2,013</u>	<u>3,073</u>
Deferred tax liability	—	124
Total liabilities	<u>2,013</u>	<u>3,197</u>
Commitments and contingencies <i>[note 14]</i>		
Stockholders' equity:		
Common stock, \$0.001 par value, 75,000,000 shares authorized, 11,956,752 and 21,230 issued at December 31, 2017 and December 31, 2016, respectively, and 11,947,932 and 21,230 outstanding at December 31, 2017 and December 31, 2016, respectively	12	—
Additional paid-in capital	20,556	2,667
Accumulated deficit	(12,694)	(2,062)
Accumulated other comprehensive income	5	5
Total stockholders' equity	<u>7,879</u>	<u>610</u>
Total liabilities and stockholders' equity	<u>\$ 9,892</u>	<u>\$ 3,807</u>
Going concern and liquidity <i>[note 1]</i>		
Subsequent events <i>[note 7 and note 17]</i>		

See accompanying notes.

**Achieve Life Sciences, Inc.**  
**Consolidated Statements of Loss and Comprehensive Loss**  
(In thousands, except per share and share amounts)

	2017	Year Ended December 31, 2016	Period from 12-May-15 (inception) to 31-Dec-15
<b>EXPENSES</b>			
Research and development	\$ 3,101	\$ 286	\$ 107
General and administrative	3,531	1,428	1,116
Total operating expenses	<u>6,632</u>	<u>1,714</u>	<u>1,223</u>
<b>OTHER INCOME (EXPENSE)</b>			
Interest income	21	—	—
Bargain purchase gain <i>[note 2]</i>	1,272	—	—
Contingent value rights recovery <i>[note 2]</i>	200	—	—
Gain on warrants	150	—	—
Loss on disposition of intangible asset <i>[note 5]</i>	(8,610)	—	—
Other expenses	(35)	(24)	(12)
Total other income	<u>(7,002)</u>	<u>(24)</u>	<u>(12)</u>
<b>Net loss before income taxes</b>	<u>\$ (13,634)</u>	<u>\$ (1,738)</u>	<u>\$ (1,235)</u>
Recovery of deferred income taxes <i>[note 5]</i>	3,051	504	407
<b>Net Loss</b>	<u>\$ (10,583)</u>	<u>\$ (1,234)</u>	<u>\$ (828)</u>
<b>OTHER COMPREHENSIVE INCOME</b>			
Net unrealized gain on foreign exchange	—	4	1
Total other comprehensive income (loss)	—	4	1
<b>Comprehensive loss</b>	<u>\$ (10,583)</u>	<u>\$ (1,230)</u>	<u>\$ (827)</u>
Basic and diluted net loss per common share <i>[note 12 [g]]</i>	<u>\$ (2.21)</u>	<u>\$ (58.13)</u>	<u>\$ (39.00)</u>
Shares used in computation of basic and diluted net loss per common share <i>[note 12 [g]]</i>	<u>4,794,421</u>	<u>21,230</u>	<u>21,230</u>

See accompanying notes.

**Achieve Life Sciences, Inc.**  
**Consolidated Statements of Stockholders' Equity**

(In thousands, except share amounts)

	Common Stock		Additional Paid-in Capital	Accumulated Other Comprehensive Income (Loss)	Accumulated Deficit	Total, Stockholders' Equity
	Shares	Amount				
Balance, May 12, 2015 (date of incorporation)						
Common stock issued	11,730	\$ —	\$ —	\$ —	\$ —	\$ —
Conversion of common stock held by Extab Corporation stockholders into common stock [note 6]	5,000	—	667	—	—	667
Conversion of note payable into common stock [note 6]	4,500	—	2,000	—	—	2,000
Net loss	—	—	—	—	(828)	(828)
Other comprehensive income (loss)	—	—	—	1	—	1
Balance, December 31, 2015	21,230	—	2,667	1	(828)	1,840
Net loss	—	—	—	—	(1,234)	(1,234)
Other comprehensive income (loss)	—	—	—	4	—	4
Balance, December 31, 2016	21,230	—	2,667	5	(2,062)	610
Stock-based compensation expense	—	—	348	—	—	348
Settlement of stockholder loans with related parties	1,572	—	2,132	—	—	2,132
Shares issued on subscription	48	—	64	—	—	64
Shares held by OncoGenex Shareholders	2,736,709	3	—	—	—	3
Shares issued on conversion of Achieve common shares	8,210,118	8	13,040	—	—	13,048
Shares cancelled on conversion of Achieve common shares	(22,850)	—	—	—	—	—
Restricted Stock Unit Settlements	5,464	—	—	—	—	—
Restricted Stock Unit Settlements withheld and retired to treasury	(1,660)	—	—	—	(5)	(5)
Shares issues - Lincoln Park Capital	997,301	1	2,305	—	—	2,306
Purchase accounting adjustment	—	—	—	—	(44)	(44)
Net loss	—	—	—	—	(10,583)	(10,583)
Balance, December 31, 2017	11,947,932	\$ 12	\$ 20,556	\$ 5	\$ (12,694)	\$ 7,879

See accompanying notes.



**Achieve Life Sciences, Inc.**  
**Consolidated Statements of Cash Flows**

(In thousands)

	2017	Year Ended December 31, 2016	Period from 12-May- 15 (inception) to 31-Dec-15
<b>Operating Activities:</b>			
Net loss	\$ (10,583)	\$ (1,234)	\$ (828)
Adjustments to reconcile net loss to net cash used in operating activities:			
Gain on warrants [note 8 and note 12[e]]	(150)	—	—
Depreciation	59	—	—
Amortization	223	223	140
Stock-based compensation [note 12[c]]	348	—	—
Deferred income tax (recovery)	(3,051)	(504)	(407)
Bargain purchase gain	(1,272)	—	—
Loss on disposition	8,610	—	—
Contingent value rights recovery	(200)	—	—
Changes in operating assets and liabilities:			
Amounts receivable	(9)	—	—
Prepaid expenses and other assets	(1,349)	(2)	—
Accounts payable	118	22	57
Accrued liabilities other	(2,185)	670	284
Accrued clinical liabilities	877	—	—
Accrued compensation	458	—	—
Salaries payable	(1,028)	623	404
Lease obligation	27	—	—
Net cash used in operating activities	(9,107)	(202)	(350)
<b>Financing Activities:</b>			
Proceeds from share subscription	64	—	—
Proceeds from ATM Financing, net of issuance costs	1,942	—	—
Taxes paid related to net share settlement of equity awards	(5)	—	—
Payments on loan	—	—	(272)
Stockholder loans	—	150	2,683
Net cash provided by financing activities	2,001	150	2,411
<b>Investing Activities:</b>			
Cash received on reverse takeover of OncoGenex	12,648	—	—
Purchase of Extab Corporation common stock [note 6]	—	—	(2,000)
Net cash provided by (used in) investing activities	12,648	—	(2,000)
Effect of exchange rate changes on cash	(1)	—	—
Net increase (decrease) in cash, cash equivalents and restricted cash	5,541	(52)	61
Cash, cash equivalents and restricted cash at beginning of year	15	67	6
Cash, cash equivalents and restricted cash at end of year	\$ 5,556	\$ 15	\$ 67
<b>Supplemental Disclosure of Cash Flow Information:</b>			
Interest expense accrued but not yet paid	\$ —	\$ 26	\$ 11

See accompanying notes.

**Achieve Life Sciences, Inc.**  
**Notes to Consolidated Financial Statements**  
**(In thousands, except per share and share amounts)**

**1. NATURE OF BUSINESS AND BASIS OF PRESENTATION**

Achieve Life Sciences, Inc. (referred to as “Achieve,” “we,” “us,” or “our”) is a clinical-stage pharmaceutical company committed to the global development and commercialization of cytisine for smoking cessation. We were incorporated in the state of Delaware, and operate out of Vancouver, British Columbia and Bothell, Washington.

On August 1, 2017, OncoGenex Pharmaceuticals, Inc., or OncoGenex, completed a transaction, or the Arrangement, with Achieve Life Science, Inc., or Achieve, as contemplated by the Merger Agreement between Achieve and OncoGenex dated January 5, 2017, or the Merger Agreement. Under the terms of the Merger Agreement, OncoGenex changed its name to Achieve Life Sciences, Inc., instituted an one-for-eleven reverse stock split, issued 8,210,118 shares of its common stock (after accounting for the elimination of resulting fractional shares) in exchange for all of the outstanding preferred shares, common shares and convertible debentures of Achieve, as a result Achieve became a wholly-owned subsidiary of OncoGenex, and is listed on the Nasdaq Capital Market under the ticker symbol ACHV.

These consolidated financial statements account for the Arrangement between OncoGenex and Achieve as a reverse merger, whereby Achieve is deemed to be the acquiring entity from an accounting perspective. The consolidated results of operations of the Company for the year ended December 31, 2017 include the results of operations of only Achieve for the time period of January 1, 2017 through August 1, 2017 and include the results of the combined company following the completion of the Arrangement on August 1, 2017. The consolidated results of operations for the years ended December 31, 2016 and December 31, 2015 include only the consolidated results of operations of Achieve and do not include historical results of OncoGenex. This treatment and presentation is in accordance with ASC 805, “Business Combinations”. Information relating to the number of shares, price per share and per share amounts of common stock are presented on a post- reverse stock split basis, as a reverse stock split in the ratio of one-for-eleven was effected in connection with the Arrangement. The accompanying consolidated Balance Sheet at December 31, 2016 has been derived from the audited consolidated financial statements included in our Amendment No. 3 to the Registration Statement on Form S-4/A filed with the Securities and Exchange Commission, or SEC, on June 6, 2017. Accordingly, these financial statements should be read in conjunction with the audited consolidated financial statements and the related notes thereto included in the Amendment No. 3 to the Registration Statement on Form S-4/A filed with the SEC on June 6, 2017.

**Basis of Presentation**

The consolidated financial statements include the accounts of Achieve and our wholly owned subsidiaries, Achieve Life Sciences Technologies Inc., Achieve Life Science, Inc., Extab Corporation, and Achieve Pharma UK Limited. All intercompany balances and transactions have been eliminated.

**Liquidity**

We have historically experienced recurring losses from operations that have generated an accumulated deficit of \$12.7 million through December 31, 2017. For the year ended December 31, 2017, we incurred a net loss of \$10.6 million. As of December 31, 2017, we had a cash and cash equivalents balance of \$5.3 million and a positive working capital balance of \$3.7 million.

The accompanying financial statements have been prepared assuming we will continue to operate as a going concern, which contemplates the realization of assets and liabilities and commitments in the normal course of business.

Substantial doubt exists as to our ability to continue as a going concern. Our ability to continue as a going concern is uncertain and dependent on our ability to obtain additional financing. There is no assurance that we will obtain additional financing from other sources. We have, thus far, financed our operations through the closing of the Arrangement (Note 2—Reverse Merger) and equity financing (Note 12—Common Stock). Without additional funds, we may be forced to delay, scale back or eliminate some of our research and development activities or other operations and potentially delay product development in an effort to provide sufficient funds to continue our operations. If any of these events occurs, our ability to achieve our development and commercialization goals would be adversely affected.

Our current capital resources are insufficient to fund our planned operations for the next 12 months. We will continue to require substantial additional capital to continue our clinical development activities. Accordingly, we will need to raise substantial additional capital to continue to fund our operations from the sale of our securities, partnering arrangements or other financing transactions in order to finance the commercialization of our product candidates. The amount and timing of our future funding requirements will

depend on many factors, including the pace and results of our clinical development efforts. Failure to raise capital as and when needed, on favorable terms or at all, will have a negative impact on our financial condition and our ability to develop our product candidate. We expect our research and development expenses to substantially increase in connection with our ongoing activities, particularly as we advance our product candidate in clinical development.

The consolidated financial statements do not include any adjustments to the amounts and classification of assets and liabilities that might be necessary should we be unable to continue as a going concern. Such adjustments could be material.

## 2. REVERSE MERGER

The consolidated financial statements account for the Arrangement between us and OncoGenex, whereby OncoGenex acquired all of our outstanding common shares, as a reverse merger wherein we are deemed to be the acquiring entity from an accounting perspective. The consolidated results of operations include our results of operations for the twelve months ended December 31, 2017 and the results of OncoGenex following the completion of the Arrangement on August 1, 2017. The consolidated results of operations for twelve months ended December 31, 2016 include only our consolidated results of operations and do not include historical results of OncoGenex.

On August 1, 2017, our stockholders approved the Arrangement described above and on the same date, OncoGenex stockholders approved the Arrangement and a one-for-eleven reverse stock split of its common stock. The reverse stock split occurred immediately prior to the closing of the Arrangement. Resulting fractional shares were eliminated. All information in the financial statements and the notes thereto relating to the number of shares, price per share, and per share amounts of common stock are presented on a post-split basis.

Under the purchase method of accounting, OncoGenex's outstanding shares of common stock were valued using the closing price on NASDAQ of \$4.62 as at August 1, 2017. There were 2,736,703 shares of common stock outstanding, as adjusted for the reverse stock split, on August 1, 2017, immediately prior to closing. The fair value of the OncoGenex outstanding stock options was determined using the Black-Scholes pricing model with the following assumptions: stock price of \$4.62, volatility of 97.23% to 106.63%, risk-free interest rate of 1.31% to 1.54%, and expected lives ranging from 1.82 to 3.31 years. The fair value of the OncoGenex outstanding warrants was determined using the Black-Scholes pricing model with the following assumptions: stock price of \$4.62, volatility of 90.33% to 106.08%, risk-free interest rate of 1.32% to 1.53%, and expected lives ranging from 1.91 to 3.24 years.

The final purchase price is summarized as follows (dollars in thousands, except per share amounts):

Shares of the combined company to be owned by OncoGenex equity holders	2,736,709
Multiplied by the price per share of OncoGenex stock	\$ 4.62
Value of shares of the combined company owned by OncoGenex equity holders	\$ 12,643
Fair value of options and warrants assumed	\$ 207
Fair value of contingent value rights assumed	\$ 200
Total purchase price	<u>\$ 13,050</u>

Under the purchase method of accounting, the total purchase price as shown in the table above is allocated to the OncoGenex net tangible and identifiable intangible assets acquired and liabilities assumed based on their fair values as of the date of the completion of the Arrangement. The final purchase price allocation is as follows (in thousands):

Cash, cash equivalents and marketable securities	\$ 12,376
Prepaid expenses and other assets	518
Intangible assets license agreements	8,610
Accounts payable, accrued expenses and other liabilities	(4,054)
Deferred tax liability	(2,928)
Contingent value rights	(200)
Excess negative goodwill	<u>(1,272)</u>
Total purchase price	13,050

In accordance with ASC 805, "Business Combinations," any excess of fair value of acquired net assets over purchase price (negative goodwill) has been recognized as a gain in the period the Arrangement was completed. We have reassessed whether all acquired assets and assumed liabilities have been identified and recognized and performed remeasurements to verify that the consideration paid, assets acquired, and liabilities assumed have been properly valued. The remaining excess has been recognized as a gain. There was no other impact to other comprehensive income.

OncoGenex issued contingent value rights, or each, a CVR and collectively, the CVRs, on July 31, 2017 to their existing stockholders as of July 27, 2017. One CVR was issued for each share of their common stock outstanding as of the record date for such issuance. Each CVR was a non-transferable right to potentially receive certain cash, equity or other consideration received by us in the event that we received any such consideration during the five-year period after consummation of the Arrangement as a result of the achievement of certain clinical milestones, regulatory milestones, sales-based milestones and/or up-front payment milestones relating to apatersen, or the Milestones, upon the terms and subject to the conditions set forth in a contingent value rights agreement to be entered into between us and an as of yet unidentified third party, as rights agent, or the CVR Agreement. The aggregate consideration to be distributed to the holders of the CVRs would have been equal to 80% of the consideration received by us as a result of the achievement of the Milestones less certain agreed to offsets, as determined pursuant to the CVR Agreement.

The contingent value rights expired on August 17, 2017, as we did not enter into any term sheets or agreement with third parties for the development or commercialization of apatersen. A recovery of \$0.2 million was recognized on our Consolidated Statements of Loss and Comprehensive Loss.

#### *Pro Forma Results of Operations*

The results of operations of OncoGenex are included in our consolidated financial statements following the date of the completion of the transaction on August 1, 2017. The following table presents pro forma results of operations and gives effect to the business combination transaction as if the transaction was consummated at the beginning of the period presented. The unaudited pro forma results of operations are not necessarily indicative of what would have occurred had the business combination been completed at the beginning of the retrospective periods or of the results that may occur in the future.

	For the year ended December 31, <u>2017</u> (Unaudited)		For the year ended December 31, <u>2016</u> (Unaudited)
Revenue	\$ —	\$	5,062
Net loss applicable to common shareholders	\$ (20,111 )	\$	(21,363 )
Net loss per share-basic and diluted	\$ (4.19 )	\$	(7.79 )
Weighted average shares	4,794,421		2,743,906

### 3. ACCOUNTING POLICIES

#### **Significant Accounting Policies**

##### *Use of Estimates*

The preparation of consolidated financial statements in conformity with United States generally accepted accounting principles requires management to make estimates and assumptions that affect the amounts reported in the consolidated financial statements and notes thereto. Actual results could differ from these estimates. Estimates and assumptions principally relate to estimates of the fair value of our warrant liability, the initial fair value and forfeiture rates of stock options issued to employees and consultants, the estimated compensation cost on performance restricted stock unit awards and clinical trial and manufacturing accruals, estimated useful lives of property, plant and equipment and estimates and assumptions in contingent liabilities.

##### *Cash Equivalents*

We consider all highly liquid investments with an original maturity of three months or less to be cash equivalents, which we consider as available for sale and carry at fair value, with unrealized gains and losses, if any, reported as accumulated other comprehensive income or loss, which is a separate component of stockholders' equity.

##### *Short-Term Investments*

Short-term investments consist of financial instruments purchased with an original maturity of greater than three months and less than one year. We consider our short-term investments as available-for-sale and carry them at fair value, with unrealized gains and losses except other than temporary losses, if any, reported as accumulated other comprehensive income or loss, which is a separate

component of stockholders' equity. Realized gains and losses on the sale of these securities are recognized in net income or loss. The cost of investments sold is based on the specific identification method.

#### *Fair value of financial instruments*

The fair value of our cash equivalents and marketable securities is based on quoted market prices and trade data for comparable securities. We determine the fair value of our warrant liability based on the Black-Scholes pricing model and using considerable judgment, including estimating stock price volatility and expected warrant life. Other financial instruments including amounts receivable, accounts payable, accrued liabilities other, accrued clinical liabilities and accrued compensation are carried at cost, which we believe approximates fair value because of the short-term maturities of these instruments.

#### *Intellectual Property*

The costs of acquiring intellectual property rights to be used in the research and development process, including licensing fees and milestone payments, are charged to research and development expense as incurred in situations where we have not identified an alternative future use for the acquired rights, and are capitalized in situations where we have identified an alternative future use. No costs associated with acquiring intellectual property rights have been capitalized to date. Costs of maintaining intellectual property rights are expensed as incurred.

#### *Intangible Assets*

Our intangible assets are subject to amortization and are amortized using the straight-line method over their estimated period of benefit. We evaluate the carrying amount of intangible assets periodically by taking into account events or circumstances that may warrant revised estimates of useful lives or that indicate the asset may be impaired.

#### *Goodwill*

Goodwill acquired in a business combination is assigned to the reporting unit that is expected to benefit from the combination as of the acquisition date. Goodwill is tested for impairment on an annual basis or, more frequently, if an event occurs or circumstances change that would more likely than not reduce the fair value of the reporting unit.

#### *Property and Equipment*

Property and equipment assets are recorded at cost less accumulated depreciation. Depreciation expense on assets acquired under capital lease is recorded within depreciation expense. Depreciation is recorded on a straight-line basis over the following periods:

Computer equipment	3 years
Furniture and fixtures	5 years
Machinery and equipment	5 - 10 years
Leasehold improvements and equipment under capital lease	Over the term of the lease

#### *Impairment of Long-Lived Assets*

We review long-lived assets for impairment whenever events or changes in circumstances indicate that the asset's carrying amount may not be recoverable. We conduct our long-lived asset impairment analyses in accordance with ASC 360-10-15, "Impairment or Disposal of Long-Lived Assets." ASC 360-10-15 requires us to group assets and liabilities at the lowest level for which identifiable cash flows are largely independent of the cash flows of other assets and liabilities and evaluate the asset group against the sum of the undiscounted future cash flows. If the undiscounted cash flows do not indicate the carrying amount of the asset is recoverable, an impairment charge is measured as the amount by which the carrying amount of the asset group exceeds its fair value based on discounted cash flow analysis or appraisals.

#### *Income Taxes*

Income taxes are accounted for under the liability method. Deferred tax assets and liabilities are recognized for the differences between the carrying values of assets and liabilities and their respective income tax bases and for operating losses and tax credit carry forwards. A valuation allowance is provided for the portion of deferred tax assets that is more likely than not to be unrealized. Deferred tax assets and liabilities are measured using the enacted tax rates and laws.

#### *Research and Development Costs*

Research and development costs are expensed as incurred, net of related refundable investment tax credits, with the exception of non-refundable advanced payments for goods or services to be used in future research and development, which are capitalized in accordance with ASC 730, "Research and Development" and included within Prepaid Expenses or Other Assets depending on when the assets will be utilized.

Clinical trial expenses are a component of research and development costs. These expenses include fees paid to contract research organizations and investigators and other service providers, which conduct certain product development activities on our behalf. We use an accrual basis of accounting, based upon estimates of the amount of service completed. In the event payments differ from the amount of service completed, prepaid expense or accrued liabilities amounts are adjusted on the balance sheet. These expenses are based on estimates of the work performed under service agreements, milestones achieved, patient enrollment and experience with similar contracts. We monitor each of these factors to the extent possible and adjusts estimates accordingly.

#### *Stock-Based Compensation*

Effective January 1, 2006, we adopted the fair value recognition provisions of the ASC 718, "Stock Compensation", using the modified prospective method with respect to options granted to employees and directors. Under this transition method, compensation cost is recognized in the financial statements beginning with the effective date for all share-based payments granted after January 1, 2006 and for all awards granted prior to but not yet vested as of January 1, 2006. The expense is amortized on a straight-line basis over the graded vesting period.

#### *Restricted Stock Unit Awards*

We grant restricted stock unit awards that generally vest and are expensed over a four-year period. We also granted restricted stock unit awards that vest in conjunction with certain performance conditions to certain executive officers and key employees. At each reporting date, we evaluate whether achievement of the performance conditions is probable. Compensation expense is recorded over the appropriate service period based upon our assessment of accomplishing each performance provision or the occurrence of other events that may have caused the awards to accelerate and vest.

#### *Segment Information*

We follow the requirements of ASC 280, "Segment Reporting." We have one operating segment, dedicated to the development and commercialization of cytisine for smoking cessation, with operations located in Canada and the United States.

#### *Comprehensive Income (Loss)*

Comprehensive income (loss) is comprised of net income (loss) and other comprehensive income (loss). Other comprehensive income (loss) consists of unrealized gains and losses on our available-for-sale marketable securities. We report the components of comprehensive loss in the statement of stockholders' equity.

#### *Loss per Common Share*

Basic loss per common share is computed using the weighted average number of common shares outstanding during the period. Diluted loss per common share is computed in accordance with the treasury stock method. The effect of potentially issuable common shares from outstanding stock options, restricted stock unit awards and warrants are anti-dilutive for all periods presented.

#### *Warrants*

We account for warrants pursuant to the authoritative guidance on accounting for derivative financial instruments indexed to, and potentially settled in, a company's own stock, on the understanding that in compliance with applicable securities laws, the warrants require the issuance of registered securities upon exercise and therefore do not sufficiently preclude an implied right to net cash settlement. We classify warrants on the consolidated balance sheet as a liability which is revalued at each balance sheet date subsequent to the initial issuance. We also have warrants classified as equity and these are not reassessed for their fair value at the end of each reporting period. Warrants classified as equity are initially measured at their fair value and recognized as part of stockholders' equity. Determining the appropriate fair-value model and calculating the fair value of registered warrants requires considerable judgment, including estimating stock price volatility and expected warrant life. The computation of expected volatility was based on the historical volatility of comparable companies from a representative peer group selected based on industry and market capitalization. A small change in the estimates used may have a relatively large change in the estimated valuation. We use the Black-

Scholes pricing model to value the warrants. Changes in the fair value of the warrants classified as liabilities are reflected in the consolidated statement of loss as gain (loss) on revaluation of warrants.

#### *Reporting Currency and Foreign Currency Translation*

Effective August 2, 2017, we changed the functional currency of our UK subsidiary from the Great British Pound to the U.S. dollar. As a result of the Arrangement, the UK subsidiary's primary economic environment has now changed from the UK to the United States. This has resulted in significant changes in economic facts and circumstances that clearly indicate that the functional currency has changed. We accounted for the change in functional currency prospectively.

The consolidated financial statements for the years ended December 31, 2016 and 2015 and for the period of January 1, 2017 to August 2, 2017, are based on the UK subsidiary with a functional currency of GBP, and have been translated into the U.S. reporting currency using the current rate method as required by SFAS No. 52, "Foreign Currency Translation", ("SFAS 52") as follows: assets and liabilities using the rate of exchange prevailing at the balance sheet date; stockholders' deficiency using the applicable historic rate; and revenue and expenses using the monthly average rate of exchange. Translation adjustments have been included as part of the accumulated other comprehensive income

Our functional and reporting currency is the U.S. dollar. Revenues and expenses denominated in other than U.S. dollars are translated at average monthly rates.

The functional currency of our foreign subsidiary is the U.S. dollar. For this foreign operation, assets and liabilities denominated in other than U.S. dollars are translated at the period-end rates for monetary assets and liabilities and historical rates for non-monetary assets and liabilities. Revenues and expenses denominated in other than U.S. dollars are translated at average monthly rates. Gains and losses from this translation are recognized in the consolidated statement of loss.

#### **Pending Adoption of Recent Accounting Pronouncements**

On February 2016, the Financial Accounting Standards Board ("FASB") issued its new leases standard, ASU No. 2016-02, Leases (Topic 842) ("ASU 2016-02"). ASU 2016-02 is aimed at putting most leases on lessees' balance sheets, but it would also change aspects of lessor accounting. ASU 2016-02 is effective for public business entities for annual periods beginning after December 15, 2018 and interim periods within that year. This standard is expected to have a significant impact on our current accounting for our lease arrangements, particularly our current operating lease arrangements, as well as, disclosures. We are currently evaluating the impact of adoption on our financial position and results from operations.

In May 2014, the FASB, issued ASU No. 2014-09, Revenue from Contracts with Customers (Topic 606): Revenue from Contracts with Customers, which guidance in this update will supersede the revenue recognition requirements in Topic 605, Revenue Recognition, and most industry-specific guidance when it becomes effective. ASU No. 2014-09 affects any entity that enters into contracts with customers to transfer goods or services or enters into contracts for the transfer of nonfinancial assets unless those contracts are within the scope of other standards. The core principal of ASU No. 2014-09 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. In doing so, companies will need to use more judgment and make more estimates than under current guidance. These may include identifying performance obligations in the contract, estimating the amount of variable consideration to include in the transaction price and allocating the transaction price to each separate performance obligation. ASU No. 2014-09 is effective for annual reporting periods beginning after December 15, 2017, including interim periods within that reporting period, which will be our fiscal year 2018 (or December 31, 2018), and entities can transition to the standard either retrospectively or as a cumulative-effect adjustment as of the date of adoption. Early adoption is permitted. We are updating our policies and procedures to reflect the adoption of ASU No. 2014-09 and we anticipate that there is no impact on our financial statement in the year of adoption.

#### **Recently Adopted Accounting Policies**

In March 2016, the FASB issued ASU 2016-09, *Improvements to Employee Share-Based Payment Accounting*. ASU 2016-09 simplifies 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. Some of the areas for simplification apply only to nonpublic entities. For public business entities, the amendments in this Update are effective for annual periods beginning after 15 December 2016, and interim periods within those annual periods. For all other entities, the amendments are effective for annual periods beginning after 15 December 2017, and interim periods within annual periods beginning after 15 December 2018. The adoption of this standard did not have a significant impact on our financial position or results of operations.

In November 2015, the FASB issued ASU No. 2015-17, Income Taxes (Topic 740): Balance Sheet Classification of Deferred Taxes. The standard requires that deferred tax liabilities and assets be classified as noncurrent in a classified statement of financial position. Entities are currently required to separate deferred income tax liabilities and assets into current and noncurrent amounts in a classified statement of financial position. The amendments, which require non-current presentation only (by jurisdiction), are effective for financial statements issued for annual periods beginning after December 15, 2016 with earlier application permitted as of the beginning of an interim or annual reporting period. The guidance is to be applied either prospectively to all deferred tax liabilities and assets or retrospectively to all periods presented. The adoption of this standard did not have a significant impact on our financial position or results of operations.

In February 2015, the FASB issued ASU 2015-02, Consolidation (Topic 810) — Amendments to the Consolidation Analysis. ASU 2015-02 eliminates the deferral of FAS 167 and makes changes to both the variable interest model and the voting model. For public business entities, the guidance is effective for annual and interim periods beginning after 15 December 2015. For nonpublic business entities, it is effective for annual periods beginning after 15 December 2016, and interim periods beginning after 15 December 2017. The adoption of this standard did not have a significant impact on our financial position or results of operations.

In January 2015, the FASB issued ASU 2015-01, Income Statement—Extraordinary and Unusual Items (Subtopic 225-20): Simplifying Income Statement Presentation by Eliminating the Concept of Extraordinary Items. ASU 2015-01 eliminates the concept of reporting extraordinary items, but retains current presentation and disclosure requirements for an event or transaction that is of an unusual nature or of a type that indicates infrequency of occurrence. Transactions that meet both criteria would now also follow such presentation and disclosure requirements. For all entities, the guidance is effective for annual periods, and interim periods within those annual periods, beginning after 15 December 2015. The adoption of this standard did not have a significant impact on our financial position or results of operations.

In August 2014, the Financial Accounting Standards Board, or FASB issued Accounting Standards Updated, or ASU No. 2014-15, Presentation of Financial Statements-Going Concern (Subtopic 2015-40) (ASU 2014-15). ASU 2014-15 provides guidance to U.S. GAAP about management's responsibility to evaluate whether there is a substantial doubt about an entity's ability to continue as a going concern and to provide related footnote disclosures. This new rule requires management to assess an entity's ability to continue as a going concern by incorporating and expanding upon certain principles currently in the U.S. auditing standards. Specifically, ASU 2014-15 (1) defines the term substantial doubt, (2) requires an evaluation of every reporting period including interim periods, (3) provides principles for considering the mitigating effect of management's plans, (5) requires an express statement and other disclosures when substantial doubt is not alleviated, and (6) requires an assessment for a period of one year after the date that the financial statements are issued (or available to be issued). This guidance is effective for annual periods ending after December 15, 2016. The adoption of this standard did not have a significant impact on our financial statement disclosures.

#### **4. FINANCIAL INSTRUMENTS AND RISK**

For certain of our financial instruments, including cash and cash equivalents, amounts receivable, accounts payable, accrued liabilities other, accrued clinical liabilities and accrued compensation carrying values approximate fair value due to their short-term nature. Our cash equivalents and short-term investments are recorded at fair value.

Financial risk is the risk to our results of operations that arises from fluctuations in interest rates and foreign exchange rates and the degree of volatility of these rates as well as credit risk associated with the financial stability of the issuers of the financial instruments. Foreign exchange rate risk arises as a portion of our investments which finance operations and a portion of our expenses are denominated in other than U.S. dollars.

We invest our excess cash in accordance with investment guidelines, which limit our credit exposure to any one financial institution or corporation other than securities issued by the U.S. government. We only invest in A (or equivalent) rated securities with maturities of one year or less. These securities generally mature within one year or less and in some cases are not collateralized. At December 31, 2017 the average days to maturity of our portfolio of cash equivalents and marketable securities was zero days. We do not use derivative instruments to hedge against any of these financial risks.

#### **5. INTANGIBLES**

All of our intangible assets are subject to amortization and are amortized using the straight-line method over their estimated useful life.

We acquired license agreements, related to OncoGenex's product candidate apatorsen, upon the acquisition of OncoGenex. As at the date of the acquisition, the agreements were determined to have a fair value of \$8.6 million with an estimated useful life of 6 years. (Note 2—Reverse Merger)



In August 2017, we discontinued further development of apatorsen. We provided a notice of discontinuance to our former development partners for apatorsen, Ionis Pharmaceuticals, Inc., or Ionis, and a letter of termination to the University of British Columbia, or UBC, notifying them that we have discontinued development of apatorsen resulting in termination of all licensing agreements related to this product candidate. We believe that all financial obligations, other than continuing mutual indemnification obligations and our requirement to pay for out-of-pocket patent expenses incurred up to the date of termination and for abandoning the apatorsen patents and patent applications, under all apatorsen related agreements with Ionis and UBC, are no longer owed and no further payments are due. We recognized a loss on disposition of apatorsen of \$8.6 million and a deferred income tax recovery of \$2.9 million as a result of discontinuing the development program and providing a notice of discontinuance of the license agreements with Ionis.

We acquired license and supply agreements, in relation to cytosine, upon the acquisition of Extab Corporation, or Extab. The agreements were determined to have a fair value of \$3.1 million with an estimated useful life of 14 years (Note 6— Extab Acquisition).

The components of intangible assets were as follows:

	December 31, 2017			December 31, 2016		
	Gross Carrying Value	Accumulated Amortization	Net Carrying Value	Gross Carrying Value	Accumulated Amortization	Net Carrying Value
License Agreements	\$ 3,117	\$ (585)	\$ 2,532	\$ 3,117	\$ (362)	\$ 2,755

For the year ended December 31, 2017 and 2016 we recorded license agreement amortization expense of \$0.2 million and \$0.2 million, respectively. The following table outlines the estimated future amortization expense related to intangible assets held as of December 31, 2017:

Year Ending December 31,	
2018	223
2019	223
2020	223
2021	223
Thereafter	1,640
<b>Total</b>	<b>\$ 2,532</b>

We evaluate the carrying amount of intangible assets periodically by taking into account events or circumstances that may warrant revised estimates of useful life or that indicate the asset may be impaired. We conducted an impairment analysis for long lived assets, including the license and supply agreements for the active pharmaceutical ingredient cytosine, and concluded no impairment has occurred as of December 31, 2017.

## 6. EXTAB ACQUISITION

On May 14, 2015, we entered into a Share Purchase Agreement with Sopharma, AD, or Sopharma, a public pharmaceutical company located in Bulgaria, to acquire 75% of the outstanding shares of Extab.

Pursuant to the Share Purchase Agreement, we acquired a 75% controlling interest in Extab from Sopharma for \$2.0 million in cash and \$2.0 million in a deferred payment, contingent on regulatory approval of cytosine by the Food and Drug Administration, or FDA, or the European Medicines Agency, or EMA. In addition, as part of and in conjunction with the Share Purchase Agreement, we amended our existing license and supply agreements with Sopharma, extending their terms by five years and reducing the royalty rate payable by us. (Note 7—License Agreements) Subsequent to the acquisition, we paid to Sopharma \$0.3 million to retire the balance of Extab's outstanding loans with Sopharma.

The acquisition was accounted for using the acquisition method under ASC 805 business combinations. Results of operations have been included in the financial statements from the date of acquisition May 18, 2015, the date we assumed control of Extab. The fair value of the business combination was determined using level 3 inputs.

The purchase price of our 75% controlling interest in Extab was as follows:

Cash consideration	\$	2,000
Contingent consideration		—
<b>Purchase Price</b>	<b>\$</b>	<b>2,000</b>

As of the date of acquisition we assessed the likelihood of meeting the contingent event as unlikely and as a result have estimated its fair value at zero. We consider the best indicator of the fair value of net assets acquired to be the \$2.0 million cash consideration paid to acquire our 75% controlling interest plus the \$0.7 million fair value attributable to the non-controlling interest, or NCI, calculated on a proportionate basis.

Under the acquisition method of accounting, the total purchase price is allocated to the acquired tangible and intangible assets and assumed liabilities of Extab based on their estimated fair values as of the transaction closing date. The allocation of the purchase price based on the estimated fair values is as follows:

	Fair Value
Cash	\$ 6
License agreements	\$ 3,117
Goodwill	\$ 1,034
Other current liabilities	\$ (456)
Deferred tax liability	\$ (1,034)
Non-controlling interest	\$ (667)
	<b>\$ 2,000</b>

The license agreement expires May 26, 2029. As of the acquisition date, we estimated its useful life to be the same as the remaining 14 year contractual life. We also elected to amortize intangible assets on a straight line basis over its useful life, since there is no pattern of successful economic benefits available at the time to reliably determine a different amortization.

Subsequent to acquiring control of Extab, we entered into an agreement with the NCI stockholder of Extab to convert their shares in Extab into shares of our common stock. As of September 30, 2015, all of the NCI had converted their shares in Extab into shares of our common stock resulting in elimination of the Extab non-controlling interest and Extab becoming a wholly-owned subsidiary of us.

## 7. LICENSE AGREEMENTS

### *Sopharma License and Supply Agreements*

In 2009 and 2010, we entered into a license agreement, or the Sopharma License Agreement, and a supply agreement, or the Sopharma Supply Agreement, with Sopharma, AD, or Sopharma. Pursuant to the Sopharma License Agreement, we were granted access to all available manufacturing, efficacy and safety data related to cytosine, as well as a granted patent in several European countries including Germany, France and Italy related to new oral dosage forms of cytosine providing enhanced stability. Additional rights granted under the Sopharma License Agreement include the exclusive use of, and the right to sublicense, the trademark Tabex in all territories—other than certain countries in Central and Eastern Europe, Scandinavia, North Africa, the Middle East and Central Asia, as well as Vietnam, where Sopharma or its affiliates and agents already market Tabex—in connection with the marketing, distribution and sale of products. Under the Sopharma License Agreement, we agreed to pay a nonrefundable license fee. In addition, we agreed to make certain royalty payments equal to a mid-teens percentage of all net sales of Tabex branded products in our territory during the term of the Sopharma License Agreement, including those sold by a third party pursuant to any sublicense which may be granted by us. We have agreed to cooperate with Sopharma in the defense against any actual or threatened infringement claims with respect to Tabex. Sopharma has the right to terminate the Sopharma License Agreement upon the termination or expiration of the Sopharma Supply Agreement. The Sopharma License Agreement will also terminate under customary termination provisions including bankruptcy or insolvency and material breach. To date, we have paid Sopharma \$10 pursuant to the Sopharma License Agreement.

A cross-license exists between us and Sopharma whereby we grant to Sopharma rights to any patents or patent applications or other intellectual property rights filed by us in Sopharma territories.

On May 14, 2015, we and Sopharma entered into an amendment to the Sopharma License Agreement. Among other things, the amendment to the Sopharma License Agreement reduced the royalty payments payable by us to Sopharma from a percentage in the mid-teens to a percentage in the mid-single digits and extended the term of the Sopharma License Agreement until May 26, 2029.

On July 28, 2017, we and Sopharma entered into the amended and restated Sopharma Supply Agreement. Pursuant to the amended and restated Sopharma Supply Agreement, for territories as detailed in the licensing agreement, we will exclusively purchase all of our cytosine from Sopharma, and Sopharma agrees to exclusively supply all such cytosine requested by us, and we extended the term to 2037. In addition, we will have full access to the cytosine supply chain and Sopharma will manufacture sufficient cytosine to meet a forecast for a specified demand of cytosine for the five years commencing shortly after the commencement of the agreement, with the forecast to be updated regularly thereafter. Each of us and Sopharma may terminate the Sopharma Supply Agreement in the event of the other party's material breach or bankruptcy or insolvency.

#### *University of Bristol License Agreement*

In July 2016, we entered into a license agreement with the University of Bristol, or the University of Bristol License Agreement. Under the University of Bristol License Agreement, we received exclusive and nonexclusive licenses from the University of Bristol to certain patent and technology rights resulting from research activities into cytosine and its derivatives for use in smoking cessation, including a number of patent applications related to novel approaches to cytosine binding at the nicotinic receptor level. Any patents issued in connection with these applications would be scheduled to expire on February 5, 2036 at the earliest.

In consideration of rights granted by the University of Bristol, we agreed to pay amounts of up to \$3.2 million, in the aggregate, tied to a financing milestone and to specific clinical development and commercialization milestones resulting from activities covered by the University of Bristol License Agreement. Additionally, if we successfully commercialize product candidates subject to the University of Bristol License Agreement, we are responsible for royalty payments in the low-single digits and payments up to a percentage in the mid-teens of any sublicense income, subject to specified exceptions, based upon net sales of such licensed products.

On January 22, 2018, we and the University of Bristol entered into an amendment to the University of Bristol License Agreement. Pursuant to the amended University of Bristol License Agreement we received exclusive rights for all human medicinal uses of cytosine across all therapeutic categories from the University of Bristol from research activities into cytosine and its derivatives. In consideration of rights granted by the amended University of Bristol License Agreement, we agreed to pay an initial amount of \$37,500 upon the execution of the amended University of Bristol License Agreement, and additional amounts of up to \$1.7 million, in the aggregate, tied to a financing milestone and to specific clinical development and commercialization milestones resulting from activities covered by the amended University of Bristol License Agreement, in addition to amounts under the original University of Bristol License Agreement of up to \$3.2 million in the aggregate, tied to specific financing, development and commercialization milestones. Additionally, if we successfully commercialize any product candidate subject to the amended University of Bristol License Agreement or to the original University of Bristol License Agreement, we will be responsible, as provided in the original University of Bristol License Agreement, for royalty payments in the low-single digits and payments up to a percentage in the mid-teens of any sublicense income, subject to specified exceptions, based upon net sales of such licensed products. To date, we have paid the University of Bristol \$50,000 pursuant to the University of Bristol License Agreement.

Unless otherwise terminated, the University of Bristol License Agreement will continue until the earlier of July 2036 or the expiration of the last patent claim subject to the University of Bristol License Agreement. We may terminate the University of Bristol License Agreement for convenience upon a specified number of days' prior notice to the University of Bristol. The University of Bristol License Agreement will terminate under customary termination provisions including bankruptcy or insolvency or its material breach of the agreement. Under the terms of the University of Bristol License Agreement, we had provided 100 grams of cytosine to the University of Bristol as an initial contribution.

#### *Ionis and UBC License Agreements*

In August 2017, we discontinued further development of apatorsen. We provided a notice of discontinuance to our former development partners for apatorsen, Ionis Pharmaceuticals, Inc., or Ionis, and a letter of termination to the University of British Columbia, or UBC, notifying them that we have discontinued development of apatorsen resulting in termination of all licensing agreements related to this product candidate. We believe that all financial obligations, other than continuing mutual indemnification obligations and our requirement to pay for out-of-pocket patent expenses incurred up to the date of termination and for abandoning the apatorsen patents and patent applications, under all apatorsen related agreements with Ionis and UBC, are no longer owed and no further payments are due.

## 8. FAIR VALUE MEASUREMENTS

Assets and liabilities recorded at fair value in the balance sheets are categorized based upon the level of judgment associated with the inputs used to measure their fair value. For certain of our financial instruments including amounts receivable and accounts payable the carrying values approximate fair value due to their short-term nature.

ASC 820 "Fair Value Measurements and Disclosures," specifies a hierarchy of valuation techniques based on whether the inputs to those valuation techniques are observable or unobservable. In accordance with ASC 820, these inputs are summarized in the three broad level listed below:

- Level 1 – Quoted prices in active markets for identical securities.
- Level 2 – Other significant inputs that are observable through corroboration with market data (including quoted prices in active markets for similar securities).
- Level 3 – Significant unobservable inputs that reflect management's best estimate of what market participants would use in pricing the asset or liability.

As quoted prices in active markets are not readily available for certain financial instruments, we obtain estimates for the fair value of financial instruments through third-party pricing service providers.

In determining the appropriate levels, we performed a detailed analysis of the assets and liabilities that are subject to ASC 820.

We invest our excess cash in accordance with investment guidelines that limit the credit exposure to any one financial institution other than securities issued by the U.S. Government. These securities are not collateralized and mature within one year.

A description of the valuation techniques applied to our financial instruments measured at fair value on a recurring basis follows.

### *Financial Instruments*

#### *Cash*

Significant amounts of cash are held on deposit with large well established U.S. and Canadian financial institutions.

#### *U.S. Government and Agency Securities*

U.S. Government Securities U.S. government securities are valued using quoted market prices. Valuation adjustments are not applied. Accordingly, U.S. government securities are categorized in Level 1 of the fair value hierarchy.

U.S. Agency Securities U.S. agency securities are comprised of two main categories consisting of callable and non-callable agency issued debt securities. Non-callable agency issued debt securities are generally valued using quoted market prices. Callable agency issued debt securities are valued by benchmarking model-derived prices to quoted market prices and trade data for identical or comparable securities. Actively traded non-callable agency issued debt securities are categorized in Level 1 of the fair value hierarchy. Callable agency issued debt securities are categorized in Level 2 of the fair value hierarchy.

#### *Corporate and Other Debt*

Corporate Bonds and Commercial Paper The fair value of corporate bonds and commercial paper is estimated using recently executed transactions, market price quotations (where observable), bond spreads or credit default swap spreads adjusted for any basis difference between cash and derivative instruments. The spread data used are for the same maturity as the bond. If the spread data does not reference the issuer, then data that reference a comparable issuer are used. When observable price quotations are not available, fair value is determined based on cash flow models with yield curves, bond or single name credit default swap spreads and recovery rates based on collateral values as significant inputs. Corporate bonds and commercial paper are generally categorized in Level 2 of the fair value hierarchy; in instances where prices, spreads or any of the other aforementioned key inputs are unobservable, they are categorized in Level 3 of the hierarchy.

#### *Warrants*

As of December 31, 2017, we recorded a value of zero for our warrant liability. We reassess the fair value of the common stock warrants classified as liabilities at each reporting date utilizing a Black-Scholes pricing model. Inputs used in the pricing model include estimates of stock price volatility, expected warrant life and risk-free interest rate. The computation of expected volatility was

based on the historical volatility of comparable companies from a representative peer group selected based on industry and market capitalization. Warrants that are classified as liabilities are categorized in Level 3 of the fair value hierarchy. A small change in the estimates used may have a relatively large change in the estimated valuation. Warrants that are classified as equity are not considered liabilities and therefore are not reassessed for their fair values at each reporting date.

The following table presents the changes in fair value of our total Level 3 financial liabilities for the year ended December 31, 2017. During the twelve months ended December 31, 2017, no common stock warrants were issued that were classified as liabilities (in thousands):

	Liability at December 31, 2016	Liability Assumed as part of Arrangement	Unrealized Gain on warrants	Liability at December 31, 2017
Warrant liability	\$ —	\$ 150	\$ (150)	\$ —

The following table presents information about our assets and liabilities that are measured at fair value on a recurring basis, and indicates the fair value hierarchy of the valuation techniques we utilized to determine such fair value (in thousands):

December 31, 2017	Level 1	Level 2	Level 3	Total
<b>Assets</b>				
Cash	\$ 1,262	\$ —	\$ —	\$ 1,262
Money market securities (cash equivalents)	4,022	—	—	4,022
Restricted cash (Note 12)	272	—	—	272
<b>Total assets</b>	<b>\$ 5,556</b>	<b>\$ —</b>	<b>\$ —</b>	<b>\$ 5,556</b>
<b>Liabilities</b>				
Warrants	\$ —	\$ —	\$ —	\$ —
<b>December 31, 2016</b>				
	Level 1	Level 2	Level 3	Total
<b>Assets</b>				
Cash	\$ 15	\$ —	\$ —	\$ 15
<b>Total assets</b>	<b>\$ 15</b>	<b>\$ —</b>	<b>\$ —</b>	<b>\$ 15</b>
<b>Liabilities</b>				
Warrants	\$ —	\$ —	\$ —	\$ —

Cash and cash equivalents and short term investments (in thousands):

December 31, 2017	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Estimated Fair Value
Cash	\$ 1,262	\$ —	\$ —	\$ 1,262
Money market securities	4,022	—	—	4,022
<b>Total cash and cash equivalents</b>	<b>\$ 5,284</b>	<b>\$ —</b>	<b>\$ —</b>	<b>\$ 5,284</b>
Money market securities (restricted cash)	272	—	—	272
<b>Total restricted cash</b>	<b>\$ 272</b>	<b>\$ —</b>	<b>\$ —</b>	<b>\$ 272</b>
<b>December 31, 2016</b>				
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Estimated Fair Value
Cash	\$ 15	\$ —	\$ —	\$ 15
<b>Total cash and cash equivalents</b>	<b>\$ 15</b>	<b>\$ —</b>	<b>\$ —</b>	<b>\$ 15</b>

Our gross realized gains and losses on sales of available-for-sale securities were not material for the years ended December 31, 2017 and 2016.

All securities included in cash and cash equivalents have maturities of 90 days or less at the time of purchase. All securities included in short-term investments have maturities of within one year of the balance sheet date. The cost of securities sold is based on the specific identification method.

We only invest in A (or equivalent) rated securities with maturities of one year or less. We do not believe that there are any other than temporary impairments related to our investment in marketable securities at December 31, 2017, given the quality of the investment portfolio, its short-term nature, and subsequent proceeds collected on sale of securities that reached maturity.

## 9. PROPERTY AND EQUIPMENT

Property and equipment consisted of the following (in thousands):

	Cost	Accumulated Depreciation	Net Book Value
<b>December 31, 2017</b>			
Computer equipment	\$ 389	\$ 358	\$ 31
Furniture and fixtures	157	156	1
Leasehold improvements	252	226	26
Computer software	322	321	1
Equipment under capital lease	24	24	—
<b>Total property and equipment</b>	<b>\$ 1,144</b>	<b>\$ 1,085</b>	<b>\$ 59</b>

### *Impairment of Long-Lived Assets*

We review long-lived assets for impairment whenever events or changes in circumstances indicate that the asset's carrying amount may not be recoverable. We conduct our long-lived asset impairment analyses in accordance with ASC 360-10-15, "Impairment or Disposal of Long-Lived Assets." ASC 360-10-15 requires us to group assets and liabilities at the lowest level for which identifiable cash flows are largely independent of the cash flows of other assets and liabilities and evaluate the asset group against the sum of the undiscounted future cash flows. If the undiscounted cash flows do not indicate the carrying amount of the asset is recoverable, an impairment charge is measured as the amount by which the carrying amount of the asset group exceeds its fair value based on discounted cash flow analysis or appraisals.

## 10. OTHER ASSETS

Other assets include deferred share issues costs, prepaid amounts related to insurance that will not be utilized in the next 12 months and deposits paid for office space in accordance with the terms of the operating lease agreements.

## 11. INCOME TAX

[a] On August 2, 2017, OncoGenex completed a reverse takeover with Achieve. OncoGenex changed its name to Achieve Life Sciences, Inc. We are a Delaware incorporated company subject to blended US Federal and state statutory rates for December 31, 2017, 2016 and 2015 of 34%, 34% and 34%, respectively. For the purposes of estimating the tax rate in effect at the time that deferred tax assets and liabilities are expected to reverse, management uses the furthest out available future tax rate in the applicable jurisdictions.

Income tax expense consisted of the following (in thousands):

<u>(In thousands)</u>	2017	2016	2015
Income taxes at statutory rates (at a rate of 34% for all years presented)	\$ (4,636)	\$ (504)	\$ (407)
Expenses not deducted for tax purposes	(174)	—	—
Effect of tax rate changes on deferred tax assets and liabilities	3,158	—	—
Rate differential on foreign earnings	314	—	—
Reduction in benefit of operating losses	—	—	—
Reduction in the benefit of other tax attributes	—	—	—
Investment tax credits	—	—	—
Change in valuation allowance	(1,683)	—	—
Book to tax return adjustments	—	—	—
Other	(14)	—	—
Income tax expense	\$ (3,035)	\$ (504)	\$ (407)

[b] At December 31, 2017, we have investment tax credits of \$2.6 million (2016—\$2.6 million) available to reduce future Canadian income taxes otherwise payable. We also have non-capital loss carryforwards of \$120.4 million (2016—\$115.9 million) available to offset future taxable income in Canada, UK net operating loss carryforwards of \$0.8 million (2016—\$0.2 million) to offset future taxable income in the UK and federal net operating loss carryforwards of \$9.9 million (2016—\$1.3 million) to offset future taxable income in the United States.

The investment tax credits and non-capital losses and net operating losses for income tax purposes expire as follows (in thousands):

	Investment Tax Credits	US Net Operating Losses	Canadian Non-capital Losses	UK Net Operating Losses
2022	—	—	—	—
2023	—	—	—	—
2024	—	—	—	—
2025	—	—	—	—
2026	244	—	7,335	—
2027	71	—	4,949	—
2028	148	—	8,020	—
2029	317	9	(9)	35
2030	346	5	6,288	21
2031	486	17	12,121	37
2032	363	43	17,278	43
2033	193	2	23,240	56
2034	215	3	17,077	48
2035	122	654	3,112	28
2036	79	611	16,664	3
2037	19	8,530	4,348	578
	\$ 2,603	\$ 9,874	\$ 120,423	\$ 849

In addition, we have unclaimed tax deductions of approximately \$15.5 million related to scientific research and experimental development expenditures available to carry forward indefinitely to reduce Canadian taxable income of future years. We also have research and development tax credits of \$19,000 available to reduce future taxes payable in the United States. The research and development tax credits expire between 2018 and 2037.

[c] Significant components of our deferred tax assets as of December 31 are shown below (in thousands):

	2017	2016
<b>Deferred tax assets</b>		
Tax basis in excess of book value of assets	\$ 850	\$ —
Non-capital loss carryforwards	33,524	496
Research and development deductions and credits	5,506	—
Stock options	51	—
§59(e) Capitalized R&D expenses	3,252	—
Accrued expenses	—	363
Other	246	—
Total deferred tax assets	43,429	859
Valuation allowance	(42,914)	(46)
Net deferred assets	515	813
<b>Deferred tax liabilities</b>		
Intangible assets	(513)	(937)
Other	(2)	—
Total deferred tax liabilities	(515)	(937)
Net deferred tax assets	—	(124)

The potential income tax benefits relating to these deferred tax assets have not been recognized in the accounts as their realization did not meet the requirements of “more likely than not” under the liability method of tax allocation. Accordingly, a valuation allowance has been recorded and no deferred tax assets have been recognized in all jurisdictions as at December 31, 2017 and in the UK as of December 31, 2016.

[d] Under ASC 740, the benefit of an uncertain tax position that is more likely than not of being sustained upon audit by the relevant taxing authority must be recognized at the largest amount that is more likely than not to be sustained. No portion of the benefit of an uncertain tax position may be recognized if the position has less than a 50% likelihood of being sustained.

A reconciliation of the unrecognized tax benefits of uncertain tax positions for the year ended December 31, 2017 is as follows (in thousands):

	2017	Year ended December 31, 2016	2015
Balance at January 1	\$ 715	\$ 699	\$ 683
Additions based on tax positions related to the current year	—	16	16
Additions based on tax positions related to prior years	—	—	—
Balance at December 31	\$ 715	\$ 715	\$ 699

As of December 31, 2017, unrecognized benefits of approximately \$0.7 million, if recognized, would affect our effective tax rate, and would reduce our deferred tax assets.

Our accounting policy is to treat interest and penalties relating to unrecognized tax benefits as a component of income taxes. As of December 31, 2017 and December 31, 2016 we had no accrued interest and penalties related to income taxes.

We are subject to taxes in Canada, the UK and the U.S. until the applicable statute of limitations expires. Tax audits by their very nature are often complex and can require several years to complete.

<u>Tax Jurisdiction</u>	<u>Years open to examination</u>
Canada	2009 to 2017
United Kingdom	2010 to 2017
US	2009 to 2017



On December 22, 2017, the U.S. government enacted comprehensive tax legislation commonly referred to as the Tax Cuts and Jobs Act (the "Tax Act"). The Tax Act makes broad and complex changes to the U.S. tax code, including, but not limited to,

- (1) reducing the U.S. federal corporate tax rate from 34 percent to 21 percent;
- (2) eliminating the corporate alternative minimum tax;
- (3) creating a new limitation on deductible interest expense; and
- (4) changing rules related to uses and limitations of net operating loss carryforwards created in tax years beginning after December 31, 2017.

As a result of when the Act was signed into law, our deferred tax assets and liabilities were required to be remeasured using the lower 21% federal rate as of December 31, 2017.

## 12. COMMON STOCK

[a] Authorized

75,000,000 authorized common voting share, par value of \$0.001, and 5,000,000 preferred shares, par value of \$0.001.

[b] Issued and outstanding shares

### *Purchase Agreement and Financing with Lincoln Park Capital*

On September 14, 2017 we and Lincoln Park Capital Fund, LLC, or LPC, entered into a share and unit purchase agreement, or Purchase Agreement, pursuant to which we have the right to sell to LPC up to \$11.0 million in shares of our common stock, par value \$0.001 per share, subject to certain limitations and conditions set forth in the Purchase Agreement.

Pursuant to the Purchase Agreement, LPC initially purchased 328,947 of our units, or the Units, at a purchase price of \$3.04 per unit, with each Unit consisting of (a) one share of our Common Stock and (b) one warrant to purchase one-quarter of a share of Common Stock at an exercise price of \$3.496 per share, or Warrant. Each Warrant is exercisable six months following the issuance date until the date that is five years and six months after the issuance date and is subject to customary adjustments. The Warrants were issued only as part of the Units in the initial purchase of \$1.0 million and no warrants shall be issued in connection with any other purchases of common stock under the Purchase Agreement.

After the initial purchase, if our stock price is above \$1.00, as often as every other business day over the 30-month term of the Purchase Agreement, and up to an aggregate amount of an additional \$10.0 million (subject to certain limitations) of shares of common stock, we have the right, from time to time, in our sole discretion and subject to certain conditions to direct LPC to purchase up to 80,000 shares of common stock with such amounts increasing as the closing sale price of our common stock as reported on The NASDAQ Capital Market increases. The purchase price of shares of common stock pursuant to the Purchase Agreement will be based on prevailing market prices of common stock at the time of sales without any fixed discount, and we will control the timing and amount of any sales of common stock to LPC. In addition, we may direct LPC to purchase additional amounts as accelerated purchases if on the date of a regular purchase the closing sale price of the common stock is not below \$2.00 per share. As consideration for entering into the Purchase Agreement, we issued to LPC 123,516 shares of common stock; no cash proceeds were received from the issuance of these shares.

From September 14, 2017 through December 31, 2017, we offered and sold 873,778 shares of our common stock pursuant to our Purchase Agreement with LPC, including the 328,947 shares that were part of the initial purchase of Units. These sales resulted in gross proceeds to us of approximately \$2.0 million and offering expenses of \$0.1 million. As of December 31, 2017 shares of our common stock having an aggregate value of approximately \$9.0 million remained available for sale under this offering program.

### *Equity Award Issuances and Settlements*

During the year ended December 31, 2017, we did not issue any shares of common stock to satisfy stock option exercises and issued 5,464 shares of common stock to satisfy restricted stock unit settlements, respectively, compared with the issuance of no shares of common to satisfy stock option exercises and restricted stock unit settlements, respectively, for the year ended December 31, 2016.

[c] Stock options

*2017 Equity Incentive Plan*

As of December 31, 2017, we had reserved, pursuant to the 2017 Equity Incentive Plan, or the 2017 Plan, 1,052,200 common shares for issuance upon exercise of stock options, currently outstanding, by employees, directors and officers of ours.

Under the 2017 Plan, we may grant options to purchase common shares or restricted stock units to our employees, directors, officers and consultants. The exercise price of the options is determined by our board of directors but will be at least equal to the fair value of the common shares at the grant date. The options vest in accordance with terms as determined by our board of directors, typically over three to four years for options issued to employees and consultants, and over one to three years for members of our board of directors. The expiry date for each option is set by our board of directors with a maximum expiry date of ten years from the date of grant. In addition, the 2017 Plan allows for accelerated vesting of outstanding equity awards in the event of a change in control. The terms for accelerated vesting, in the event of a change in control, is determined at our discretion and defined under the employment agreements for our officers and certain of our employees.

*2010 Performance Incentive Plan*

As at December 31, 2017 we had reserved, pursuant to our 2010 Performance Incentive Plan, 68,507 common shares for issuance upon exercise of stock options and settlement of restricted stock units by employees, directors, officers and consultants of ours, of which 63,447 are reserved for options currently outstanding and 5,060 are reserved for restricted stock units currently outstanding.

Under the 2010 Plan we granted options to purchase common shares and restricted stock units to our employees, directors, officers and consultants. The exercise price of the options was determined by our board of directors and was at least equal to the fair value of the common shares at the grant date. The options vest in accordance with terms as determined by our board of directors, typically over three to four years for options issued to employees and consultants, and over one to three years for members of our board of directors. The expiry date for each option is set by our board of directors with a maximum expiry date of ten years from the date of grant. In addition, the 2010 Plan allows for accelerated vesting of outstanding equity awards in the event of a change in control. The terms for accelerated vesting, in the event of a change in control, is determined at our discretion and defined under the employment agreements for our officers and certain of our employees

*ASC 718 Compensation – Stock Compensation*

We recognize expense related to the fair value of our stock-based compensation awards using the provisions of ASC 718. We use the Black-Scholes option pricing model as the most appropriate fair value method for our stock options and recognize compensation expense for stock options on a straight-line basis over the requisite service period. In valuing our stock options using the Black-Scholes option pricing model, we make assumptions about risk-free interest rates, dividend yields, volatility and weighted average expected lives, including estimated forfeiture rates of the options.

The expected life was calculated based on the simplified method as permitted by the SEC's Staff Accounting Bulletin 110, Share-Based Payment. We consider the use of the simplified method appropriate because of the lack of sufficient historical exercise data following the reverse merger of OncoGenex. The computation of expected volatility was based on the historical volatility of comparable companies from a representative peer group selected based on industry and market capitalization. The risk-free interest rate is based on a U.S. Treasury instrument whose term is consistent with the expected life of the stock options. In addition to the assumptions above, as required under ASC 718, management made an estimate of expected forfeitures and is recognizing compensation costs only for those equity awards expected to vest. Forfeiture rates are estimated using historical actual forfeiture rates. These rates are adjusted on a quarterly basis and any change in compensation expense is recognized in the period of the change. We have never paid or declared cash dividends on our common stock and do not expect to pay cash dividends in the foreseeable future.

The estimated fair value of stock options granted in the respective periods was determined using the Black-Scholes option pricing model using the following weighted average assumptions:

	2017
Risk-free interest rates	1.95 %
Expected dividend yield	0 %
Expected life	6 years
Expected volatility	86.06 %

The weighted average fair value of stock options granted during the year ended December 31, 2017 was \$2.09.

The results for the periods set forth below included stock-based compensation expense in the following expense categories of the consolidated statements of loss (in thousands):

	Year ended December 31, 2017
Research and development	\$ 107
General and administrative	241
<b>Total stock-based compensation</b>	<b>\$ 348</b>

Options vest in accordance with terms as determined by our board of directors, typically over three or four years for employee and consultant grants and over one or three years for board of director option grants. The expiry date for each option is set by our board of directors with, which is typically seven to ten years. The exercise price of the options is determined by our board of directors but is at least equal to the fair value of the share at the grant date.

Stock option transactions and the number of stock options outstanding are summarized below:

	Number of Optioned Common Shares	Weighted Average Exercise Price
<b>Balance, January 1, 2017</b>	<b>\$ —</b>	<b>\$ —</b>
Additions from OncoGenex Plan	113,451	96.38
Granted	1,052,200	2.89
Expired	(19,543)	114.53
Exercised	—	—
Forfeited	(30,461)	92.72
<b>Balance, December 31, 2017</b>	<b>1,115,647</b>	<b>\$ 7.99</b>

The following table summarizes information about stock options outstanding at December 31, 2017 regarding the number of ordinary shares issuable upon: (1) outstanding options and (2) vested options.

**(1) Number of common shares issuable upon exercise of outstanding options:**

<u>Exercise Prices</u>	<u>Number of Options</u>	<u>Weighted- Average Exercise Price</u>	<u>Weighted- Average Remaining Contractual Life (in years)</u>
\$2.89 - \$6.95	1,052,200	\$ 2.89	9.58
\$6.96 - \$15.73	4,090	11.00	8.40
\$15.74 - \$20.63	17,983	20.46	7.38
\$20.64 - \$37.35	6,452	31.53	6.76
\$37.36 - \$128.64	2,451	84.08	5.75
\$128.65 - \$130.57	8,905	129.69	6.20
\$130.58 - \$134.81	6,450	131.45	5.19
\$134.82 - \$143.88	5,927	142.41	4.36
\$143.89 - \$185.85	7,019	172.70	3.01
\$185.86 - \$245.08	4,170	237.60	2.21
	<b>1,115,647</b>	<b>\$ 7.99</b>	<b>9.37</b>

(2) Number common shares issuable upon exercise of vested options:

<u>Exercise Prices</u>	<u>Number of Options</u>	<u>Weighted-Average Exercise Price</u>	<u>Weighted-Average Remaining Contractual Life (in years)</u>
\$2.89 - \$6.95	3,644	\$ 2.89	9.58
\$6.96 - \$15.73	4,090	11.00	8.40
\$15.74 - \$20.63	14,883	20.46	7.38
\$20.64 - \$37.35	5,432	31.25	6.77
\$37.36 - \$128.64	2,451	84.08	5.75
\$128.65 - \$130.57	8,758	129.69	6.20
\$130.58 - \$134.81	6,450	131.45	5.19
\$134.82 - \$143.88	5,927	142.41	4.36
\$143.89 - \$185.85	7,019	172.70	3.01
\$185.86 - \$245.08	4,170	237.60	2.21
	<b>62,824</b>	<b>\$ 91.79</b>	<b>5.95</b>

As at December 31, 2017, the total unrecognized compensation expense related to stock options granted was \$2.0 million, which is expected to be recognized into expense over a period of approximately 3.9 years.

The estimated grant date fair value of stock options vested during the years ended December 31, 2017, 2016 and 2015 was \$0.6 million, zero and zero, respectively.

The aggregate intrinsic value of options exercised was calculated as the difference between the exercise price of the stock options and the fair value of the underlying common stock as of the date of exercise. The aggregate intrinsic value of options exercised for the years ended December 31, 2017, 2016 and 2015 was zero, zero and zero, respectively. At December 31, 2017, the aggregate intrinsic value of the outstanding options was zero and the aggregate intrinsic value of the exercisable options was zero.

[d] Restricted Stock Unit Awards

We grant restricted stock unit awards that generally vest and are expensed over a four year period. We also grant restricted stock unit awards that vest in conjunction with certain performance conditions to certain executive officers and key employees. At each reporting date, we are required to evaluate whether achievement of the performance conditions is probable. Compensation expense is recorded over the appropriate service period based upon our assessment of accomplishing each performance provision. For the year ended December 31, 2017, \$0.1 million of stock based compensation expense was recognized related to these awards.

The following table summarizes our restricted stock unit award activity during the year ended December 31, 2017:

	<u>Number of Shares</u>	<u>Weighted Average Grant Date Fair Value</u>
<b>Balance, January 1, 2017</b>	-	\$ -
Additions from OncoGenex Plans	10,527	41.12
Granted	205,100	2.89
Released	(5,464)	44.25
Forfeited or expired	(3)	25.37
<b>Balance, December 31, 2017</b>	<b>210,160</b>	<b>\$ 3.73</b>

As of December 31, 2017, we had approximately \$0.6 million in total unrecognized compensation expense related to our restricted stock unit awards which is to be recognized over a weighted-average period of approximately 3.75 years.

[e] Stock Warrants

The following is a summary of outstanding warrants to purchase common stock at December 31, 2017:

	Total Outstanding and Exercisable	Exercise price per Share	Expiration Date
(1) Series A Warrants issued in July 2014 financing	252,721	44.000	July 2019
(2) Series B Warrants issued in July 2014 financing	60,933	44.000	July 2019
(3) Series A-1 Warrants issued in April 2015 financing	21,748	26.400	October 2020
(4) Warrants issued in September 2017 financing	82,237	3.496	March 2023

No warrants were exercised for the year ended December 31, 2017. The Series A-1 Warrants assumed by us as part of the Arrangement and the warrants issued in the September 2017 financing are classified as equity. The Series A and Series B assumed by us as part of the Arrangement are classified as liabilities. The estimated fair value of warrants classified as liabilities is reassessed at each reporting date using the Black-Scholes pricing model.

Series A and Series B Warrant Valuation Assumptions	As of December 31,	
	2017	2016
Risk-free interest rates	1.82 %	—
Expected dividend yield	0 %	—
Expected life	1.50 years	—
Expected volatility	86 %	—

[f] 401(k) Plan

We maintain a 401(k) plan. Our securities are not offered as an investment option. Our shares are prohibited for inclusion our 401(k) plan, as well as any match of our shares to employee contributions.

[g] Loss per common share

The following table presents the computation of basic and diluted net loss attributable to common stockholders per share (in thousands, except per share and share amounts):

	Years ended December 31,		
	2017	2016	2015
<b>Numerator</b>			
Net loss	\$ (10,583)	\$ (1,234)	\$ (828)
<b>Denominator</b>			
Weighted average number of common shares outstanding	4,794,421	21,230	21,230
<b>Basic and diluted net loss per common share</b>	\$ (2.21)	\$ (58.13)	\$ (39.00)

As of December 31, 2017 a total of 1.7 million options, restricted stock units and warrants, respectively, have not been included in the calculation of potential common shares as their effect on diluted per share amounts would have been anti-dilutive.

### 13. RELATED PARTY TRANSACTIONS

We entered into a consulting agreement with Ricanto, Ltd., or Ricanto, on September 17, 2015 to provide strategic consulting and advice concerning clinical development, regulatory matters and business planning. Richard Stewart and Anthony Clarke together own 100% of Ricanto. Richard Stewart is our Chief Executive Officer, or CEO, Chairman of the Board, and a principal stockholder. Anthony Clarke is our Chief Scientific Officer, President, a board director, and a principal stockholder. We incurred consulting fees from Ricanto of \$0.1 million during the nine months ended September 30, 2016. The consulting agreement with Ricanto was terminated on August 1, 2017, immediately prior to the closing of the Arrangement. We did not incur any consulting fees from Ricanto in 2017. As of December 31, 2016, we recorded amounts payable to Ricanto of \$0.6 million in accrued liabilities on our

balance sheet. On July 18, 2017, Ricanto converted all amounts owed to it, totaling \$0.6 million, into 475 shares of our common stock, prior to the closing of the Arrangement, par value \$0.01. Pursuant to the terms of the Arrangement, each share was converted into, approximately, 359.3053 shares of OncoGenex's common stock, or 170,670 shares of common stock post-conversion. As of December 31, 2017 we had no outstanding amounts payable to Ricanto.

During 2016 we borrowed \$0.2 million in total principal amount through two notes payable dated April 20, 2016 and December 8, 2016 from Richard Stewart. The notes mature and are payable upon demand one year from the date of issuance. Interest accrues at an annual rate of 3.5%. As of December 31, 2016 the outstanding principal, included in shareholder loans with related parties, was \$0.2 million and accrued interest payable was \$3,000. On July 24, 2017, Richard Stewart converted the \$0.2 million, representing the entire amounts of principal and accrued interest owed, into 146 shares of our common stock, prior to the closing of the Arrangement, par value \$0.01. Pursuant to the terms of the Arrangement, each share was converted into, approximately, 359.3014 shares of OncoGenex's common stock, or 52,458 shares of common stock post-conversion. As of December 31, 2017 we had no outstanding principal or accrued interest with the related party.

We borrowed \$2.7 million on May 18, 2015, through a convertible promissory note payable to a Lender of ours. The note matures and is payable upon demand one year from the date of the note. Interest accrues at an annual rate of 3.5%. On September 30, 2015 the Lender converted \$2.0 million in principal into 4,500 shares of our common stock, prior to the closing of the Arrangement, par value \$0.01, and became a principal stockholder. On March 7, 2017 we borrowed \$20,000 through a note payable to the Lender. The note matures and is payable upon demand one year from the date of issuance. Interest accrues at an annual rate of 3.5%. As of December 31, 2016, the outstanding principal balance, included in shareholder loans with related parties, was \$0.7 million and had accrued interest payable of \$35,000. On July 24, 2017, the Lender converted the remaining amounts in principal and accrued interest, totaling \$0.8 million, into 586 shares of our common stock, prior to the closing of the Arrangement, par value \$0.01. Pursuant to the terms of the Arrangement, each share was converted into, approximately, 359.3052 shares of OncoGenex's common stock, or 1,827,426 shares of common stock post-conversion. As of December 31, 2017 we had no outstanding principal or accrued interest with the related party.

We entered into an employment agreement on May 11, 2015 with one of our principal stockholders to serve as our CEO. We terminated the employment agreement on December 31, 2016. From May 11, 2015 to December 31, 2016, we had not paid any salary specified in the employment agreement. Salary otherwise payable as at December 31, 2016 was \$0.7 million and was accrued on our balance sheet as Accrued compensation. On July 19, 2017 we entered into a separation agreement with our former CEO. Pursuant to the separation agreement, for settlement of all salaries owed, we paid 238 shares of our common stock, prior to the closing of the Arrangement, representing 50% of the total amounts owed as accrued compensation and paid \$0.4 million for the remaining 50%, subsequent to the closing of the Arrangement. Pursuant to the terms of the Arrangement, each share was converted into, approximately, 359.3025 shares of OncoGenex's common stock, or 85,514 shares of common stock post-conversion. As of December 31, 2017 we had no outstanding principal or accrued interest with the related party.

We entered into an employment agreement on August 17, 2015 with one of our principal stockholders to serve as our Chief Financial Officer, or CFO. We terminated the employment agreement on December 31, 2016. From August 17, 2015 to December 31, 2016, we had not paid any salary specified in the employment agreement. Salary otherwise payable as at December 31, 2016 was \$0.3 million and was accrued on our balance sheet as Accrued compensation. On July 20, 2017 we entered into a separation agreement with our former CFO. Pursuant to the separation agreement, for settlement of all salaries owed and as a separation payment, we paid 127 shares of our common stock, prior to the closing of the Arrangement, representing 50% of the total amounts owed as accrued compensation and paid \$0.2 million for the remaining 50%, subsequent to the closing of the Arrangement. Pursuant to the terms of the Arrangement, each share was converted into, approximately, 359.2992 shares of OncoGenex's common stock, or 45,631 shares of common stock post-conversion. As of December 31, 2017 we had no outstanding principal or accrued interest with the related party.

Michelle Griffin, the spouse of Scott Cormack, OncoGenex's former CEO and a current member of our board of directors, entered into a consulting agreement in 2013 with OncoGenex, which was amended thereafter. Immediately prior to the closing of the Arrangement, the consulting agreement was terminated. Pursuant to the consulting agreement, OncoGenex was obligated to pay to the consultant a termination fee of \$0.6 million, which was accrued in OncoGenex's accrued liabilities immediately prior to the closing of the Arrangement. Subsequent to the closing of the Arrangement, we paid the full amount of the termination fees and no amounts were accrued on our balance sheet as at December 31, 2017.

#### 14. COMMITMENTS AND CONTINGENCIES

The following table summarizes our contractual obligations as of December 31, 2017 (in thousands):

	Total	Less than 1 year	1-3 years	3-5 years	More than 5 years
Bothell office operating lease	\$ 95	\$ 95	\$ —	\$ —	\$ —
Vancouver office operating lease	\$ 71	\$ 71	\$ —	\$ —	\$ —
Seattle office operating lease	\$ 433	\$ 117	\$ 291	\$ 25	\$ —
Leased equipment	\$ 3	\$ 3	\$ —	\$ —	\$ —
<b>Total</b>	<b>\$ 602</b>	<b>\$ 286</b>	<b>\$ 291</b>	<b>\$ 25</b>	<b>\$ —</b>

##### Lease Arrangements

We have an operating lease agreement for office space being used in Vancouver, Canada, which expires in September 2018. Pursuant to the operating lease agreement, we have the option to terminate the lease early without penalty at any time after January 1, 2017 so long as we provide three months prior written notice to the landlord.

The future minimum annual lease payments under the Vancouver lease is \$71,000 in 2018.

In February 2015, we entered into an office lease with Grosvenor International (Atlantic Freeholds) Limited, or Landlord, pursuant to which we leased approximately 11,526 square feet located at 19820 North Creek Parkway, Bothell, Washington, 98011, commencing on February 15, 2015. The initial term of this lease will expire on April 30, 2018, with an option to extend the term for one approximately three-year period. Our monthly base rent for the premises will start at approximately \$18,000 commencing on May 1, 2015 and will increase on an annual basis up to approximately \$20,000. We received a construction allowance, for leasehold improvements that we made, of approximately \$0.1 million. We will be responsible for 17% of taxes levied upon the building during each calendar year of the term. We delivered to the Landlord a letter of credit in the amount of \$0.2 million, in accordance with the terms of the lease, which the Landlord may draw upon for base rent or other damages in the event of our default under this lease. In August 2015 we exercised our expansion option for an additional 2,245 square feet of office space, which commenced on August 1, 2015. We did not exercise our renewal option under the lease agreement and the lease will expire on April 30, 2018.

The remaining future minimum annual lease payments under the Bothell lease are as follows (in thousands):

2018	95
<b>Total</b>	<b>\$ 95</b>

Consolidated rent and operating expense relating to both the Vancouver, Canada and Bothell, Washington offices for years ended December 31, 2017, 2016 and 2015 was \$0.6 million, \$0.9 million and \$2.8 million, respectively.

On December 11, 2017, we entered into a lease, or New Lease, with 520 Pike Street, Inc., or Pike, pursuant to which we will lease approximately 3,187 square feet located at Suite 2250 at 520 Pike Tower, Seattle, Washington, 98101, commencing on March 1, 2018, or such later date on which Pike delivers exclusive possession of the premises to us; and further provided, that if such delivery does not occur by May 1, 2018, we have the right to terminate the agreement upon provision of notice. The initial term of the New Lease will expire at the end of the month on the third anniversary of the New Lease.

Our monthly base rent for the premises will start at approximately \$11,685 commencing on March 1, 2018 and will increase on an annual basis up to approximately \$12,397. In addition, we will also be obligated to pay a security deposit to Pike in the amount of \$37,192, subject to periodic reductions in the amount of \$12,397 after each of the first and second anniversaries of the New Lease, which Pike may retain for base rent or other damages, in the event of our default under the New Lease.

We may not assign or sublet all or any portion of the premises without the consent of Pike, and Pike shall be entitled to 50% of any profit which we may receive above and beyond the rental price of the New Lease. Upon receipt of notice of our intent to assign or sublease any portion of the leased premises, Pike may terminate that portion of the premises within 30 days, and provided, that if such portion constitutes 50% or more of the total square footage of the premises, Pike may terminate the New Lease in its entirety.

The future minimum annual lease payments under the New Lease are as follows (in thousands):

2018	117
2019	144
2020	148
2021	25
<b>Total</b>	<b>\$ 434</b>

#### *Guarantees and Indemnifications*

We indemnify our officers, directors and certain consultants for certain events or occurrences, subject to certain limits, while the officer or director is or was serving at its request in such capacity. The term of the indemnification period is equal to the officer's or director's lifetime.

The maximum amount of potential future indemnification is unlimited; however, we have obtained director and officer insurance that limits our exposure and may enable us to recover a portion of any future amounts paid. We believe that the fair value of these indemnification obligations is minimal. Accordingly, we have not recognized any liabilities relating to these obligations as of December 31, 2017.

We have certain agreements with certain organizations with which it does business that contain indemnification provisions pursuant to which it typically agrees to indemnify the party against certain types of third-party claims. We accrue for known indemnification issues when a loss is probable and can be reasonably estimated. There were no accruals for or expenses related to indemnification issues for any period presented.

#### **Material Changes in Financial Condition**

(in thousands)	December 31,	
	2017	2016
Total Assets	\$ 9,892	\$ 3,807
Total Liabilities	2,013	3,197
Total Equity	7,879	610

The increase in assets as at December 31, 2017 as compared to December 31, 2016 primarily relates to increase in cash and cash equivalents following the Arrangement. The decrease in liabilities as at December 31, 2017 compared to December 31, 2016 was primarily due to lower stockholder loans with related parties and lower accrued compensation

#### **15. SEVERANCE CHARGES**

As a requirement for the closing of the Arrangement, OncoGenex terminated the employment of one senior executive. Severance payable at the date of the transaction was \$1.2 million and has been accounted for as part of the purchase price allocation (Note 4—Intangibles). The severance payable was settled following the completion of the Arrangement and no amounts were owing as at December 31, 2017.



## 16. QUARTERLY FINANCIAL INFORMATION (UNAUDITED)

The following table summarizes the unaudited statements of operations for each quarter of 2017 and 2016 (in thousands, except per share amounts):

	March 31	June 30	September 30	December 31
<b>2017</b>				
Research and development	61	62	825	2,153
General and administrative	260	96	1,546	1,629
Total operating expenses	321	158	2,371	3,782
Other income	(8)	(11)	(7,025)	42
Recovery of deferred income taxes	124	—	2,927	—
Net loss	(205)	(169)	(6,469)	(3,740)
Basic and diluted net loss per share	\$ (9.66)	\$ (7.96)	\$ (0.90)	\$ (0.32)
<b>2016</b>				
Research and development	65	72	69	80
General and administrative	289	281	329	529
Total operating expenses	354	353	398	609
Other income	(6)	(7)	(7)	(4)
Recovery of deferred income taxes	118	122	137	127
Net loss	(242)	(238)	(268)	(486)
Basic and diluted net loss per share	\$ (11.40)	\$ (11.21)	\$ (12.62)	\$ (22.89)

## 17. SUBSEQUENT EVENTS

From January 1, 2018 through March 1, 2018 we offered and sold 800,000 shares of our common stock pursuant to our Purchase Agreement with LPC. These sales resulted in gross proceeds to us of approximately \$1.3 million. As of March 1, 2018 shares of our common stock having an aggregate value of approximately \$7.6 million remained available for sale under this offering program

**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 material information required to be disclosed in our periodic reports filed or submitted under the Exchange Act, is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms. Our disclosure controls and procedures are also designed to ensure that information required to be disclosed in the reports we file or submit under the Exchange Act is accumulated and communicated to our management, including our principal executive officer and principal financial officer, as appropriate, to allow timely decisions regarding required disclosure.

We carried out an evaluation, under the supervision and with the participation of our management, including the principal executive officer and the principal financial officer, of the effectiveness of the design and operation of the disclosure controls and procedures, as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act. Based on that evaluation, our principal executive officer and principal financial officer concluded that our disclosure controls and procedures were effective as of the end of the period covered by this Annual Report on Form 10-K.

*Changes in Internal Control Over Financial Reporting*

We have not made any changes to our internal control over financial reporting (as defined in Rule 13a-15(f) and 15d-15(f) under the Exchange Act) during the quarter ended December 31, 2017 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

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

Our management is responsible for establishing and maintaining adequate internal control over our financial reporting, as defined in Rule 13a-15(f) under the Exchange Act. Our internal control over financial reporting is a process designed under the supervision of our principal executive and principal financial officers to provide reasonable assurance regarding the reliability of financial reporting and the preparation of our financial statements for external reporting purposes in accordance with U.S. generally accepted accounting principles.

As of December 31, 2017, management assessed the effectiveness of our internal control over financial reporting based on the framework established in "Internal Control—Integrated Framework" issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) (2013 Framework). Based on this evaluation, management has determined that our internal control over financial reporting was effective as of December 31, 2017.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

**ITEM 9B. OTHER INFORMATION**

Not applicable.

### PART III

#### ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

The information required by this Item is set forth in our 2018 Proxy Statement to be filed with the SEC within 120 days of December 31, 2017, and is incorporated by reference into this Annual Report on Form 10-K by reference.

#### ITEM 11. EXECUTIVE COMPENSATION

The information required by this Item is set forth in our 2018 Proxy Statement to be filed with the SEC within 120 days of December 31, 2017, and is incorporated by reference into this Annual Report on Form 10-K by reference.

#### ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

The following table sets forth certain information regarding our equity compensation plans as of December 31, 2017:

	(a)		(b)		(c)
Plan category	Number of securities to be issued upon exercise of outstanding options, restricted stock units, warrants and rights		Weighted-average exercise price of outstanding options, warrants and rights		Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a))
Equity compensation plans approved by security holders	1,632,026	(1) \$	7.28	(1)	2,002,032 (1)
Equity compensation plans not approved by security holders <sup>(2)</sup>	—		—		—
Total	1,632,026	\$	7.28		2,002,032

- (1) As of December 31, 2017, we maintained the following equity compensation plans, which were approved by security holders: (a) the 2000 Stock Incentive Plan, (b) the 2007 Performance Incentive Plan, (c) the 2010 Performance Incentive Plan and (d) 2017 Equity Incentive Plan.

#### ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

The information required by this Item is set forth in our 2018 Proxy Statement to be filed with the SEC within 120 days of December 31, 2017, and is incorporated by reference into this Annual Report on Form 10-K by reference.

#### ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES

The information required by this Item is set forth in our 2018 Proxy Statement to be filed with the SEC within 120 days of December 31, 2017, and is incorporated by reference into this Annual Report on Form 10-K by reference.

PART IV

ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

(1) Financial Statements

<a href="#">Report of Independent Registered Public Accounting Firm</a>	53
<a href="#">Consolidated Balance Sheets as of December 31, 2017 and 2016</a>	54
<a href="#">Consolidated Statements of Loss for the years ended December 31, 2017, 2016, and 2015</a>	55
<a href="#">Consolidated Statements of Stockholders' Equity for the years ended December 31, 2017, 2016, and 2015</a>	56
<a href="#">Consolidated Statements of Cash Flows for the years ended December 31, 2017, 2016, and 2015</a>	57
<a href="#">Notes to Consolidated Financial Statements</a>	58

(2) All schedules are omitted because they are not required or the required information is included in the consolidated financial statements or notes thereto.

(3) Exhibits

Exhibit Number	Description	Incorporated by Reference			Filed/ Furnished Herewith
		Form	File No.	Exhibit	
2.1	<a href="#">Agreement and Plan of Merger and Reorganization, dated as of January 5, 2017, by and among OncoGenex Pharmaceuticals, Inc., Ash Acquisition Sub, Inc., Ash Acquisition Sub 2, Inc. and Achieve Life Science, Inc. †</a>	8-K	033-80623	2.1	January 5, 2017
2.2	<a href="#">Amendment No. 2 to Agreement and Plan of Merger and Reorganization, dated July 19, 2017, by and among Achieve Life Sciences, Inc., Ash Acquisition Sub, Inc., Ash Acquisition Sub 2, Inc., and Achieve Life Science, Inc.</a>	8-K	033-80623	10.1	July 19, 2017
3.1	<a href="#">Second Amended and Restated Certificate of Incorporation filed on May 24, 2013</a>	8-K	033-80623	3.1	May 29, 2013
3.2	<a href="#">Certificate of Amendment to Amended and Restated Certificate of Incorporation filed on May 21, 2015</a>	8-K	033-80623	3.1	May 22, 2015
3.3	<a href="#">Certificate of Amendment (Reverse Stock Split) to Second Amended and Restated Certificate of Incorporation filed on August 1, 2017</a>	8-K	033-80623	3.1	August 2, 2017
3.4	<a href="#">Certificate of Amendment (Name Change) to Second Amended and Restated Certificate of Incorporation filed on August 1, 2017</a>	8-K	033-80623	3.2	August 2, 2017
3.5	<a href="#">Certificate of Amendment (Elimination of Cumulative Voting) to Second Amended and Restated Certificate of Incorporation filed on October 31, 2017</a>	8-K	033-80623	3.1	November 1, 2017
3.6	<a href="#">Sixth Amended and Restated Bylaws</a>	8-K	033-80623	3.1	January 5, 2017
4.1	<a href="#">Specimen Certificate of Common Stock</a>	10-Q	000-21243	4.1	November 10, 2008
4.2	<a href="#">Form of Series A Warrant</a>	8-K	033-80623	4.1	June 27, 2014
4.3	<a href="#">Form of Series A-1 Warrant</a>	8-K	033-80623	4.1	April 30, 2015

Exhibit Number	Description	Incorporated by Reference				Filed/ Furnished Herewith
		Form	File No.	Exhibit	Filing Date	
4.4	<a href="#">Form of Pre-Funded Series B Warrant</a>	8-K	033-80623	4.2	June 27, 2014	
4.5	<a href="#">Form of Series B Warrant</a>	8-K	033-80623	4.3	June 27, 2014	
4.6	<a href="#">Form of Warrant (LPC)</a>	8-K	033-80623	4.1	September 14, 2017	
10.1	<a href="#">Sonus Pharmaceuticals, Inc. 2007 Performance Incentive Plan (the "2007 Plan")††</a>	DEF 14A	000-21243	Appendix A	April 3, 2007	
10.2	<a href="#">Form of Sonus Pharmaceuticals, Inc. Stock Option Agreement (pertaining to the 2007 Plan)††</a>	10-Q	000-21243	10.1	November 9, 2007	
10.3	<a href="#">OncoGenex Technologies Inc. Amended and Restated Stock Option Plan††</a>	F-1	333-139293	10.1	December 13, 2006	
10.4	<a href="#">Form of OncoGenex Pharmaceuticals, Inc. 2010 Stock Option Agreement††</a>	8-K	033-80623	10.1	June 14, 2010	
10.5	<a href="#">Form of OncoGenex Pharmaceuticals, Inc. 2010 Restricted Stock Unit Agreement††</a>	10-Q	033-80623	10.2	November 3, 2011	
10.6	<a href="#">OncoGenex Pharmaceuticals, Inc. 2010 Performance Incentive Plan, as amended and restated††</a>	DEF 14A	033-80623	Appendix A	April 16, 2015	
10.7a	<a href="#">Achieve Life Sciences 2017 Equity Incentive Plan††</a>	DEF 14A	033-80623	Appendix A	September 21, 2017	
10.7b	<a href="#">Form of Achieve Life Sciences Stock Option Agreement††</a>					X
10.7c	<a href="#">Form of Achieve Life Sciences Restricted Stock Unit Agreement††</a>					X
10.8	<a href="#">Achieve Life Sciences 2017 Employee Stock Purchase Plan††</a>	DEF 14A	033-80623	Appendix B	September 21, 2017	
10.9	Form of Indemnification Agreement for Officers and Directors of the Company†† (p)	S-1	33-96112	10.19	September 25, 1995	
10.10	<a href="#">Form of Indemnification Agreement between OncoGenex Technologies Inc. and Cindy Jacobs††</a>	F-1	333-139293	10.7	December 13, 2006	
10.11	<a href="#">Employment Agreement between the Company and Cindy Jacobs dated as of November 3, 2009††</a>	10-Q	033-80623	10.27	November 5, 2009	
10.12	<a href="#">Employment Agreement between OncoGenex Pharmaceuticals, Inc. and John Bencich††</a>	10-Q	033-80623	10.1	November 10, 2016	
10.13	<a href="#">Exclusive License Agreement, by and between Sopharma Joint Stock Company and Extab Corporation, dated May 26, 2009*</a>	S-4/A	333-216961	10.21	May 3, 2017	

Exhibit Number	Description	Incorporated by Reference				Filed/ Furnished Herewith
		Form	File No.	Exhibit	Filing Date	
10.14	<a href="#">Variation of Contract, by and between Sopharma AD and Extab Corporation, dated May 14, 2015*</a>	S-4/A	333-216961	10.22	May 3, 2017	
10.15	<a href="#">Commercial Agreement on Supply of Pharmaceutical Products, by and between Sopharma AD and Extab Corporation, dated February 1, 2010*</a>	S-4/A	333-216961	10.23	May 3, 2017	
10.16	<a href="#">Variation of Contract, by and between Sopharma AD and Extab Corporation, dated May 14, 2015*</a>	S-4/A	333-216961	10.24	May 3, 2017	
10.17	<a href="#">Technical and Quality Agreement, by and between Sopharma AD and Extab Corporation, dated May 14, 2015*</a>	S-4/A	333-216961	10.25	May 3, 2017	
10.18	<a href="#">License of Technology, by and between University of Bristol and Achieve Life Science, Inc., dated July 13, 2016*</a>	S-4/A	333-216961	10.27	May 3, 2017	
10.19	<a href="#">Office Lease by and between Grosvenor International (Atlantic Freeholds) Limited and OncoGenex Pharmaceuticals, Inc., dated February 11, 2015</a>	8-K	033-80623	10.1	February 12, 2015	
10.20	<a href="#">Lease by and between 520 Pike Street, Inc. and Achieve Life Sciences, Inc., dated December 11, 2018</a>					X
10.21	<a href="#">Purchase Agreement, by and between Achieve Life Sciences, Inc. and Lincoln Park Capital Fund, LLC, dated as of September 14, 2017</a>	8-K	033-80623	10.1	September 14, 2017	
10.22	<a href="#">Amended and Restated Supply Agreement, dated July 28, 2017, by and between Achieve Life Science, Inc., and Sopharma AD*</a>	10-Q	033-80623	10.1	November 9, 2017	
21.1	<a href="#">Subsidiaries of the Registrant</a>					X
23.1	<a href="#">Consent of PriceWaterhouseCoopers LLP</a>					X
24.1	<a href="#">Power of Attorney (included on the signature page hereto)</a>					X
31.1	<a href="#">Certification of Chief Executive pursuant to Rule 13a-14(a) or 15d-14(a) of the Securities Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002</a>					X
31.2	<a href="#">Certification of Chief Financial Officer pursuant to Rule 13a-14(a) or 15d-14(a) of the Securities Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002</a>					X
32.1	<a href="#">Certification of Chief Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002**</a>					X

Exhibit Number	Description	Incorporated by Reference				Filed/ Furnished Herewith
		Form	File No.	Exhibit	Filing Date	
32.2	<a href="#">Certification of Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002**</a>					X
101.INS	XBRL Instance Document					X
101.SCH	XBRL Taxonomy Extension Schema Document					X
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document					X
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document					X
101.LAB	XBRL Taxonomy Extension Label Linkbase Document					X
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document					X

† Schedules and similar attachments to the Merger Agreement have been omitted pursuant to Item 601(b)(2) of Regulation S-K. The Company will furnish supplementally a copy of any omitted schedule or similar attachment to the SEC upon request.

†† Indicates management contract or compensatory plan or arrangement.

\* Confidential portions of this exhibit have been omitted and filed separately with the Commission pursuant to an application for Confidential Treatment under Rule 24b-2 promulgated under the Securities Exchange Act of 1934, as amended.

\*\* The certifications attached as Exhibits 32.1 and 32.2 accompany to this Annual Report on Form 10-K pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, and shall not be deemed filed for purposes of Section 18 of the Securities Exchange Act of 1934, as amended.

## 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.

ACHIEVE LIFE SCIENCES, INC.  
(Registrant)

Date: March 1, 2018

By: /s/ RICHARD STEWART  
Richard Stewart  
Chairman and Chief Executive Officer

### Power of Attorney

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Scott Cormack and John Bencich, jointly and severally, as such person's attorneys-in-fact, each with the power of substitution, for such person in any and all capacities, to sign any amendments to this Annual Report on Form 10-K, and to file the same, with exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, hereby ratifying and confirming all that each of said attorneys-in-fact, or his substitute or substitutes, may do or cause to be done by virtue hereof.

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.

By: /s/ RICHARD STEWART Chairman and Chief Executive Officer Date: March 1, 2018  
Richard Stewart

By: /s/ JOHN BENCICH Executive Vice President, Chief Financial Officer and Chief Operating Officer Date: March 1, 2018  
John Bencich

By: /s/ SCOTT CORMACK Director Date: March 1, 2018  
Scott Cormack

By: /s/ ANTHONY CLARKE Director Date: March 1, 2018  
Anthony Clarke

By: /s/ MARTIN MATTINGLY Director Date: March 1, 2018  
Martin Mattingly

By: /s/ H. STEWART PARKER Director Date: March 1, 2018  
H. Stewart Parker

By: /s/ JAY MOYES Director Date: March 1, 2018  
Jay Moyes

By: /s/ DONALD JOSEPH Director Date: March 1, 2018  
Donald Joseph



**NOTICE OF STOCK OPTION GRANT  
(UNITED STATES, CANADA, UNITED KINGDOM)**

**ACHIEVE LIFE SCIENCES, INC.  
2017 EQUITY INCENTIVE PLAN  
GRANT NUMBER:**

Unless otherwise defined herein, the terms defined in the Achieve Life Sciences, Inc. (the "*Company*"), 2017 Equity Incentive Plan (the "*Plan*") shall have the same meanings in this Notice of Stock Option Grant (the "*Notice of Grant*") and the attached Stock Option Agreement, including any special terms and conditions for your country set forth in the appendix attached thereto (collectively, the "*Option Agreement*"). You have been granted an Option to purchase shares of Common Stock of the Company under the Plan subject to the terms and conditions of the Plan, this Notice of Grant and the Option Agreement.

**Name:**

**Address:**

**Number of Shares:**

**Exercise Price Per Share:**

**Date of Grant:**

**Vesting Commencement Date:**

**Type of Option:**                                 Non-Qualified Stock Option  
    Incentive Stock Option

**Expiration Date:** \_\_\_\_\_; this Option expires earlier if your Service terminates earlier, as described in the Option Agreement.

**Vesting Schedule:**                            **[Sample vesting language:]** [This Option becomes exercisable with respect to the first 25% of the Shares subject to this Option when you complete 12 months of Service from the Vesting Commencement Date. Thereafter, this Option becomes exercisable with respect to an additional 1/48<sup>th</sup> of the Shares subject to this Option when you complete each month of Service.] [Note: actual vesting language to match vesting schedule approved by the Board or Committee]

**Additional Terms:**                            If your address set forth above is an address located outside the United States, the additional terms and conditions set forth on an Appendix attached hereto (as executed by the Company) are applicable and are incorporated herein by reference. (No Appendix need be attached if your address set forth above is an address located within the United States.)

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*(Signature page follows.)*

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You understand that your employment or consulting relationship with the Company or a Parent, Subsidiary or Affiliate is for an unspecified duration, can be terminated at any time, and that nothing in this Notice of Grant, the Option Agreement or the Plan changes the nature of that relationship. By accepting this Option, you and the Company agree that this Option is granted under and governed by the terms and conditions of the Plan, this Notice of Grant and the Option Agreement. By accepting this Option, you consent to the electronic delivery and acceptance as further set forth in the Option Agreement.

**PARTICIPANT**

**ACHIEVE LIFE SCIENCES, INC.**

By:  
Name:

By:  
Name:  
Title:

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**STOCK OPTION AGREEMENT  
ACHIEVE LIFE SCIENCES, INC.  
2017 EQUITY INCENTIVE PLAN**

You have been granted an Option by Achieve Life Sciences, Inc. (the “*Company*”), under the 2017 Equity Incentive Plan (the “*Plan*”) to purchase Shares (the “*Option*”), subject to the terms, restrictions and conditions of the Plan, the Notice of Stock Option Grant (the “*Notice of Grant*”) and this Stock Option Agreement, including any special terms and conditions for your country set forth in the appendix attached hereto (the “*Appendix*”) (collectively, the “*Agreement*”).

**1. Grant of Option.** You have been granted the Option for the number of Shares set forth in the Notice of Grant at the Exercise Price per Share set forth in the Notice of Grant. In the event of a conflict between the terms and conditions of the Plan and the terms and conditions of this Agreement, the terms and conditions of the Plan shall prevail.

If designated in the Notice of Grant as an Incentive Stock Option (“*ISO*”), this Option is intended to qualify as an Incentive Stock Option under Section 422 of the Code. However, if this Option is intended to be an ISO, to the extent that it exceeds the \$100,000 limit under Code Section 422(d), it shall be treated as a Nonqualified Stock Option (“*NSO*”).

**2. Termination.**

(a) General Rule. If your Service terminates for any reason except death or Disability, and other than for Cause, then this Option will expire at the close of business at Company headquarters on the date three months after your termination of Service (subject to the expiration detailed in Section 6). If your Service is terminated for Cause, this Option will expire upon the date of such termination.

You acknowledge and agree that the vesting schedule set forth in the Notice of Grant may change prospectively in the event that your service status changes between full and part-time status in accordance with Company policies relating to work schedules and vesting of awards. You acknowledge that the vesting of the Shares pursuant to this Agreement is earned only by continuing Service.

(b) Death; Disability. If you die before your Service terminates (or you die within three months of your termination of Service other than for Cause), then this Option will expire at the close of business at Company headquarters on the date 12 months after the date of death (subject to the expiration detailed in Section 6). If your Service terminates because of your Disability, then this Option will expire at the close of business at Company headquarters on the date 12 months after your termination date (subject to the expiration detailed in Section 6).

(c) Termination Date. For purposes of this Option, your Service will be considered terminated as of the date you are no longer actively providing services to the Company or a Parent, Subsidiary or Affiliate (regardless of the reason for such termination and whether or not later found to be invalid or in breach of labor laws in the jurisdiction where you are employed or engaged or the terms of your employment or consulting agreement, if any), and your period of

Service will not include any contractual notice period or any period of “garden leave” or similar period mandated under labor laws in the jurisdiction where you are employed or engaged or the terms of your employment or consulting agreement, if any. The Committee shall have the exclusive discretion to determine when you are no longer actively providing services for purposes of this Option (including whether you may still be considered to be providing services while on a leave of absence).

(d) No Notice. You are responsible for keeping track of these exercise periods following your termination of Service for any reason. The Company will not provide further notice of such periods. In no event shall this Option be exercised later than the Expiration Date set forth in the Notice of Grant.

**3. Exercise of Option**

(a) Right to Exercise. This Option is exercisable during its term in accordance with the vesting schedule set forth in the Notice of Grant and the applicable provisions of the Plan and this Agreement. In the event of your death, Disability, or other cessation of Service, the exercisability of the Option is governed by the applicable provisions of the Plan, the Notice of Grant and this Agreement. This Option may not be exercised for a fraction of a Share.

(b) Method of Exercise. This Option is exercisable by delivery of an exercise notice in a form specified by the Company (the “*Exercise Notice*”), which shall state the election to exercise the Option, the number of Shares in respect of which the Option is being exercised (the “*Exercised Shares*”), and such other representations and agreements as may be required by the Company pursuant to the provisions of the Plan. The Exercise Notice shall be delivered in person, by mail, via electronic mail or facsimile or by other authorized method to the Secretary of the Company or other person designated by the Company. The Exercise Notice shall be accompanied by payment of the aggregate Exercise Price as to all Exercised Shares. This Option shall be deemed to be exercised upon receipt by the Company of a fully executed Exercise Notice accompanied by the aggregate Exercise Price and any applicable withholding of Tax-Related Items as detailed in Section 8 below.

(c) Exercise by Another. If another person wants to exercise this Option after it has been transferred to him or her in compliance with this Agreement, that person must prove to the Company’s satisfaction that he or she is entitled to exercise this Option. That person must also complete the proper Exercise Notice form (as described above) and pay the Exercise Price (as described below) and any applicable withholding of Tax-Related Items as described below.

**4. Method of Payment**. Payment of the aggregate Exercise Price shall be by any of the following, or a combination thereof, at your election:

(a) your personal check, wire transfer, or a cashier’s check;

(b) for U.S. taxpayers only: certificates for shares of Company stock that you own, along with any forms needed to effect a transfer of those shares to the Company; the value of the shares, determined as of the effective date of the Option exercise, will be applied to the Exercise Price. Instead of surrendering shares of Company stock, you may attest to the ownership of those shares on a form provided by the Company and have the same number of shares subtracted

from the Exercised Shares issued to you. However, you may not surrender, or attest to the ownership of, shares of Company stock in payment of the Exercise Price of your Option if your action would cause the Company to recognize compensation expense (or additional compensation expense) with respect to this Option for financial reporting purposes;

(c) cashless exercise through irrevocable directions to a securities broker approved by the Company to sell all or part of the Exercised Shares and to deliver to the Company from the sale proceeds an amount sufficient to pay the Exercise Price and any withholding of Tax-Related Items. The balance of the sale proceeds, if any, will be delivered to you. The directions must be given by signing a special notice of exercise form provided by the Company; or

(d) other method authorized by the Company.

**5. Non-Transferability of Option.** In general, except as provided below, only you may exercise this Option prior to your death. You may not transfer or assign this Option, except as provided below. For instance, you may not sell this Option or use it as security for a loan. If you attempt to do any of these things, this Option will immediately become invalid.

However, if you are a U.S. taxpayer, you may dispose of this Option in your will or in a beneficiary designation. If you are a U.S. taxpayer and this Option is designated as a NSO in the Notice of Grant, then the Committee may, in its sole discretion, allow you to transfer this Option as a gift to one or more family members. For purposes of this Agreement, “family member” means a child, stepchild, grandchild, parent, stepparent, grandparent, spouse, former spouse, sibling, niece, nephew, mother-in-law, father-in-law, son-in-law, daughter-in-law, brother-in-law or sister-in-law (including adoptive relationships), any individual sharing your household (other than a tenant or employee), a trust in which one or more of these individuals have more than 50% of the beneficial interest, a foundation in which you or one or more of these persons control the management of assets, and any entity in which you or one or more of these persons own more than 50% of the voting interest. In addition, if you are a U.S. taxpayer and this Option is designated as a NSO in the Notice of Grant, then the Committee may, in its sole discretion, allow you to transfer this Option to your spouse or former spouse pursuant to a domestic relations order in settlement of marital property rights. The Committee will allow you to transfer this Option only if both you and the transferee(s) execute the forms prescribed by the Committee, which include the consent of the transferee(s) to be bound by this Agreement.

This Option may not be transferred in any manner other than by will or by the laws of descent or distribution or court order and may be exercised during the lifetime of you only by you, your guardian, or legal representative, as permitted in the Plan and applicable local laws. The terms of the Plan and this Agreement shall be binding upon the executors, administrators, heirs, successors and assigns of you.

**6. Term of Option.** This Option shall in any event expire on the expiration date set forth in the Notice of Grant, which date is ten years after the grant date (five years after the grant date if this Option is designated as an ISO in the Notice of Grant and Section 5.3 of the Plan applies).

7. **Tax Consequences.** You should consult a tax adviser for tax consequences relating to this Option in the jurisdiction in which you are subject to tax. **YOU SHOULD CONSULT A TAX ADVISER BEFORE EXERCISING THIS OPTION OR DISPOSING OF THE SHARES.**

(a) **Exercising the Option.** You will not be allowed to exercise this Option unless you make arrangements acceptable to the Company to pay any withholding of Tax-Related Items.

(b) **Notice of Disqualifying Disposition of ISO Shares.** If you sell or otherwise dispose of any of the Shares acquired pursuant to an ISO on or before the later of (i) two years after the grant date, or (ii) one year after the exercise date, you shall immediately notify the Company in writing of such disposition. You agree that you may be subject to income tax withholding by the Company on the compensation income recognized from such early disposition of ISO Shares by payment in cash or out of the current compensation paid to you.

8. **Responsibility for Taxes.** Regardless of any action the Company or, if different, your actual employer (the “*Employer*”) takes with respect to any or all income tax, social insurance contributions, payroll tax, fringe benefits tax, payment on account or other tax-related withholding (“*Tax-Related Items*”), you acknowledge that the ultimate liability for all Tax-Related Items legally due by you is and remains your responsibility and that the Company and/or the Employer (1) make no representations or undertakings regarding the treatment of any Tax-Related Items in connection with any aspect of this Option, including the grant, vesting or exercise of this Option, the subsequent sale of Shares acquired pursuant to such exercise and the receipt of any dividends; and (2) do not commit to structure the terms of the grant or any aspect of this Option to reduce or eliminate your liability for Tax-Related Items or achieve any particular tax result. You acknowledge that if you are subject to Tax-Related Items in more than one jurisdiction, the Company and/or the Employer may be required to withhold or account for Tax-Related Items in more than one jurisdiction.

Prior to exercise of the Option, you shall pay or make adequate arrangements satisfactory to the Company and/or the Employer to satisfy all Tax-Related Item withholding and payment on account obligations of the Company and/or the Employer. In this regard, you authorize the Company and/or the Employer, and their respective agents, at their discretion, to withhold all applicable Tax-Related Items legally payable by you from your wages or other cash compensation paid to you by the Company and/or the Employer. With the Company’s consent, these arrangements may also include, if permissible under local law, (a) withholding Shares that otherwise would be issued to you when you exercise this Option, provided that the Company only withholds the amount of Shares necessary to satisfy the minimum statutory withholding amount, (b) having the Company withhold taxes from the proceeds of the sale of the Shares, either through a voluntary sale or through a mandatory sale arranged by the Company (on your behalf and pursuant to this authorization), (c) your payment of a cash amount, or (d) any other arrangement approved by the Company; all under such rules as may be established by the Committee and in compliance with the Company’s Insider Trading Policy and 10b5-1 Trading Plan Policy, if applicable; provided, however, that if you are a Section 16 officer of the Company under the Exchange Act, then the Committee (as constituted in accordance with Rule 16b-3 under the Exchange Act) shall establish the method of withholding from alternatives (a)-(d) above, and the Committee shall establish the method prior to the taxable or withholding event. The Fair Market

Value of these Shares, determined as of the effective date of the Option exercise, will be applied as a credit against the Tax-Related Items.

Depending on the withholding method, the Company may withhold or account for Tax-Related Items by considering applicable minimum statutory withholding rates or other applicable withholding rates, including maximum applicable rates, in which case you will receive a refund of any over-withheld amount in cash and will have no entitlement to the Shares equivalent. If the obligation for Tax-Related Items is satisfied by withholding in Shares, for tax purposes, you are deemed to have been issued the full number of Shares subject to the vested RSUs, notwithstanding that a number of the Shares are held back solely for the purpose of paying the Tax-Related Items.

Finally, you agree to pay to the Company or the Employer any amount of Tax-Related Items that the Company or the Employer may be required to withhold as a result of your participation in the Plan or your purchase of Shares that cannot be satisfied by the means previously described. You acknowledge that the Company has no obligation to deliver Shares to you until you have satisfied the obligations in connection with the Tax-Related Items as described in this Section.

**9. Nature of Grant.** In accepting this Option, you acknowledge, understand and agree that:

- (a) the Plan is established voluntarily by the Company, it is discretionary in nature and it may be modified, suspended or terminated by the Company at any time, to the extent permitted by the Plan;
- (b) the grant of this Option is voluntary and occasional and does not create any contractual or other right to receive future grants of stock options, or benefits in lieu of stock options, even if stock options have been granted in the past;
- (c) all decisions with respect to future stock options or other grants, if any, will be at the sole discretion of the Company;
- (d) you are voluntarily participating in the Plan;
- (e) this Option and any Shares acquired under the Plan, and the income and value of same, are not intended to replace any pension rights or compensation;
- (f) this Option and any Shares acquired under the Plan, and the income and value of same, are not part of normal or expected compensation for purpose of calculating any severance, resignation, termination, redundancy, dismissal, end-of-service payments, bonuses, long-service awards, pension or retirement benefits or payments or welfare benefits or similar payments;
- (g) unless otherwise agreed with the Company, this Option and any Shares acquired under the Plan, and the income and value of same, are not granted as consideration for, or in connection with, any Service you may provide as a director of any Parent, Subsidiary or Affiliate;



(h) the future value of the Shares underlying this Option is unknown, indeterminable, and cannot be predicted with certainty;

(i) if the underlying Shares do not increase in value, this Option will have no value;

(j) if you exercise this Option and acquire Shares, the value of such Shares may increase or decrease in value, even below the Exercise Price;

(k) no claim or entitlement to compensation or damages shall arise from forfeiture of this Option resulting from the termination of your Service (for any reason whatsoever, whether or not later found to be invalid or in breach of labor laws in the jurisdiction where you are employed or engaged or the terms of your employment or service agreement, if any), and in consideration of the grant of this Option to which you are otherwise not entitled, you irrevocably agree never to institute any claim against the Company, the Employer or any Parent, Subsidiary or Affiliate, waive your ability, if any, to bring any such claim, and release the Company, the Employer or any Parent, Subsidiary or Affiliate from any such claim; if, notwithstanding the foregoing, any such claim is allowed by a court of competent jurisdiction, then, by participating in the Plan, you shall be deemed irrevocably to have agreed not to pursue such claim and agree to execute any and all documents necessary to request dismissal or withdrawal of such claim; and

(l) if you are providing Service outside the United States, neither the Employer, the Company nor any Parent, Subsidiary or Affiliate shall be liable for any foreign exchange rate fluctuation between your local currency and the United States Dollar that may affect the value of this Option or of any amounts due to you pursuant to the exercise of this Option or the subsequent sale of any Shares acquired upon exercise.

**10. Data Privacy.** You hereby explicitly and unambiguously consent to the collection, use and transfer, in electronic or other form, of your personal data as described in this Agreement and any other Option grant materials by and among, as applicable, the Employer, the Company and any Parent, Subsidiary or Affiliate for the exclusive purpose of implementing, administering and managing your participation in the Plan.

You understand that the Company and the Employer may hold certain personal information about you, including, but not limited to, your name, home address and telephone number, date of birth, social insurance number or other identification number, salary, nationality, job title, any shares or directorships held in the Company, details of all stock options or any other entitlement to shares awarded, canceled, exercised, vested, unvested or outstanding in your favor ("**Data**"), for the exclusive purpose of implementing, administering and managing the Plan.

You understand that Data will be transferred to third parties in connection with the implementation, administration and management of the Plan. You understand that the recipients of Data may be located in the United States or elsewhere, and that the recipient's country (e.g., the United States) may have different data privacy laws and protections than your country. You understand that if you reside outside the United States, he or she may request a list with the names and addresses of any potential recipients of Data by contacting your local human resources representative. You authorize the Company and any other possible recipients which may assist

the Company (presently or in the future) with implementing, administering and managing the Plan to receive, possess, use, retain and transfer Data, in electronic or other form, for the sole purposes of implementing, administering and managing your participation in the Plan. You understand that Data will be held only as long as is necessary to implement, administer and manage your participation in the Plan. You understands that if you reside outside the United States, you may, at any time, view Data, request additional information about the storage and processing of Data, require any necessary amendments to Data or refuse or withdraw the consents herein, in any case without cost, by contacting in writing your local human resources representative. Further, you understand that you are providing the consents herein on a purely voluntary basis. If you do not consent, or if you later seek to revoke your consent, your Service status and career with the Employer will not be adversely affected; the only consequence of refusing or withdrawing your consent is that Company would not be able to grant you stock options or other equity awards or administer or maintain such awards. Therefore, you understand that refusing or withdrawing your consent may affect your ability to participate in the Plan. For more information on the consequences of your refusal to consent or withdrawal of consent, you understand that you may contact your local human resources representative.

**11. Acknowledgement.** The Company and you agree that this Option is granted under and governed by the Notice of Grant, this Agreement and the provisions of the Plan (incorporated herein by reference). You: (i) acknowledge receipt of a copy of the Plan prospectus, (ii) represent that you have carefully read and are familiar with the provisions in the grant documents, and (iii) hereby accept this Option subject to all of the terms and conditions set forth in this Agreement and those set forth in the Plan and the Notice of Grant. You hereby agree to accept as binding, conclusive and final all decisions or interpretations of the Committee upon any questions relating to the Plan, the Notice of Grant and this Agreement.

**12. Consent to Electronic Delivery and Acceptance of All Plan Documents and Disclosures.** By your acceptance of this Option, you consent to the electronic delivery of the Notice of Grant, this Agreement, account statements, Plan prospectuses required by the SEC, U.S. financial reports of the Company, and all other documents that the Company is required to deliver to its stockholders (including, without limitation, annual reports and proxy statements) or other communications or information related to this Option. Electronic delivery may include the delivery of a link to a Company intranet or the internet site of a third party involved in administering the Plan, the delivery of the document via e-mail or such other delivery determined at the Company's discretion. You acknowledge that you may receive from the Company a paper copy of any documents delivered electronically at no cost if you contact the Company by telephone, through a postal service or electronic mail at [insert email]. You further acknowledge that you will be provided with a paper copy of any documents delivered electronically if electronic delivery fails; similarly, you understand that you must provide on request to the Company or any designated third party a paper copy of any documents delivered electronically if electronic delivery fails. You agree to participate in the Plan through an on-line or electronic system established and maintained by the Company or a third party designated by the Company. Also, you understand that your consent may be revoked or changed, including any change in the electronic mail address to which documents are delivered (if you have provided an electronic mail address), at any time by notifying the Company of such revised or revoked consent by telephone, postal service or electronic mail at [insert email]. Finally, you understand that you are not required to consent to electronic delivery.

**13. Compliance with Laws and Regulations.** The exercise of this Option will be subject to and conditioned upon compliance by the Company and you with all applicable state, federal and foreign laws and regulations and with all applicable requirements of any stock exchange or automated quotation system on which the Company's Common Stock may be listed or quoted at the time of such issuance or transfer, which compliance the Company shall, in its absolute discretion, deem necessary or advisable. You understand that the Company is under no obligation to register or qualify the Common Stock with any state, federal or foreign securities commission or to seek approval or clearance from any governmental authority for the issuance or sale of the Shares. Further, you agree that the Company shall have unilateral authority to amend the Plan and this Agreement without your consent to the extent necessary to comply with securities or other laws applicable to issuance of Shares. Finally, the Shares issued pursuant to this Agreement shall be endorsed with appropriate legends, if any, determined by the Company.

**14. No Advice Regarding Grant.** The Company is not providing any tax, legal or financial advice, nor is the Company making any recommendations regarding your participation in the Plan, or your acquisition or sale of the underlying Shares. You are hereby advised to consult with your own personal tax, legal and financial advisors regarding your participation in the Plan before taking any action related to the Plan.

**Governing Law; Venue.** This Agreement and all acts and transactions pursuant hereto and the rights and obligations of the parties hereto shall be governed, construed and interpreted in accordance with the laws of the State of Delaware, without giving effect to principles of conflicts of law. For purposes of litigating any dispute that may arise directly or indirectly from the Plan, the Notice of Grant and this Agreement, the parties hereby submit and consent to litigation in the exclusive jurisdiction of the State of California and agree that any such litigation shall be conducted only in the courts of California in San Diego County, California or the federal courts of the United States for the Southern District of California and no other courts.

**16. Severability.** If one or more provisions of this Agreement are held to be unenforceable under applicable law, the parties agree to renegotiate such provision in good faith. In the event that the parties cannot reach a mutually agreeable and enforceable replacement for such provision, then (i) such provision shall be excluded from this Agreement, (ii) the balance of this Agreement shall be interpreted as if such provision were so excluded and (iii) the balance of this Agreement shall be enforceable in accordance with its terms.

**17. No Rights as Employee, Director or Consultant.** Nothing in this Agreement shall affect in any manner whatsoever the right or power of the Company, or a Parent, Subsidiary or Affiliate of the Company, to terminate your Service, for any reason, with or without Cause.

**18. Adjustment.** In the event of a stock split, a stock dividend or a similar change in Company stock, the number of Shares covered by this Option and the Exercise Price per Share may be adjusted pursuant to the Plan.

**19. Lock-Up Agreement.** In connection with the initial public offering of the Company's securities and upon request of the Company or the underwriters managing any underwritten offering of the Company's securities, you hereby agree not to sell, make any short sale of, loan, grant any Option for the purchase of, or otherwise dispose of any securities of the

Company however and whenever acquired (other than those included in the registration) without the prior written consent of the Company or such underwriters, as the case may be, for such period of time (not to exceed one hundred eighty (180) days) from the effective date of such registration as may be requested by the Company or such managing underwriters and to execute an agreement reflecting the foregoing as may be requested by the underwriters at the time of the public offering; provided however that, if during the last seventeen (17) days of the restricted period the Company issues an earnings release or material news or a material event relating to the Company occurs, or prior to the expiration of the restricted period the Company announces that it will release earnings results during the sixteen (16)-day period beginning on the last day of the restricted period, then, upon the request of the managing underwriter, to the extent required by any FINRA rules, the restrictions imposed by this Section shall continue to apply until the end of the third trading day following the expiration of the fifteen (15)-day period beginning on the issuance of the earnings release or the occurrence of the material news or material event. In no event will the restricted period extend beyond two hundred sixteen (216) days after the effective date of the registration statement.

**20. Award Subject to Company Clawback or Recoupment.** To the extent permitted by applicable law, the Option shall be subject to clawback or recoupment pursuant to any clawback or recoupment policy adopted by the Board or required by law during the term of your employment or other Service that is applicable to you. In addition to any other remedies available under such policy, applicable law may require the cancellation of your Option (whether vested or unvested) and the recoupment of any gains realized with respect to your Option.

**21. Entire Agreement; Enforcement of Rights.** This Agreement, the Plan and the Notice of Grant constitute the entire agreement and understanding of the parties relating to the subject matter herein and supersede all prior discussions between them. Any prior agreements, commitments or negotiations concerning this Option are superseded. No modification of or amendment to this Agreement, nor any waiver of any rights under this Agreement, shall be effective unless in writing and signed by the parties to this Agreement. The failure by either party to enforce any rights under this Agreement shall not be construed as a waiver of any rights of such party.

**22. Insider Trading Restrictions/Market Abuse Laws.** You acknowledge that you may be subject to insider trading restrictions and/or market abuse laws, which may affect your ability to acquire or sell the Shares or rights to Shares under the Plan during such times as you are considered to have “inside information” regarding the Company (as defined by the laws in your country). Any restrictions under these laws or regulations are separate from and in addition to any restrictions that may be imposed under any applicable Company insider trading policy. You acknowledge that it is your responsibility to comply with any applicable restrictions, and you are advised to speak to your personal advisor on this matter.

**23. Language.** If you have received this Agreement or any other document related to the Plan translated into a language other than English and if the meaning of the translated version is different than the English version, the English version will control.

**24. Appendix.** Notwithstanding any provisions in this Agreement, this Option shall be subject to any special terms and conditions set forth in any Appendix hereto for your country.

Moreover, if you relocate to one of the countries included in the Appendix, the special terms and conditions for such country will apply to you, to the extent the Company determines that the application of such terms and conditions is necessary or advisable for legal or administrative reasons. The Appendix constitutes part of this Agreement.

**25. Imposition of Other Requirements.** The Company reserves the right to impose other requirements on your participation in the Plan, on this Option and on any Shares acquired under the Plan, to the extent the Company determines it is necessary or advisable for legal or administrative reasons, and to require you to sign any additional agreements or undertakings that may be necessary to accomplish the foregoing.

**26. Waiver.** You acknowledge that a waiver by the Company of breach of any provision of this Agreement shall not operate or be construed as a waiver of any other provision of this Agreement, or of any subsequent breach by you or any other Participant.

BY ACCEPTING THIS OPTION, YOU AGREE TO ALL OF THE TERMS AND CONDITIONS DESCRIBED ABOVE AND IN THE PLAN.

**APPENDIX**

**ADDITIONAL TERMS AND CONDITIONS TO  
STOCK OPTION AGREEMENT  
ACHIEVE LIFE SCIENCES, INC.  
2017 EQUITY INCENTIVE PLAN**

Capitalized terms, unless explicitly defined in this Appendix, shall have the meanings given to them in the Stock Option Agreement, the Notice of Grant or in the Plan.

***Terms and Conditions***

This Appendix includes special terms and conditions that govern this Option if you reside and/or work in one of the countries listed below. If you are a citizen or resident (or are considered as such for local law purposes) of a country other than the country in which you are currently residing and/or working, or if you transfer to another country after receiving this Option, the Company shall, in its discretion, determine to what extent the special terms and conditions contained herein shall be applicable to you.

***Notifications***

This Appendix also includes information regarding securities, exchange control, tax and certain other issues of which you should be aware with respect to your participation in the Plan. The information is based on the securities, exchange control, tax and other laws in effect in the respective countries as of October 2017. Such laws are often complex and change frequently. As a result, the Company strongly recommends that you not rely on the information contained herein as the only source of information relating to the consequences of your participation in the Plan because the information may be out of date at the time you exercise this Option or at the time you sell any Shares acquired under the Plan. In addition, the information is general in nature and may not apply to your particular situation, and the Company is not in a position to assure you of any particular result. Therefore, you are advised to seek appropriate professional advice as to how the relevant laws in your country may apply to your individual situation.

If you are a citizen or resident (or are considered as such for local tax purposes) of a country other than the country in which you are currently residing and/or working, or if you transfer to another country after the grant of this Option, the information contained herein may not be applicable to you in the same manner.

**CANADA**

***Terms and Conditions***

**Manner of Exercising Option.**

Due to regulatory requirements, you are prohibited from surrendering certificates for Shares that you already own to pay the Exercise Price or any Tax-Related Items in connection with the exercise of your Shares.

You hereby authorize the Company and the Company's representatives to discuss with and obtain all relevant information from all personnel, professional or not, involved in the administration and operation of the Plan. You further authorize the Employer, the Company and Parent, Subsidiaries and Affiliates and the administrator of the Plan to disclose and discuss the Plan with their advisors. You further authorize the Employer to record such information and to keep such information in your employee file.

Language Consent.

The following provisions will apply if you are a resident of Quebec:

The parties acknowledge that it is their express wish that this Agreement, as well as all documents, notices and legal proceedings entered into, given or instituted pursuant hereto or relating directly or indirectly hereto, be drawn up in English.

Les parties reconnaissent avoir exigé la rédaction en anglais de cette convention ("Agreement"), ainsi que de tous documents exécutés, avis donnés et procédures judiciaires intentées, directement ou indirectement, relativement à la présente convention.

**UNITED KINGDOM**

*Terms and Conditions*

Data privacy

The following provision replaces Section 10 of the Global Stock Option Grant Agreement:

To the satisfaction and on the direction of the Committee, all operations of the Plan and this Option (at the time of its grant and as necessary thereafter) shall include or be supported by appropriate agreements, notifications and arrangements in respect of Data and its use and processing under the Plan, in order to secure:

- (a) the reasonable freedom of the Employer, the Company and any Parent or Subsidiary (together, the "**Group**"), as appropriate, to operate the Plan and for connected purposes; and
- (b) compliance with the data protection requirements applicable from time to time, including, without limitation:
  - (aa) the Data Protection Act 1998;
  - (bb) Regulation EU 2016/679 of the European Parliament and of the Council of 27 April 2016 (the "**GDPR**"); and
  - (cc) the Group's relevant policies and practices.

The above shall include, and other provision may also be made as the Committee decides:

- (a) the collection, use, processing and transfer of your Data by any member of the Group or any Affiliate or third parties in connection with the implementation, administration and management of the Plan;
- (b) the transfer of your Data amongst themselves by members of the Group or any Affiliate or third parties in connection with the implementation, administration and management of the Plan;
- (c) the use of such Data by any such person for any appropriate purpose; and
- (d) as reasonably necessary, the transfer to and retention of your Data by third parties in connection with the implementation, administration and management of the Plan (whether or not any such third party is situated outside the European Economic Area) for or in connection with any appropriate purpose, on such terms and by such means as may be required by applicable data protection law and guidance.

A data privacy notice, in a form approved by the Committee, setting out applicable provisions in respect of Data, and any related information or disclosure that may be required or appropriate, [was provided to you on [DATE]] / [accompanies this Option Agreement and you acknowledge receipt of that notice]. Further information, disclosures or other measures in respect of Data and your participation in the Plan may be notified to you in future, as may be required.

"Data" for these purposes includes, but is not limited to your name, home address and telephone number, date of birth, social insurance number or other identification number, salary, nationality, job title, any shares or directorships held in the Company, details of all stock options or any other entitlement to shares awarded, canceled, exercised, vested, unvested or outstanding in your favor and any other personal information which could identify you.

#### Responsibility for Taxes.

The following provision supplements Section 8 of the Global Stock Option Agreement:

If payment or withholding of the income tax is due in connection with the Option and is not made within ninety (90) days after the end of the year in which the event giving rise to the income tax liability occurs or such other period specified in Section 222(1)(c) of the ITEPA 2003 (the "**Due Date**"), the amount of any uncollected income tax will constitute a loan owed by you to the Employer, effective on the Due Date. You agree that the loan will bear interest at then-current Official Rate of Her Majesty's Revenue and Customs ("**HMRC**"), it will be immediately due and repayable, and the Company or the Employer may recover it at any time thereafter by any of the means referred to in the Agreement.

Notwithstanding the foregoing, if you are a director or executive officer of the Company (within the meaning of Section 13(k) of the U.S. Securities Exchange Act of 1934, as amended), you will not be eligible for such a loan to cover the income tax due as described above. In the event that you are a director or executive officer and the income tax is not collected from or paid by you by



the Due Date, the amount of any uncollected tax will constitute a benefit to you on which additional income tax and National Insurance Contributions (“*NICs*”) will be payable. You acknowledge that the Company or the Employer may recover any such additional income tax and NICs at any time thereafter by any of the means referred to in the Agreement. You will also be responsible for reporting and paying any income tax and NICs due on this additional benefit directly to HMRC under the self-assessment regime.

Employer NICs.

As a condition of participation in the Plan, you agree and undertake to the Company and to the Employer to accept any liability for secondary Class 1 National Insurance Contributions that may be payable by the Company or the Employer (or any successor to the Company or the Employer) in connection with the Option and any event giving rise to Tax-Related Items (the “*Employer NICs*”). The Employer NICs may be collected by the Company or the Employer using any of the methods described in the Plan or in Section 8 of the Global Stock Option Agreement.

You further agree, if required to do so, to execute a joint election with the Company and/or the Employer (a “*Joint Election*”), the form of such Joint Election being formally approved by HMRC, and any other consent or elections required by the Company or the Employer in respect of the Employer NICs liability. You further agree to execute such other elections as may be required by any successor to the Company and/or the Employer for the purpose of continuing the effectiveness of your Joint Election.

\* \* \*

**NOTICE OF RESTRICTED STOCK UNIT AWARD  
(UNITED STATES, CANADA, UNITED KINGDOM)**

**ACHIEVE LIFE SCIENCES, INC.  
2017 EQUITY INCENTIVE PLAN  
GRANT NUMBER:**

Unless otherwise defined herein, the terms defined in the Achieve Life Sciences, Inc. (the “*Company*”), 2017 Equity Incentive Plan (the “*Plan*”) shall have the same meanings in this Notice of Restricted Stock Unit Award (the “*Notice*”) and the attached Award Agreement (Restricted Stock Unit Agreement, including any special terms and conditions for your country set forth in the appendix attached thereto (collectively, the “*RSU Agreement*”). You (“*you*”) have been granted an award of Restricted Stock Units (“*RSUs*”) under the Plan subject to the terms and conditions of the Plan, this Notice and the attached RSU Agreement.

**Name:**

**Address:**

**Number of RSUs:**

**Date of Grant:**

**Vesting Commencement Date:**

**Expiration Date:**

The settlement of all vested RSUs granted hereunder. The RSUs expire earlier if your Service terminates earlier, as described in the RSU Agreement.

**Vesting Schedule:**

**[Sample vesting language:]** [25% of the total number of RSUs will vest on the twelve month anniversary of the Vesting Commencement Date and 25% of the total number of RSUs will vest on each annual anniversary thereafter so long as your Service continues.][Note: actual vesting language to match vesting schedule approved by the Board or Committee]

**Additional Terms:**

If your address set forth above is an address located outside the United States, the additional terms and conditions set forth on an Appendix attached hereto (as executed by the Company) are applicable and are incorporated herein by reference. (No Appendix need be attached if your address set forth above is an address located within the United States.)

*(Signature page follows.)*

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You acknowledge that the vesting of the RSUs pursuant to this Notice is earned only by continuing Service. By accepting this award, you and the Company agree that this award is granted under and governed by the terms and conditions of the Plan, this Notice and the RSU Agreement. By accepting this award of RSUs, you consent to the electronic delivery and acceptance as further set forth in the RSU Agreement.

**PARTICIPANT**

**ACHIEVE LIFE SCIENCES, INC.**

By:  
Name:

By:  
Name:  
Title:

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**RESTRICTED STOCK UNIT AGREEMENT**  
**ACHIEVE LIFE SCIENCES, INC.**  
**2017 EQUITY INCENTIVE PLAN**

You have been granted Restricted Stock Units (“*RSUs*”) by Achieve Life Sciences, Inc. (the “*Company*”), subject to the terms, restrictions and conditions of the Plan, the Notice of Restricted Stock Unit Award (the “*Notice*”) and this Restricted Stock Unit Agreement, including any special terms and conditions for your country set forth in the appendix attached hereto (the “*Appendix*”) (collectively, this “*RSU Agreement*”).

**1. Nature of Grant.** In accepting this award of RSUs, you acknowledge, understand and agree that:

(a) the Plan is established voluntarily by the Company, it is discretionary in nature and it may be modified, amended, suspended or terminated by the Company at any time, to the extent permitted by the Plan;

(b) the grant of the RSUs is voluntary and occasional and does not create any contractual or other right to receive future awards of RSUs, or benefits in lieu of RSUs, even if RSUs have been granted in the past;

(c) all decisions with respect to future RSUs or other grants, if any, will be at the sole discretion of the Company;

(d) you are voluntarily participating in the Plan;

(e) the RSUs and the Shares subject to the RSUs, and the income and value of same, are not intended to replace any pension rights or compensation;

(f) the RSUs and the Shares subject to the RSUs, and the income and value of same, are not part of normal or expected compensation for purposes of calculating any severance, resignation, termination, redundancy, dismissal, end-of-service payments, bonuses, long-service awards, pension or retirement or welfare benefits or similar payments;

(g) unless otherwise agreed with the Company, the RSUs and any Shares acquired under the Plan, and the income and value of same, are not granted as consideration for, or in connection with, any service you may provide as a director of the Company, or a Parent or Subsidiary of the Company;

(h) the future value of the underlying Shares is unknown, indeterminable and cannot be predicted with certainty;

(i) no claim or entitlement to compensation or damages shall arise from forfeiture of the RSUs resulting from the termination of your Service (for any reason whatsoever whether or not later found to be invalid or in breach of labor laws in the jurisdiction where you are providing Service or the terms of your employment or service agreement, if any), and in consideration of the grant of the RSUs to which you are otherwise not entitled, you irrevocably agree never to institute any claim against the Company, the Employer (as defined below), or any other Parent or

Subsidiary of the Company, waive your ability, if any, to bring any such claim, and release the Company, the Employer and its Parent or Subsidiaries from any such claim; if, notwithstanding the foregoing, any such claim is allowed by a court of competent jurisdiction, then, by participating in the Plan, you shall be deemed irrevocably to have agreed not to pursue such claim and agree to execute any and all documents necessary to request dismissal or withdrawal of such claim; and

(j) the following provisions apply only if you are providing Service outside the United States:

(i) the RSUs and the Shares subject to the RSUs, and the income and value of same, are not part of normal or expected compensation or salary for any purpose; and

(ii) neither the Company, the Employer nor any Parent or Subsidiary of the Company shall be liable for any foreign exchange rate fluctuation between your local currency and the United States Dollar that may affect the value of the RSUs or the subsequent sale of any Shares acquired upon settlement.

**2. Settlement.** Settlement of RSUs shall be made in the same calendar year as the applicable date of vesting under the vesting schedule set forth in the Notice; provided, however, that if the vesting date under the vesting schedule set forth in the Notice is in December, then settlement of any RSUs that vest in December shall be within 30 days of vesting. Settlement of RSUs shall be in Shares. Settlement means the delivery to you of the Shares vested under the RSUs. Fractional Shares will not be issued.

**3. No Stockholder Rights.** Unless and until such time as Shares are issued in settlement of vested RSUs, you shall have no ownership of the Shares allocated to the RSUs and shall have no right to dividends or to vote such Shares.

**4. Dividend Equivalents.** Dividends, if any (whether in cash or Shares), shall not be credited to you.

**5. No Transfer.** RSUs may not be sold, assigned, transferred, pledged, hypothecated, or otherwise disposed of in any manner other than by will or by the laws of descent or distribution or court order or unless otherwise permitted by the Committee on a case-by-case basis.

**6. Termination.** If your Service terminates for any reason, all unvested RSUs shall be forfeited to the Company forthwith, and all rights you have to such RSUs shall immediately terminate, without payment of any consideration to you. For purposes of this award of RSUs, your Service will be considered terminated as of the date you are no longer providing Service (regardless of the reason for such termination and whether or not later found to be invalid or in breach of labor laws in the jurisdiction where you are employed or the terms of your employment or service agreement, if any) and will not be extended by any notice period mandated under local employment laws (*e.g.*, Service would not include a period of “garden leave” or similar period). In case of any dispute as to whether your termination of Service has occurred, the Committee shall have sole discretion to determine whether such termination has occurred (including whether you may still be considered to be providing Services while on a leave of absence) and the effective date of such termination.

7. **Tax Consequences.** You acknowledge that there will be certain consequences with regard to income tax, national or social insurance contributions, payroll tax, fringe benefits tax, payment on account or other tax-related items (“*Tax-Related Items*”) upon settlement of the RSUs or disposition of the Shares, if any, received in connection therewith, and you should consult a tax adviser regarding your tax obligations prior to such settlement or disposition in the jurisdiction where you are subject to tax.

8. **Responsibility for Taxes.** Regardless of any action the Company or, if different, your actual employer (the “*Employer*”) takes with respect to any or all Tax-Related Items withholding or required deductions, you acknowledge that the ultimate liability for all Tax-Related Items legally due by you is and remains your responsibility and that the Company and/or the Employer (1) make no representations or undertakings regarding the treatment of any Tax-Related Items in connection with any aspect of the award, including the grant, vesting or settlement of the RSUs, the subsequent sale of Shares acquired pursuant to such settlement and the receipt of any dividends; and (2) do not commit to structure the terms of the award or any aspect of the RSUs to reduce or eliminate your liability for Tax-Related Items or achieve any particular tax result. You acknowledge that if you are subject to Tax-Related Items in more than one jurisdiction, the Company and/or the Employer may be required to withhold or account for Tax-Related Items in more than one jurisdiction.

Prior to the settlement of your RSUs, you shall pay or make adequate arrangements satisfactory to the Company and/or the Employer to satisfy all Tax-Related Items withholding and payment on account obligations of the Company and/or the Employer. In this regard, you authorize the Company and/or the Employer, and their respective agents, at their discretion, to withhold all applicable Tax-Related Items legally payable by you from your wages or other cash compensation paid to you by the Company and/or the Employer. With the Company’s consent, these arrangements may also include, if permissible under local law, (a) withholding Shares that otherwise would be issued to you when your RSUs are settled, provided that the Company only withholds the amount of Shares necessary to satisfy the minimum statutory withholding amount, (b) having the Company withhold taxes from the proceeds of the sale of the Shares, either through a voluntary sale or through a mandatory sale arranged by the Company (on your behalf pursuant to this authorization), (c) payment by you of an amount equal to the Tax-Related Items directly by cash, cheque, wire transfer, bank draft or money order payable to the Company, or (d) any other arrangement approved by the Company; all under such rules as may be established by the Committee and in compliance with the Company’s Insider Trading Policy and 10b5-1 Trading Plan Policy, if applicable; provided, however, that if you are a Section 16 officer of the Company under the Exchange Act, then the Committee (as constituted in accordance with Rule 16b-3 under the Exchange Act) shall establish the method of withholding from alternatives (a)-(d) above, and the Committee shall establish the method prior to the taxable or withholding event. The Fair Market Value of these Shares, determined as of the effective date when taxes otherwise would have been withheld in cash, will be applied as a credit against the Tax-Related Items.

Depending on the withholding method, the Company may withhold or account for Tax-Related Items by considering applicable minimum statutory withholding rates or other applicable withholding rates, including maximum applicable rates, in which case you will receive a refund of any over-withheld amount in cash and will have no entitlement to the Shares equivalent. If the obligation for Tax-Related Items is satisfied by withholding in Shares, for tax purposes, you are

deemed to have been issued the full number of Shares subject to the vested RSUs, notwithstanding that a number of the Shares are held back solely for the purpose of paying the Tax-Related Items.

Finally, you agree to pay to the Company or the Employer any amount of Tax-Related Items that the Company or the Employer may be required to withhold as a result of your participation in the Plan or the vesting and settlement of the RSUs that cannot be satisfied by the means previously described. You acknowledge that the Company has no obligation to deliver Shares to you until you have satisfied the obligations in connection with the Tax-Related Items as described in this Section.

**9. Data Privacy.** You hereby explicitly and unambiguously consent to the collection, use and transfer, in electronic or other form, of your personal data as described in this RSU Agreement and any other RSU grant materials by and among, as applicable, the Company, the Employer and any other Parent or Subsidiaries, for the exclusive purpose of implementing, administering and managing your participation in the Plan.

You understand that the Company and the Employer may hold certain personal information about you, including, but not limited to, your name, home address and telephone number, date of birth, social insurance number or other identification number, salary, nationality, job title, any shares of stock or directorships held in the Company, details of all RSUs or any other entitlement to shares of stock awarded, canceled, exercised, vested, unvested or outstanding in your favor (“*Data*”), for the exclusive purpose of implementing, administering and managing the Plan.

You understand that Data will be transferred to the stock plan service provider as may be designated by the Company from time to time, which is assisting the Company with the implementation, administration and management of the Plan. You understand that the recipients of Data may be located in the United States or elsewhere, and that the recipients’ country (e.g., the United States) may have different data privacy laws and protections than your country. You understand that if you reside outside the United States, you may request a list with the names and addresses of any potential recipients of Data by contacting your local human resources representative. You authorize the Company, the designated broker and any other possible recipients which may assist the Company (presently or in the future) with implementing, administering and managing the Plan to receive, possess, use, retain and transfer Data, in electronic or other form, for the sole purpose of implementing, administering and managing your participation in the Plan. You understand that Data will be held only as long as is necessary to implement, administer and manage your participation in the Plan. You understand that if you reside outside the United States, you may, at any time, view Data, request additional information about the storage and processing of Data, require any necessary amendments to Data or refuse or withdraw the consents herein, in any case without cost, by contacting in writing your local human resources representative. Further, you understand that you are providing the consents herein on a purely voluntary basis. If you do not consent, or if you later seek to revoke your consent, your employment status or service and career with the Employer will not be adversely affected. The only adverse consequence of refusing or withdrawing your consent is that the Company would not be able to grant you RSUs or other equity awards or administer or maintain such awards. Therefore, you understand that refusing or withdrawing your consent may affect your ability to participate in the Plan. For more information on the consequences of your refusal to consent or withdrawal of consent, you understand that you may contact your local human resources representative.



**10. Acknowledgement.** The Company and you agree that the RSUs are granted under and governed by the Notice, this RSU Agreement and the provisions of the Plan. You: (i) acknowledge receipt of a copy of the Plan prospectus, (ii) represent that you have carefully read and are familiar with the provisions in the grant documents, and (iii) hereby accept the RSUs subject to all of the terms and conditions set forth in this RSU Agreement and those set forth in the Notice. You hereby agree to accept as binding, conclusive and final all decisions or interpretations of the Committee upon any questions relating to the Plan, the Notice and this RSU Agreement.

**11. Entire Agreement; Enforcement of Rights.** This RSU Agreement, the Plan and the Notice constitute the entire agreement and understanding of the parties relating to the subject matter herein and supersede all prior discussions between them. Any prior agreements, commitments or negotiations concerning the purchase of the Shares hereunder are superseded. No modification of or amendment to this RSU Agreement, nor any waiver of any rights under this RSU Agreement, shall be effective unless in writing and signed by the parties to this RSU Agreement. The failure by either party to enforce any rights under this RSU Agreement shall not be construed as a waiver of any rights of such party.

**12. Compliance with Laws and Regulations.** The issuance of Shares will be subject to and conditioned upon compliance by the Company and you with all applicable state, federal and foreign laws and regulations and with all applicable requirements of any stock exchange or automated quotation system on which the Company's Common Stock may be listed or quoted at the time of such issuance or transfer, which compliance the Company shall, in its absolute discretion, deem necessary or advisable. You understand that the Company is under no obligation to register or qualify the Common Stock with any state, federal or foreign securities commission or to seek approval or clearance from any governmental authority for the issuance or sale of the Shares. Further, you agree that the Company shall have unilateral authority to amend the Plan and this RSU Agreement without your consent to the extent necessary to comply with securities or other laws applicable to issuance of Shares. Finally, the Shares issued pursuant to this RSU Agreement shall be endorsed with appropriate legends, if any, determined by the Company.

**13. No Advice Regarding Grant.** The Company is not providing any tax, legal or financial advice, nor is the Company making any recommendations regarding your participation in the Plan, or your acquisition or sale of the underlying Shares. You are hereby advised to consult with your own personal tax, legal and financial advisors regarding your participation in the Plan before taking any action related to the Plan.

**14. Governing Law; Venue.** This RSU Agreement, all acts and transactions pursuant hereto and the rights and obligations of the parties hereto shall be governed, construed and interpreted in accordance with the laws of the State of Delaware, without giving effect to principles of conflicts of law. For purposes of litigating any dispute that may arise directly or indirectly from the Plan, the Notice and this RSU Agreement, the parties hereby submit and consent to litigation in the exclusive jurisdiction of the State of California and agree that any such litigation shall be conducted only in the courts of California in San Diego County, California or the federal courts of the United States for the Southern District of California and no other courts.

**15. Severability.** If one or more provisions of this RSU Agreement are held to be unenforceable under applicable law, the parties agree to renegotiate such provision in good faith.

In the event that the parties cannot reach a mutually agreeable and enforceable replacement for such provision, then (i) such provision shall be excluded from this RSU Agreement, (ii) the balance of this RSU Agreement shall be interpreted as if such provision were so excluded and (iii) the balance of this RSU Agreement shall be enforceable in accordance with its terms.

**16. No Rights as Employee, Director or Consultant.** Nothing in this RSU Agreement shall affect in any manner whatsoever the right or power of the Company, or a Parent or Subsidiary of the Company, to terminate your Service, for any reason, with or without Cause.

**17. Consent to Electronic Delivery and Acceptance of All Plan Documents and Disclosures.** By your acceptance of this award of RSUs, you consent to the electronic delivery of the Notice, this RSU Agreement, the Plan, account statements, Plan prospectuses required by the SEC, U.S. financial reports of the Company, and all other documents that the Company is required to deliver to its stockholders (including, without limitation, annual reports and proxy statements) or other communications or information related to the RSUs. Electronic delivery may include the delivery of a link to a Company intranet or the internet site of a third party involved in administering the Plan, the delivery of the document via e-mail or such other delivery determined at the Company's discretion. You acknowledge that you may receive from the Company a paper copy of any documents delivered electronically at no cost if you contact the Company by telephone, through a postal service or electronic mail at [insert email]. You further acknowledge that you will be provided with a paper copy of any documents delivered electronically if electronic delivery fails; similarly, you understand that you must provide on request to the Company or any designated third party a paper copy of any documents delivered electronically if electronic delivery fails. You agree to participate in the Plan through an on-line or electronic system established and maintained by the Company or a third party designated by the Company. Also, you understand that your consent may be revoked or changed, including any change in the electronic mail address to which documents are delivered (if you have provided an electronic mail address), at any time by notifying the Company of such revised or revoked consent by telephone, postal service or electronic mail at [insert email]. Finally, you understand that you are not required to consent to electronic delivery.

**18. Insider Trading Restrictions/Market Abuse Laws.** You acknowledge that, depending on your country, you may be subject to insider trading restrictions and/or market abuse laws, which may affect your ability to acquire or sell the Shares or rights to Shares under the Plan during such times as you are considered to have "inside information" regarding the Company (as defined by the laws in your country). Any restrictions under these laws or regulations are separate from and in addition to any restrictions that may be imposed under any applicable Company insider trading policy. You acknowledge that it is your responsibility to comply with any applicable restrictions, and you are advised to speak to your personal advisor on this matter.

**19. Language.** If you have received this RSU Agreement or any other document related to the Plan translated into a language other than English and if the meaning of the translated version is different than the English version, the English version will control.

**20. Appendix.** Notwithstanding any provisions in this Restricted Stock Unit Agreement, this award of RSUs shall be subject to any special terms and conditions set forth in any Appendix hereto for your country. Moreover, if you relocate to one of the countries included in the

Appendix, the special terms and conditions for such country will apply to you, to the extent the Company determines that the application of such terms and conditions is necessary or advisable for legal or administrative reasons. The Appendix constitutes part of this RSU Agreement.

**21. Imposition of Other Requirements.** The Company reserves the right to impose other requirements on your participation in the Plan, on the RSUs and on any Shares acquired under the Plan, to the extent the Company determines it is necessary or advisable for legal or administrative reasons, and to require you to sign any additional agreements or undertakings that may be necessary to accomplish the foregoing.

**22. Waiver.** You acknowledge that a waiver by the Company of breach of any provision of this RSU Agreement shall not operate or be construed as a waiver of any other provision of this RSU Agreement, or of any subsequent breach by you or any other Participant.

**23. Code Section 409A.** For purposes of this RSU Agreement, a termination of employment will be determined consistent with the rules relating to a “separation from service” as defined in Section 409A of the Code and the regulations thereunder (“**Section 409A**”). Notwithstanding anything else provided herein, to the extent any payments provided under this RSU Agreement in connection with your termination of employment constitute deferred compensation subject to Section 409A, and you are deemed at the time of such termination of employment to be a “specified employee” under Section 409A, then such payment shall not be made or commence until the earlier of (i) the expiration of the six-month period measured from your separation from service from the Company or (ii) the date of your death following such a separation from service; provided, however, that such deferral shall only be effected to the extent required to avoid adverse tax treatment to you including, without limitation, the additional tax for which you would otherwise be liable under Section 409A(a)(1)(B) in the absence of such a deferral. To the extent any payment under this RSU Agreement may be classified as a “short-term deferral” within the meaning of Section 409A, such payment shall be deemed a short-term deferral, even if it may also qualify for an exemption from Section 409A under another provision of Section 409A. Payments pursuant to this section are intended to constitute separate payments for purposes of Section 1.409A-2(b)(2) of the Treasury Regulations.

**24. Award Subject to Company Clawback or Recoupment.** The RSUs shall be subject to clawback or recoupment pursuant to any compensation clawback or recoupment policy adopted by the Board or required by law during the term of your employment or other Service that is applicable to executive officers, Employees, Directors or other service providers of the Company, and in addition to any other remedies available under such policy and applicable law may require the cancellation of your RSUs (whether vested or unvested) and the recoupment of any gains realized with respect to your RSUs.

BY ACCEPTING THIS AWARD OF RSUS, YOU AGREE TO ALL OF THE TERMS AND CONDITIONS DESCRIBED ABOVE AND IN THE PLAN.

**APPENDIX**

**ADDITIONAL TERMS AND CONDITIONS TO  
RESTRICTED STOCK UNIT AGREEMENT  
ACHIEVE LIFE SCIENCES, INC.  
2017 EQUITY INCENTIVE PLAN**

Capitalized terms, unless explicitly defined in this Appendix, shall have the meanings given to them in the RSU Agreement, the Notice or in the Plan.

***Terms and Conditions***

This Appendix includes additional terms and conditions that govern the RSUs granted to you under the Plan if you reside in one of the countries listed below. If you are a citizen or resident (or is considered as such for local law purposes) of a country other than the country in which you are currently residing and/or working, or if you transfer to another country after receiving the RSUs, the Company shall, in its discretion, determine to what extent the special terms and conditions contained herein shall be applicable to you.

***Notifications***

This Appendix also includes information regarding securities, exchange control, tax and certain other issues of which you should be aware with respect to your participation in the Plan. The information is based on the securities, exchange control, tax and other laws in effect in the respective countries as of October 2017. Such laws are often complex and change frequently. As a result, the Company strongly recommends that you not rely on the information in this Appendix as the only source of information relating to the consequences of your participation in the Plan because the information may be out of date at the time that the RSUs vest or you sell Shares acquired under the Plan.

In addition, the information contained herein is general in nature and may not apply to your particular situation and the Company is not in a position to assure you of a particular result. Accordingly, you are advised to seek appropriate professional advice as to how the relevant laws in your country may apply to your individual situation.

Finally, if you are a citizen or resident (or are considered as such for local tax purposes) of a country other than the one in which you are currently residing and/or working, or if you transfer to another country after the grant of the RSUs, the information contained herein may not be applicable to you in the same manner.

## CANADA

### *Terms and Conditions*

#### Settlement.

The following provision supplements Section 2 of the Restricted Stock Unit Agreement: Notwithstanding anything to the contrary in the Plan, including Section 9.2 of the Plan, the RSUs will be settled in Shares only, not cash.

#### Termination.

The following sentence replaces the second sentence of Section 6 of the Restricted Stock Unit Agreement: For purposes of this award of RSUs, your Service will be considered terminated as of the date that is the earliest to occur of: (1) the date of termination of Service, (2) the date you receive notice of termination from the Employer, and (3) the date you are no longer actively providing services, regardless of any notice period or period of pay in lieu of such notice required under applicable law (including, but not limited to statutory law, regulatory law and/or common law).

#### Language Consent.

The following provisions will apply to you if you are a resident of Quebec:

The parties acknowledge that it is their express wish that the RSU Agreement, as well as all appendices, documents, notices, and legal proceedings entered into, given or instituted pursuant hereto or relating directly or indirectly hereto, be drawn up in English.

Les parties reconnaissent avoir exigé la rédaction en anglais de cette Convention, ainsi que de tous documents exécutés, avis donnés et procédures judiciaires intentées, directement ou indirectement, relativement à ou suite à la présente convention.

#### Data Privacy.

The following provision supplements Section 9 of the Restricted Stock Unit Agreement: You hereby authorize the Company and the Company's representatives to discuss and obtain all relevant information from all personnel, professional or non-professional, involved in the administration of the Plan. You further authorize the Company, the Employer, its Parent or other Subsidiaries and the Committee to disclose and discuss the Plan with their advisors. You further authorize the Company, the Employer and its Parent or other Subsidiary to record such information and to keep such information in your employee file.

### *Notifications*

#### Securities Law Information.

You are permitted to sell Shares acquired under the Plan through the designated broker appointed under the Plan, if any, provided the sale of the Shares acquired under Plan takes place outside of Canada through the facilities of a stock exchange on which the Common Stock is listed.

Foreign Asset/Account Reporting Information.

Canadian taxpayers must report annually on Form T1135 (Foreign Income Verification Statement) the foreign property (including Shares acquired under the Plan) held if the total value of such foreign property exceeds C\$100,000 at any time during the year. Unvested RSUs also must be reported (generally at nil cost) on Form 1135 if the C\$100,000 threshold is exceeded due to other foreign property held. The Form T1135 must be filed at the same time the individual's files his or her annual tax return. You should consult your personal legal advisor to ensure compliance with applicable reporting obligations.

**UNITED KINGDOM**

***Terms and Conditions***

Settlement.

The following provision supplements Section 2 of the Restricted Stock Unit Agreement: Notwithstanding anything to the contrary in the Plan, including Section 9.2 of the Plan, the RSUs will be settled in Shares only, not cash.

Responsibility for Taxes.

The following provision supplements Section 8 of the Restricted Stock Unit Agreement:

You agree that, if you do not pay or the Employer or the Company does not withhold from you the full amount of income tax that you owe at vesting of the RSUs, or the release or assignment of the RSUs for consideration, or the receipt of any other benefit in connection with the RSUs (the "***Taxable Event***") within 90 days of the U.K. tax year within which the Taxable Event occurs, or such other period specified in Section 222(1)(c) of the U.K. Income Tax (Earnings and Pensions) Act 2003 (the "***Due Date***"), then the amount that should have been withheld shall constitute a loan owed by you to the Employer, effective as of the Due Date. You agree that the loan will bear interest at the Her Majesty's Revenue and Customs ("***HMRC***") official rate and will be immediately due and repayable by you, and the Company and/or the Employer may recover it at any time thereafter by any of the means set forth in this Section 8.

Notwithstanding the foregoing, if you are an executive officer or director (as within the meaning of Section 13(k) of the Exchange Act), the terms of the immediately foregoing provision will not apply. In the event that you are an executive officer or director and income tax is not collected from or paid by you by the Due Date, the amount of any uncollected income tax may constitute a benefit to you on which additional income tax and National Insurance contributions ("***NICs***") may be due. You will be responsible for reporting and accounting for any income tax due on this additional benefit directly to

HMRC under the self-assessment regime and for reimbursing the Company or the Employer, as applicable, for the value of any NICs due on this additional benefit.

Employer NICs.

As a condition of participation in the Plan, you agree and undertake to the Company and to the Employer to accept any liability for secondary Class 1 National Insurance Contributions that may be payable by the Company or the Employer (or any successor to the Company or the Employer) in connection with the RSUs and any event giving rise to Tax-Related Items (the “**Employer NICs**”). The Employer NICs may be collected by the Company or the Employer using any of the methods described in the Plan or in Section 8 of the Restricted Stock Unit Agreement.

You further agree, if required to do so, to execute a joint election with the Company and/or the Employer (a “**Joint Election**”), the form of such Joint Election being formally approved by HMRC, and any other consent or elections required by the Company or the Employer in respect of the Employer NICs liability. You further agree to execute such other elections as may be required by any successor to the Company and/or the Employer for the purpose of continuing the effectiveness of your Joint Election.

\* \* \*

**LEASE**

**520 PIKE STREET, INC.,**

**a Delaware corporation,**

**Landlord**

**and**

**ACHIEVE LIFE SCIENCES, INC.,**

**a Delaware corporation,**

**Tenant**

**for**

**Suite 2250**

**520 Pike Tower Seattle, Washington**

December 1, 2017

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TABLE OF CONTENTS

		<b>Page</b>
ARTICLE 1	BASIC LEASE PROVISIONS	1
ARTICLE 2	PREMISES; TERM; RENT	4
ARTICLE 3	USE AND OCCUPANCY	4
ARTICLE 4	CONDITION OF THE PREMISES	5
ARTICLE 5	ALTERATIONS	5
ARTICLE 6	REPAIRS	7
ARTICLE 7	INCREASES IN TAXES AND OPERATING EXPENSES	8
ARTICLE 8	REQUIREMENTS OF LAW	12
ARTICLE 9	SUBORDINATION	13
ARTICLE 10	SERVICES	14
ARTICLE 11	INSURANCE; PROPERTY LOSS OR DAMAGE	16
ARTICLE 12	EMINENT DOMAIN	19
ARTICLE 13	ASSIGNMENT AND SUBLETTING	20
ARTICLE 14	ACCESS TO PREMISES	25
ARTICLE 15	DEFAULT	25
ARTICLE 16	LANDLORD'S RIGHT TO CURE; FEES AND EXPENSES	28
ARTICLE 17	NO REPRESENTATIONS BY LANDLORD; LANDLORD'S APPROVAL	29
ARTICLE 18	END OF TERM	29
ARTICLE 19	QUIET ENJOYMENT	30
ARTICLE 20	NO SURRENDER; NO WAIVER	30
ARTICLE 21	WAIVER OF TRIAL BY JURY; COUNTERCLAIM; ATTORNEYS' FEE	31
ARTICLE 22	NOTICES	31
ARTICLE 23	RULES AND REGULATIONS	31
ARTICLE 24	BROKER	32
ARTICLE 25	INDEMNITY	32
ARTICLE 26	MISCELLANEOUS	33
ARTICLE 27	SECURITY DEPOSIT	35

**Schedule of Exhibits**

Exhibit A	Floor Plan
Exhibit B	Definitions
Exhibit C	Work Letter
Exhibit D	Design Standards
Exhibit E	Cleaning Specifications
Exhibit F	Rules and Regulations

**LEASE**

THIS LEASE is made as of the 1st day of December, 2017 (“**Effective Date**”), between 520 Pike Street, Inc., a Delaware corporation (“**Landlord**”), and Achieve Life Sciences, Inc., a Delaware corporation (“**Tenant**”).

Landlord and Tenant hereby agree as follows:

**ARTICLE 1**

**BASIC LEASE PROVISIONS**

<b>PREMISES</b>	Suite 2250, which is a portion of the twenty second (22nd) floor of the Building, as more particularly shown on <b>Exhibit A</b> .
<b>BUILDING</b>	The building, fixtures, equipment and other improvements and appurtenances now located or hereafter erected, located or placed upon the land known as the 520 Pike Tower, Seattle, Washington, as more particularly described on <b>Exhibit A</b> .
<b>REAL PROPERTY</b>	The Building, together with the plot of land upon which it stands.
<b>COMMENCEMENT DATE</b>	March 1, 2018 (subject to Section 2.2)
<b>RENT COMMENCEMENT DATE</b>	The Commencement Date.
<b>EXPIRATION DATE</b>	If the Commencement Date shall be the first day of a calendar month, then the date which is the day immediately preceding the third (3rd) anniversary of the Commencement Date; or if the Commencement Date shall be other than the first day of a calendar month, then the date which is the last day of the month in which the third (3rd) anniversary of the Commencement Date occurs.
<b>TERM</b>	The period commencing on the Commencement Date and ending on the Expiration Date.
<b>PERMITTED USES</b>	Executive and general offices.
<b>BASE YEAR</b>	Calendar year 2018.
<b>TENANT'S PROPORTIONATE SHARE</b>	0.8031%
<b>AGREED AREA OF BUILDING</b>	396,821 rentable square feet, as mutually agreed by Landlord and Tenant.
<b>AGREED AREA OF PREMISES</b>	3,187 rentable square feet, as mutually agreed by Landlord and Tenant, (which Landlord warrants is measured pursuant to the BOMA 2010 measurement methodology).

**FIXED RENT**

Period (Months)	Per Annum	Per Month	Annual Fixed Rent Per Rentable Square Foot
1 – 12	\$140,228.00	\$11,685.67	\$44.00
13 – 24	\$144,434.84	\$12,036.24	\$45.32
25 – 36	\$148,767.89	\$12,397.32	\$46.68

**ADDITIONAL RENT**

All sums other than Fixed Rent payable by Tenant to Landlord under this Lease, including Tenant's Tax Payment, Tenant's Operating Payment, late charges, overtime or excess service charges, damages, and interest and other costs related to Tenant's failure to perform any of its obligations under this Lease.

**RENT**

Fixed Rent and Additional Rent, collectively.

**INTEREST RATE**

The lesser of (i) 4% per annum above the then-current Base Rate, and (ii) the maximum rate permitted by applicable Requirements.

**SECURITY DEPOSIT**

\$37,191.97 (subject to reduction as set forth in Article 27)

**TENANT'S ADDRESS FOR NOTICES**

Until Tenant commences business operations from the Premises:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Thereafter:

Achieve Life Sciences, Inc. 520  
Pike Street, Suite 2250  
Seattle, Washington 98101  
Attn: \_\_\_\_\_

**LANDLORD'S ADDRESS FOR NOTICES**

520 Pike Street, Inc.  
c/o Tishman Speyer Properties, L.P. 520 Pike Street, Suite 1210  
Seattle, Washington 98101 Attn: Property Manager

Copies to:  
520 Pike Street, Inc.  
Tishman Speyer Properties, L.P. 45 Rockefeller Plaza  
  
New York, New York 10011 Attn: Chief Financial Officer

and:  
520 Pike Street, Inc.  
Tishman Speyer Properties, L.P. 45 Rockefeller Plaza  
New York, New York 10011 Attn:  
Chief Legal Officer

**TENANT'S BROKER**

Flinn Ferguson Corporate Real Estate

**LANDLORD'S AGENT**

Jones Lang LaSalle Americas, Inc. AND/OR Tishman Speyer Properties,  
L.P. or any other person or entity designated at any time and from time to time by Landlord as Landlord's Agent.

**LANDLORD'S CONTRIBUTION**

\$31,870.00

**All capitalized terms used in this Lease without definition are defined in Exhibit B.**

## ARTICLE 2

### PREMISES; TERM; RENT

**Section 2.1 Lease of Premises.** Subject to the terms of this Lease, Landlord leases to Tenant and Tenant leases from Landlord the Premises for the Term. In addition, Landlord grants to Tenant the right to use, on a non-exclusive basis and in common with others, the Common Areas.

**Section 2.2 Commencement Date.** Upon the Effective Date, the terms and provisions hereof shall be fully binding on Landlord and Tenant prior to the occurrence of the Commencement Date. The Term of this Lease shall commence on the Commencement Date. The Commencement Date shall be the later of (i) March 1, 2018 or (ii) the date on which Landlord delivers exclusive possession of the Premises to Tenant, broom clean and free and clear of any other tenants or their personal property. Unless sooner terminated or extended as hereinafter provided, the Term shall end on the Expiration Date. If Landlord does not tender exclusive possession of the Premises to Tenant on or before the Scheduled Commencement Date or any other particular date, for any reason whatsoever, Landlord shall not be liable for any damage thereby, this Lease shall not be void or voidable thereby except as set forth below, and the Term shall not commence until the Commencement Date. Landlord shall be deemed to have tendered possession of the Premises to Tenant upon the giving of notice by Landlord to Tenant stating that the Premises are vacant, in the condition required by this Lease and available for Tenant's occupancy. No failure to tender possession of the Premises to Tenant on or before the Scheduled Commencement Date shall affect any other obligations of Tenant hereunder. Once the Commencement Date is determined, Landlord and Tenant shall execute an agreement stating the Commencement Date, Rent Commencement Date and Expiration Date, but the failure to do so will not affect the determination of such dates.

Notwithstanding anything to the contrary, if Landlord has not tendered exclusive possession of the Premises to Tenant, broom clean and free and clear of other tenants or their property, by May 1, 2018, then Tenant shall have the right to terminate this Lease effective as of written notice provided to Landlord prior to such delivery occurring.

**Section 2.3 Payment of Rent.** Tenant shall pay to Landlord, without notice or demand, and without any set-off, counterclaim, abatement or deduction whatsoever, except as may be expressly set forth in this Lease, in lawful money of the United States by wire transfer of funds, (i) Fixed Rent in equal monthly installments, in advance, on the first day of each month during the Term, commencing on the Rent Commencement Date, and (ii) Additional Rent, at the times and in the manner set forth in this Lease.

**Section 2.4 First Month's Rent.** Tenant shall pay one month's Fixed Rent upon the execution of this Lease ("**Advance Rent**"). If the Rent Commencement Date is on the first day of a month, the Advance Rent shall be credited towards the first month's Fixed Rent payment. If the Rent Commencement Date is not the first day of a month, then on the Rent Commencement Date Tenant shall pay Fixed Rent for the period from the Rent Commencement Date through the last day of such month, and the Advance Rent shall be credited towards Fixed Rent for the next succeeding calendar month.

## ARTICLE 3

### USE AND OCCUPANCY

Tenant shall use and occupy the Premises for the Permitted Uses and for no other purpose. Tenant expressly acknowledges that the Premises are intended for office purposes only. Tenant shall not conduct any research or experiments within the Premises or the Building, nor shall Tenant cause or permit any Hazardous Materials to be brought, stored or used within the Premises as further provided in Section 8.1(b). Tenant shall not use or occupy or permit the use or occupancy of any part of the Premises in a manner constituting a Prohibited Use. If Tenant uses the Premises for a purpose constituting a Prohibited Use, violating any Requirement, or causing the Building to be in violation of any Requirement, then Tenant shall promptly discontinue such use upon notice of such violation. Tenant, at its expense, shall procure and at all times maintain and comply with the terms and conditions of all licenses and permits required for the lawful conduct of the Permitted Uses in the Premises.

## ARTICLE 4

### CONDITION OF THE PREMISES

Tenant has inspected the Premises and agrees (a) to accept possession of the Premises in the condition existing on the Commencement Date "as is", and (b) that except for Landlord's Contribution, Landlord has no obligation to perform any work, supply any materials, incur any expense or make any alterations or improvements to prepare the Premises for Tenant's occupancy. Any work to be performed by Tenant in connection with Tenant's initial occupancy of the Premises shall be hereinafter referred to as the "Initial Installations." Tenant's occupancy of any part of the Premises shall be conclusive evidence, as against Tenant, that Tenant has accepted possession of the Premises in its then current condition and at the time such possession was taken, the Premises and the Building were in a good and satisfactory condition as required by this Lease, subject to Landlord's maintenance and repair obligations under this Lease. Notwithstanding anything to the contrary, Landlord agrees to deliver the Premises to Tenant (i) broom clean and in the same general condition as existing on the Effective Date, without any damage caused by the existing tenant; and (ii) free of other tenants and their personal property.

## ARTICLE 5

### ALTERATIONS

**Section 5.1 Tenant's Alterations.** (a) Tenant shall not make any alterations, additions or other physical changes in or about the Premises (collectively, "Alterations") other than decorative Alterations such as painting, wall coverings and floor coverings (collectively, "Decorative Alterations"), without Landlord's prior consent, which consent shall not be unreasonably withheld if such Alterations (i) are non-structural and do not adversely affect any Building Systems, (ii) affect only the Premises and are not visible from outside of the Premises, (iii) do not affect the certificate of occupancy issued for the Building or the Premises, and (iv) do not violate any Requirement.

(b) **Plans and Specifications.** Prior to making any Alterations, Tenant, at its expense, shall (i) submit to Landlord for its approval, detailed plans and specifications ("Plans") of each proposed Alteration (other than Decorative Alterations), and with respect to any Alteration affecting any Building System, evidence that the Alteration has been designed by, or reviewed and approved by, Landlord's designated engineer for the affected Building System, (ii) obtain all permits, approvals and certificates required by any Governmental Authorities, (iii) furnish to Landlord certificates of worker's compensation (covering all persons to be employed by Tenant, and Tenant's contractors and subcontractors in connection with such Alteration), commercial general liability (including property damage coverage) and business auto insurance and Builder's Risk coverage (as described in Article 11) all in such form, with such companies, for such periods and in such amounts as Landlord may reasonably require, naming Landlord, Landlord's Agent, any Lessor and any Mortgagee as additional insureds, and (iv) furnish to Landlord reasonably satisfactory evidence of Tenant's ability to complete and to fully pay for such Alterations (other than Decorative Alterations). Tenant shall give Landlord not less than 5 Business Days' notice prior to performing any Decorative Alteration, which notice shall contain a description of such Decorative Alteration.

(c) **Governmental Approvals.** Tenant, at its expense, shall, as and when required, promptly obtain certificates of partial and final approval of such Alterations required by any Governmental Authority and shall furnish Landlord with copies thereof, together with "as-built" Plans for such Alterations prepared on an AutoCAD Computer Assisted Drafting and Design System (or such other system or medium as Landlord may accept), using naming conventions issued by the American Institute of Architects in June, 1990 (or such other naming conventions as Landlord may accept) and magnetic computer media of such record drawings and specifications translated in DFX format or another format acceptable to Landlord.

**Section 5.2 Manner and Quality of Alterations.** All Alterations shall be performed (a) in a good and workmanlike manner and free from defects, (b) substantially in accordance with the Plans, and by contractors reasonably approved by Landlord, (c) in compliance with all Requirements, the terms of this Lease and all construction procedures and regulations then prescribed by Landlord, and (d) at Tenant's expense. All materials and equipment shall be of first quality and at least equal to the applicable standards for the Building then established by Landlord, and no

such materials or equipment (other than Tenant's Property) shall be subject to any lien or other encumbrance. Upon completion of any Alterations hereunder, Tenant shall provide Landlord with proof of payment for all labor and materials, and final unconditional waivers of lien from all contractors, subcontractors, materialmen, suppliers and others having lien rights with respect to such Alterations, in the form prescribed by Washington law.

**Section 5.3 Removal of Tenant's Property.** Tenant's Property shall remain the property of Tenant and Tenant may remove the same at any time on or before the Expiration Date. On or prior to the Expiration Date, Tenant shall, unless otherwise directed by Landlord, at Tenant's expense, remove any Specialty Alterations and close up any slab penetrations made by Tenant in the Premises. Tenant shall repair and restore, in a good and workmanlike manner, any damage to the Premises or the Building caused by Tenant's removal of any Alterations or Tenant's Property or by the closing of any slab penetrations, and upon default thereof, Tenant shall reimburse Landlord for Landlord's cost of repairing and restoring such damage. Any Specialty Alterations or Tenant's Property not so removed shall be deemed abandoned and Landlord may retain or remove and dispose of same, and repair and restore any damage caused thereby, at Tenant's cost and without accountability to Tenant. All other Alterations shall become Landlord's property upon termination of this Lease. Notwithstanding anything to the contrary in this Lease, in no event shall Tenant be required to remove or restore the Initial Improvements.

**Section 5.4 Mechanic's Liens.** Tenant, at its expense, shall discharge any lien or charge recorded or filed against the Real Property in connection with any work done or claimed to have been done by or on behalf of, or materials furnished or claimed to have been furnished to, Tenant, within 10 days after Tenant's receipt of notice thereof by payment, by procuring and recording a lien release bond issued by a responsible corporate surety in an amount sufficient to satisfy statutory requirements therefor in the State of Washington or otherwise in accordance with law.

**Section 5.5 Labor Relations.** Tenant shall not employ, or permit the employment of, any contractor, mechanic or laborer, or permit any materials to be delivered to or used in the Building, if, in Landlord's sole judgment, such employment, delivery or use 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. If such interference or conflict occurs, upon Landlord's request, Tenant shall cause all contractors, mechanics or laborers causing such interference or conflict to leave the Building immediately.

**Section 5.6 Tenant's Costs.** Tenant shall pay to Landlord, upon demand, all out-of-pocket, reasonable costs actually incurred by Landlord in connection with Tenant's Alterations, including costs incurred in connection with (a) Landlord's review of the Alterations (including review of requests for approval thereof) and (b) the provision of Building personnel during the performance of any Alteration, to operate elevators or otherwise to facilitate Tenant's Alterations. In addition, Tenant shall pay to Landlord, upon demand, an administrative fee in an amount equal to 3% of the total cost of any Alterations, unless Tenant secures the services of a construction manager reasonably acceptable to Landlord, in which case the administrative fee shall be 1% of the total cost of the Alterations. At Landlord's request, Tenant shall deliver to Landlord reasonable supporting documentation evidencing the hard and soft costs incurred by Tenant in designing and constructing any Alterations.

**Section 5.7 Tenant's Equipment.** Tenant shall provide notice to Landlord prior to moving any heavy machinery, heavy equipment, freight, bulky matter or fixtures (collectively, "Equipment") into or out of the Building and shall pay to Landlord any costs actually incurred by Landlord in connection therewith. If such Equipment requires special handling, Tenant agrees (a) to employ only persons holding all necessary licenses to perform such work, (b) all work performed in connection therewith shall comply with all applicable Requirements and (c) such work shall be done only during hours designated by Landlord.

**Section 5.8 Legal Compliance.** The approval of Plans, or consent by Landlord to the making of any Alterations, does not constitute Landlord's representation that such Plans or Alterations comply with any Requirements. Landlord shall not be liable to Tenant or any other party in connection with Landlord's approval of any Plans, or Landlord's consent to Tenant's performing any Alterations. If any Alterations made by or on behalf of Tenant require Landlord to make any alterations or improvements to any part of the Building in order to comply with any Requirements, Tenant shall pay all costs and expenses incurred by Landlord in connection with such alterations or improvements.



**Section 5.9 Floor Load.** Tenant shall not place a load upon any floor of the Premises that exceeds 50 pounds per square foot "live load". Landlord reserves the right to reasonably designate the position of all Equipment which Tenant wishes to place within the Premises, and to place limitations on the weight thereof.

## ARTICLE 6

### REPAIRS

**Section 6.1 Landlord's Repair and Maintenance.** Landlord shall operate, maintain and, except as provided in Section 6.2 hereof, make all necessary repairs (both structural and nonstructural) to (i) the Building Systems; (ii) the Building's structure, roof and exterior walls; and (iii) the Common Areas, in conformance with standards applicable to Comparable Buildings.

**Section 6.2 Tenant's Repair and Maintenance.** Tenant shall promptly, at its expense and in compliance with Article 5 including, without limitation, the requirement that any repairs affecting any Building System be reviewed and approved by Landlord's designated engineer for the affected Building System, make all nonstructural repairs to the Premises and the fixtures, equipment and appurtenances therein (including all electrical, plumbing, heating, ventilation and air conditioning, sprinklers and life safety systems in and exclusively serving the Premises from the point of connection to the Building Systems) (collectively, "**Tenant Fixtures**") as and when needed to preserve the Premises in as good condition as received, except for reasonable wear and tear and damage which is Landlord's obligation to repair pursuant to the express provisions of this Lease. Subject to the provisions of Section 11.2, all damage to the Building or to any portion thereof, or to any Tenant Fixtures, requiring structural or nonstructural repair caused by or resulting from any act, omission, neglect or improper conduct of a Tenant Party or the moving of Tenant's Property or Equipment into, within or out of the Premises by a Tenant Party, shall be repaired at Tenant's expense by (i) Tenant, if the required repairs are nonstructural in nature and do not affect any Building System, or (ii) Landlord, if the required repairs are structural in nature, involve replacement of exterior window glass or affect any Building System. All Tenant repairs shall be of good quality utilizing new construction materials.

**Section 6.3 Reserved Rights.** Landlord reserves the right to make all changes, alterations, additions, improvements, repairs or replacements to the Building and Building Systems, including changing the arrangement or location of entrances or passageways, doors and doorways, corridors, elevators, stairs, toilets or other Common Areas (collectively, "**Work of Improvement**"), as Landlord deems necessary or desirable, and to take all materials into the Premises required for the performance of such Work of Improvement, provided that (a) the level of any Building service shall not decrease in any material respect from the level required of Landlord in this Lease as a result thereof (other than temporary changes in the level of such services during the performance of any such Work of Improvement), and (b) Tenant is not deprived of access to the Premises. Landlord shall use reasonable efforts to minimize interference with Tenant's use and occupancy of the Premises during the performance of such Work of Improvement. There shall be no Rent abatement or allowance to Tenant for a diminution of rental value, no actual or constructive eviction of Tenant, in whole or in part, no relief from any of Tenant's other obligations under this Lease, and no liability on the part of Landlord by reason of inconvenience, annoyance or injury to business arising from Landlord, Tenant or others performing, or failing to perform, any Work of Improvement.

ARTICLE 7

INCREASES IN TAXES AND OPERATING EXPENSES

**Section 7.1 Definitions.** For the purposes of this Article 7, the following terms shall have the meanings set forth below:

- (a) **“Assessed Valuation”** shall mean the amount for which the Real Property is assessed by the County Assessor of King County, Washington for the purpose of imposition of Taxes.
- (b) **“Base Operating Expenses”** shall mean the Operating Expenses for the Base Year.
- (c) **“Base Taxes”** shall mean the Taxes payable for the Base Year.
- (d) **“Comparison Year”** shall mean each calendar year commencing subsequent to the Base Year.
- (e) **“Operating Expenses”** shall mean the aggregate of all costs and expenses paid or incurred by or on behalf of Landlord in connection with the ownership, operation, repair and maintenance of the Real Property, which costs and expenses may include, without limitation, the following: (i) the rental value of Landlord’s Building office, (ii) the cost of insurance premiums and related charges, including premiums for coverage with respect to terrorist acts and occurrences, and (iii) capital improvements incurred after the Base Year only if such capital improvement either (A) is reasonably intended to result in a reduction in Operating Expenses (as for example, a labor-saving improvement), provided the amount included in Operating Expenses in any Comparison Year shall not exceed an amount equal to the savings reasonably anticipated to result from the installation and operation of such improvement, and/or (B) is made during any Comparison Year in compliance with Requirements which became effective (whether through adoption, promulgation, application, interpretation by the applicable Governmental Authority or otherwise) after the date of this Lease. Such capital improvements shall be amortized (with interest at the Base Rate) on a straight-line basis over such period as Landlord shall reasonably determine, and the amount included in Operating Expenses in any Comparison Year shall be equal to the annual amortized amount. Operating Expenses shall not include any Excluded Expenses. If during all or part of the Base Year or any Comparison Year, Landlord shall not furnish any particular item(s) of work or service (which would otherwise constitute an Operating Expense) to any leasable portions of the Building for any reason, then, for purposes of computing Operating Expenses for such period, the amount included in Operating Expenses for such period shall be increased by an amount equal to the costs and expenses that would have been reasonably incurred by Landlord during such period if Landlord had furnished such item(s) of work or service to such portion of the Building. If Landlord eliminates from Operating Expenses for any Comparison Year a recurring category of expenses previously included in Operating Expenses for the Base Year, Landlord may subtract such category from Operating Expenses for the Base Year commencing with such Comparison Year. Without limiting the generality of the foregoing, if Landlord eliminates from Operating Expenses for any Comparison Year any particular type of insurance included in Operating Expenses for the Base Year, or if Landlord reduces the level of insurance coverage during any Comparison Year from that carried during the Base Year, then Landlord may adjust the amount of any insurance premium included in Operating Expenses for the Base Year to equal that amount which Landlord reasonably estimates it would have incurred had Landlord maintained similar types and levels of insurance during the Base Year as maintained by Landlord during such Comparison Year. In determining the amount of Operating Expenses for the Base Year or any Comparison Year, if less than 95% of the Building rentable area is occupied by tenants at any time during any such Base Year or Comparison Year, Operating Expenses shall be determined for such Base Year or Comparison Year to be an amount equal to the like expenses which would normally be expected to be incurred had such occupancy been 95% throughout the Base Year or such Comparison Year. Without limiting the foregoing, in calculating the Base Operating Expenses, Landlord shall include the cost of premiums for insurance coverages with respect to terrorist acts and occurrences (collectively, “Terrorist Coverage Insurance Premiums”) payable with respect to the Base Year; provided, however, thereafter Landlord may elect to reduce the Base Operating Expenses by an amount equal to the Terrorism Risk Insurance Premium Reduction (as hereinafter defined); provided, further, if the Terrorism Risk Insurance Act of 2002 (the “Terrorism Act”) expires or is repealed, or the benefits intended to be provided by the Terrorism Act are no longer available to Landlord in any material respect, then commencing with the first Comparison Year in which the Terrorism Coverage Insurance Premiums are affected by such expiration, repeal or material unavailability (the

“Expiration Year”), Landlord shall readjust the calculation of Base Operating Expenses to include the lesser of (i) Terrorism Coverage Insurance Premiums payable with respect to the Base Year, or (ii) the Terrorism Coverage Insurance Premiums payable with respect to the Expiration Year, without regard to the Terrorism Risk Insurance Premium Reduction. The “Terrorism Risk Insurance Premium Reduction” shall mean the amount by which the Terrorism Coverage Insurance Premiums for the Base Year exceed the Terrorism Coverage Insurance Premiums for the next succeeding Comparison Year with respect to which the benefits intended to be provided by the Terrorism Act are available to Landlord.

(f) **“Statement”** shall mean a statement containing a comparison of (i) Base Taxes and the Taxes for any Comparison Year, or (ii) Base Operating Expenses and the Operating Expenses for any Comparison Year.

(g) **“Taxes”** shall mean (i) all real estate taxes, assessments, sewer and water rents, rates and charges and other governmental levies, impositions or charges, whether general, special, ordinary, extraordinary, foreseen or unforeseen, which may be assessed, levied or imposed upon all or any part of the Real Property, and (ii) all expenses (including reasonable attorneys’ fees and disbursements and experts’ and other witnesses’ fees) incurred in contesting any of the foregoing or the Assessed Valuation of the Real Property (but such expenses will not be included in Base Taxes if incurred during the Base Year). Taxes shall not include (x) interest or penalties incurred by Landlord as a result of Landlord’s late payment of Taxes, or (y) franchise, transfer, gift, inheritance, estate or net income taxes imposed upon Landlord. If Landlord elects to pay any assessment in annual installments, then (i) such assessment shall be deemed to have been so divided and to be payable in the maximum number of installments permitted by law, and (ii) there shall be deemed included in Taxes for each Comparison Year the installments of such assessment becoming payable during such Comparison Year, together with interest payable during such Comparison Year on such installments and on all installments thereafter becoming due as provided by law, all as if such assessment had been so divided. If at any time the methods of taxation prevailing on the Effective Date shall be altered so that in lieu of or as an addition to the whole or any part of Taxes, there shall be assessed, levied or imposed (1) a tax, assessment, levy, imposition or charge based on the income or rents received from the Real Property whether or not wholly or partially as a capital levy or otherwise, (2) a tax, assessment, levy, imposition or charge measured by or based in whole or in part upon all or any part of the Real Property and imposed upon Landlord, (3) a license fee measured by the rents, or (4) any other tax, assessment, levy, imposition, charge or license fee however described or imposed, including business improvement district impositions, then all such taxes, assessments, levies, impositions, charges or license fees or the part thereof so measured or based shall be deemed to be Taxes.

**Section 7.2 Tenant’s Tax Payment.** (a) If the Taxes payable for any Comparison Year exceed the Base Taxes, Tenant shall pay to Landlord Tenant’s Proportionate Share of such excess (**“Tenant’s Tax Payment”**). For each Comparison Year, Landlord shall furnish to Tenant a statement setting forth Landlord’s reasonable estimate of Tenant’s Tax Payment for such Comparison Year (the **“Tax Estimate”**). Tenant shall pay to Landlord on the 1st day of each month during such Comparison Year an amount equal to 1/12 of the Tax Estimate for such Comparison Year. If Landlord furnishes a Tax Estimate for a Comparison Year subsequent to the commencement thereof, then (i) until the 1st day of the month following the month in which the Tax Estimate is furnished to Tenant, Tenant shall pay to Landlord on the 1st day of each month an amount equal to the monthly sum payable by Tenant to Landlord under this Section 7.2 during the last month of the preceding Comparison Year, (ii) promptly after the Tax Estimate is furnished to Tenant or together therewith, Landlord shall give notice to Tenant stating whether the installments of Tenant’s Tax Estimate previously made for such Comparison Year were greater or less than the installments of Tenant’s Tax Estimate to be made for such Comparison Year in accordance with the Tax Estimate, and (x) if there shall be a deficiency, Tenant shall pay the amount thereof within 10 Business Days after demand therefor, or (y) if there shall have been an overpayment, Landlord shall credit the amount thereof against subsequent payments of Rent due hereunder, and (iii) on the 1st day of the month following the month in which the Tax Estimate is furnished to Tenant, and on the 1st day of each month thereafter throughout the remainder of such Comparison Year, Tenant shall pay to Landlord an amount equal to 1/12 of the Tax Estimate. Landlord shall have the right, upon not less than 30 days prior written notice to Tenant, to reasonably adjust the Tax Estimate from time to time during any Comparison Year.

(b) As soon as reasonably practicable after Landlord has determined the Taxes for a Comparison Year, Landlord shall furnish to Tenant a Statement for such Comparison Year. If the Statement shall show that the sums paid by Tenant under Section 7.2(a) exceeded the actual amount of Tenant's Tax Payment for such Comparison Year, Landlord shall credit the amount of such excess against subsequent payments of Rent due hereunder (or refund to Tenant within thirty (30) days if the Term has expired). If the Statement for such Comparison Year shall show that the sums so paid by Tenant were less than Tenant's Tax Payment for such Comparison Year, Tenant shall pay the amount of such deficiency within 10 Business Days after delivery of the Statement of Tenant.

(c) Only Landlord may institute proceedings to reduce the Assessed Valuation of the Real Property and the filing of any such proceeding by Tenant without Landlord's consent shall constitute an Event of Default. If the Taxes payable for the Base Year are reduced, the Base Taxes shall be correspondingly revised, the Additional Rent previously paid or payable on account of Tenant's Tax Payment hereunder for all Comparison Years shall be recomputed on the basis of such reduction, and Tenant shall pay to Landlord within 10 Business Days after being billed therefor, any deficiency between the amount of such Additional Rent previously computed and paid by Tenant to Landlord, and the amount due as a result of such recomputations. If Landlord receives a refund of Taxes for any Comparison Year, Landlord shall credit against subsequent payments of Rent due hereunder (or refund to Tenant within thirty (30) days if the Term has expired), an amount equal to Tenant's Proportionate Share of the refund, net of any expenses incurred by Landlord in achieving such refund, which amount shall not exceed Tenant's Tax Payment paid for such Comparison Year. Landlord shall not be obligated to file any application or institute any proceeding seeking a reduction in Taxes or the Assessed Valuation. The benefit of any exemption or abatement relating to all or any part of the Real Property shall accrue solely to the benefit of Landlord and Taxes shall be computed without taking into account any such exemption or abatement.

(d) Tenant shall be responsible for any applicable occupancy or rent tax now in effect or hereafter enacted and, if such tax is payable by Landlord, Tenant shall promptly pay such amounts to Landlord, upon Landlord's demand.

(e) Tenant shall be obligated to make Tenant's Tax Payment regardless of whether Tenant may be exempt from the payment of any Taxes as the result of any reduction, abatement or exemption from Taxes granted or agreed to by any Governmental Authority, or by reason of Tenant's diplomatic or other tax-exempt status.

**Section 7.3 Tenant's Operating Payment.** (a) If the Operating Expenses payable for any Comparison Year exceed the Base Operating Expenses, Tenant shall pay to Landlord Tenant's Proportionate Share of such excess ("Tenant's Operating Payment"). For each Comparison Year, Landlord shall furnish to Tenant a statement setting forth Landlord's reasonable estimate of Tenant's Operating Payment for such Comparison Year (the "Expense Estimate"). Tenant shall pay to Landlord on the 1st day of each month during such Comparison Year an amount equal to 1/12 of the Expense Estimate. If Landlord furnishes an Expense Estimate for a Comparison Year subsequent to the commencement thereof, then (i) until the 1st day of the month following the month in which the Expense Estimate is furnished to Tenant, Tenant shall pay to Landlord on the 1st day of each month an amount equal to the monthly sum payable by Tenant to Landlord under this Section 7.3 during the last month of the preceding Comparison Year, (ii) promptly after the Expense Estimate is furnished to Tenant or together therewith, Landlord shall give notice to Tenant stating whether the installments of Tenant's Operating Payment previously made for such Comparison Year were greater or less than the installments of Tenant's Operating Payment to be made for such Comparison Year in accordance with the Expense Estimate, and (x) if there shall be a deficiency, Tenant shall pay the amount thereof within 10 Business Days after demand therefor, or (y) if there shall have been an overpayment, Landlord shall credit the amount thereof against subsequent payments of Rent due hereunder (or refund to Tenant within thirty (30) days if the Term has expired), and (iii) on the 1st day of the month following the month in which the Expense Estimate is furnished to Tenant, and on the 1st day of each month thereafter throughout the remainder of such Comparison Year, Tenant shall pay to Landlord an amount equal to 1/12 of the Expense Estimate. Landlord shall have the right, upon not less than 30 days prior written notice to Tenant, to reasonably adjust the Expense Estimate from time to time during any Comparison Year.

(b) On or before May 1st of each Comparison Year, Landlord shall furnish to Tenant a Statement for the immediately preceding Comparison Year. If the Statement shows that the sums paid by Tenant under Section 7.3(a) exceeded the actual amount of Tenant's Operating Payment for such Comparison Year, Landlord shall credit the amount of such excess against subsequent payments of Rent due hereunder. If the Statement shows that the sums so paid by Tenant were less than Tenant's Operating Payment for such Comparison Year, Tenant shall pay the amount of such deficiency within 10 Business Days after delivery of the Statement to Tenant.

**Section 7.4 Non-Waiver; Disputes.** (a) Landlord's failure to render any Statement on a timely basis with respect to any Comparison Year shall not prejudice Landlord's right to thereafter render a Statement with respect to such Comparison Year or any subsequent Comparison Year, nor shall the rendering of a Statement prejudice Landlord's right to thereafter render a corrected Statement for that Comparison Year.

(b) Each Statement sent to Tenant shall be conclusively binding upon Tenant unless Tenant (i) pays to Landlord when due the amount set forth in such Statement, without prejudice to Tenant's right to dispute such Statement, and (ii) within 60 days after such Statement is sent, sends a notice to Landlord objecting to such Statement and specifying the reasons therefor. Tenant agrees that Tenant will not employ, in connection with any dispute under this Lease, any person or entity who is to be compensated, in whole or in part, on a contingency fee basis. If the parties are unable to resolve any dispute as to the correctness of such Statement within 30 days following such notice of objection, either party may refer the issues raised to one of the nationally recognized public accounting firms selected by Landlord and reasonably acceptable to Tenant, and the decision of such accountants shall be conclusively binding upon Landlord and Tenant. In connection therewith, Tenant and such accountants shall execute and deliver to Landlord a confidentiality agreement, in form and substance reasonably satisfactory to Landlord, whereby such parties agree not to disclose to any third party any of the information obtained in connection with such review. Tenant shall pay the fees and expenses relating to such procedure, unless such accountants determine that Landlord overstated Operating Expenses by more than 5% for such Comparison Year, in which case Landlord shall pay such fees and expenses. Except as provided in this Section 7.4, Tenant shall have no right whatsoever to dispute, by judicial proceeding or otherwise, the accuracy of any Statement.

**Section 7.5 Proration.** If the Rent Commencement Date is not January 1, and provided that the Rent Commencement Date does not occur in the Base Year, Tenant's Tax Payment and Tenant's Operating Payment for the Comparison Year in which the Rent Commencement Date occurs shall be apportioned on the basis of the number of days in the year from the Rent Commencement Date to the following December 31. If the Expiration Date occurs on a date other than December 31st, Tenant's Tax Payment and Tenant's Operating Payment for the Comparison Year in which such Expiration Date occurs shall be apportioned on the basis of the number of days in the period from January 1st to the Expiration Date. Upon the expiration or earlier termination of this Lease, any Additional Rent under this Article 7 shall be adjusted or paid within 30 days after submission of the Statement for the last Comparison Year. Landlord shall have the right, from time to time, to equitably allocate some or all of the Taxes and/or Operating Expenses for the Real Property among different portions or occupants of the Real Property (the "Cost Pools"), in Landlord's reasonable discretion. Such Cost Pools may include, but shall not be limited to, the office space tenants of the Real Property and the retail space tenants of the Real Property. The Taxes and/or Operating Expenses allocable to each such Cost Pool shall be allocated to such Cost Pool and charged to the tenants within such Cost Pool in an equitable manner.

**Section 7.6** No Reduction in Rent. In no event shall any decrease in Operating Expenses or Taxes in any Comparison Year below the Base Operating Expenses or Base Taxes, as the case may be, result in a reduction in the Fixed Rent or any component of Additional Rent payable hereunder.

ARTICLE 8

REQUIREMENTS OF LAW

**Section 8.1 Compliance with Requirements.**

(a) **Tenant's Compliance.** Tenant, at its expense, shall comply with all Requirements applicable to the Premises and/or Tenant's use or occupancy thereof; provided, however, that Tenant shall not be obligated to comply with any Requirements requiring any structural alterations to the Building unless the application of such Requirements arises from (i) the specific manner and/or nature of Tenant's use or occupancy of the Premises, as distinct from general office use, (ii) Alterations made by Tenant, or (iii) a breach by Tenant of any provisions of this Lease. Any repairs or alterations required for compliance with applicable Requirements shall be made at Tenant's expense (1) by Tenant in compliance with Article 5 if such repairs or alterations are nonstructural and do not affect any Building System, and to the extent such repairs or alterations do not affect areas outside the Premises, or (2) by Landlord if such repairs or alterations are structural or affect any Building System, or to the extent such repairs or alterations affect areas outside the Premises. If Tenant obtains knowledge of any failure to comply with any Requirements applicable to the Premises, Tenant shall give Landlord prompt notice thereof.

(b) **Hazardous Materials.** Tenant shall not cause or permit (i) any Hazardous Materials to be brought into the Building, (ii) the storage or use of Hazardous Materials in or about the Building or Premises (subject to the second sentence of this Section 8.1(b)), or (iii) the escape, disposal or release of any Hazardous Materials within or in the vicinity of the Building. Nothing herein shall be deemed to prevent Tenant's use of any Hazardous Materials customarily used in the ordinary course of office work, provided such use is in accordance with all Requirements. Tenant shall be responsible, at its expense, for all matters directly or indirectly based on, or arising or resulting from the presence of Hazardous Materials in the Building which is caused or permitted by a Tenant Party. Tenant shall provide to Landlord copies of all communications received by Tenant with respect to any Requirements relating to Hazardous Materials, and/or any claims made in connection therewith. Landlord or its agents may perform environmental inspections of the Premises at any time. Landlord warrants to Tenant that Landlord is not aware of any Hazardous Materials present in or about the Premises that are in violation of applicable laws.

(c) **Landlord's Compliance.** Landlord shall comply with (or cause to be complied with) all Requirements applicable to the Building which are not the obligation of Tenant, to the extent that non-compliance would materially impair Tenant's use and occupancy of the Premises for the Permitted Uses.

(d) **Landlord's Insurance.** Tenant shall not cause or permit any action or condition that would (i) invalidate or conflict with Landlord's insurance policies, (ii) violate applicable rules, regulations and guidelines of the Fire Department, Fire Insurance Rating Organization or any other authority having jurisdiction over the Building, (iii) cause an increase in the premiums of insurance for the Building over that payable with respect to Comparable Buildings, or (iv) result in Landlord's insurance companies' refusing to insure the Building or any property therein in amounts and against risks as reasonably determined by Landlord. If insurance premiums increase as a result of Tenant's failure to comply with the provisions of this Section 8.1, Tenant shall promptly cure such failure and shall reimburse Landlord for the increased insurance premiums paid by Landlord as a result of such failure by Tenant.

**Section 8.2 Fire and Life Safety.** Landlord shall maintain in good order and repair the sprinkler, fire-alarm and life-safety system in the Premises. If the Fire Insurance Rating Organization or any Governmental Authority or any of Landlord's insurers requires or recommends any modifications and/or alterations be made or any additional equipment be supplied in connection with the sprinkler system or fire alarm and life-safety system serving the Building by reason of Tenant's business, any Alterations performed by Tenant or the location of the partitions, Tenant's Property, or other contents of the Premises, Landlord shall make such modifications and/or Alterations, and supply such additional equipment, at Tenant's expense.

**ARTICLE 9**  
**SUBORDINATION**

**Section 9.1 Subordination and Attornment.** (a) This Lease is subject and subordinate to all Mortgages and Superior Leases, and, at the request of any Mortgagee or Lessor, Tenant shall attorn to such Mortgagee or Lessor, its successors in interest or any purchaser in a foreclosure sale.

(b) If a Lessor or Mortgagee or any other person or entity shall succeed to the rights of Landlord under this Lease, whether through possession or foreclosure action or the delivery of a new lease or deed, then successor landlord shall accept Tenant's attornment and recognize Tenant's interest under this Lease, and Tenant shall be deemed to have attorned to and recognized such successor landlord as Landlord under this Lease. The provisions of this Section 9.1 are self-operative and require no further instruments to give effect hereto; provided, however, that Tenant shall promptly execute and deliver any commercially reasonable instrument that such successor landlord may reasonably request (i) evidencing such attornment, (ii) setting forth the terms and conditions of Tenant's tenancy, and (iii) containing such other terms and conditions as may be required by such Mortgagee or Lessor, provided such terms and conditions do not increase the Rent, materially increase Tenant's other obligations or materially and adversely affect Tenant's rights under this Lease. Upon such attornment this Lease shall continue in full force and effect as a direct lease between such successor landlord and Tenant upon all of the terms, conditions and covenants set forth in this Lease except that such successor landlord shall not be

(i) liable for any act or omission of Landlord (except to the extent such act or omission continues beyond the date when such successor landlord succeeds to Landlord's interest and Tenant gives notice of such act or omission);

(ii) subject to any defense, claim, counterclaim, set-off or offset which Tenant may have against Landlord; prior landlord;

(iii) bound by any prepayment of more than one month's Rent to any prior landlord;

(iv) bound by any obligation to make any payment to Tenant which was required to be made prior to the time such successor landlord succeeded to Landlord's interest;

(v) bound by any obligation to perform any work or to make improvements to the Premises except for (x) repairs and maintenance required to be made by Landlord under this Lease, and (y) repairs to the Premises as a result of damage by fire or other casualty or a partial condemnation pursuant to the provisions of this Lease, but only to the extent that such repairs can reasonably be made from the net proceeds of any insurance or condemnation awards, respectively, actually made available to such successor landlord;

(vi) bound by any modification, amendment or renewal of this Lease made without successor landlord's consent;

(vii) liable for the repayment of any security deposit or surrender of any letter of credit, unless and until such security deposit actually is paid or such letter of credit is actually delivered to such successor landlord; or

(viii) liable for the payment of any unfunded tenant improvement allowance, refurbishment allowance or similar obligation.

(c) Tenant shall from time to time within 10 days of request from Landlord execute and deliver any documents or instruments that may be reasonably required by any Mortgagee or Lessor to confirm any subordination.

**Section 9.2 Mortgage or Superior Lease Defaults.** Any Mortgagee may elect that this Lease shall have priority over the Mortgage and, upon notification to Tenant by such Mortgagee, this Lease shall be deemed to have priority over such Mortgage, regardless of the date of this Lease. In connection with any financing of the Real Property, Tenant shall consent to any reasonable modifications of this Lease requested by any lending institution, provided such modifications do not increase the Rent, materially increase the other obligations, or materially and adversely affect the rights, of Tenant under this Lease.

**Section 9.3 Tenant's Termination Right.** As long as any Superior Lease or Mortgage exists, Tenant shall not seek to terminate this Lease by reason of any act or omission of Landlord until (a) Tenant shall have given notice of such act or omission to all Lessors and/or Mortgagees, and (b) a reasonable period of time shall have elapsed following the giving of notice of such default and the expiration of any applicable notice or grace periods (unless such act or omission is not capable of being remedied within a reasonable period of time), during which period such Lessors and/or Mortgagees shall have the right, but not the obligation, to remedy such act or omission and thereafter diligently proceed to so remedy such act or omission. If any Lessor or Mortgagee elects to remedy such act or omission of Landlord, Tenant shall not seek to terminate this Lease so long as such Lessor or Mortgagee is proceeding with reasonable diligence to effect such remedy.

**Section 9.4 Provisions.** The provisions of this Article 9 shall (a) inure to the benefit of Landlord, any future owner of the Building or the Real Property, Lessor or Mortgagee and any sublessor thereof and (b) apply notwithstanding that, as a matter of law, this Lease may terminate upon the termination of any such Superior Lease or Mortgage.

**Section 9.5 Future Condominium Declaration.** This Lease and Tenant's rights hereunder are and will be subject and subordinate to any condominium declaration, by-laws and other instruments (collectively, the "**Declaration**") which may be recorded regardless of the reason therefor, in order to permit a condominium form of ownership of the Building pursuant to the Washington Condominium Act, RCW 64.34.005-950, or any successor Requirement, provided that the Declaration does not by its terms increase the Rent, materially increase Tenant's non-Rent obligations or materially and adversely affect Tenant's rights under this Lease. At Landlord's request, and subject to the foregoing proviso, Tenant will execute and deliver to Landlord an amendment of this Lease confirming such subordination and modifying this Lease to conform to such condominium regime.

## ARTICLE 10

### SERVICES

**Section 10.1 Electricity.** Subject to any Requirements or any public utility rules or regulations governing energy consumption, Landlord shall make or cause to be made, customary arrangements with utility companies and/or public service companies to furnish electric current to the Premises for Tenant's use in accordance with the Design Standards. If Landlord reasonably determines by the use of an electrical consumption survey or by other reasonable means that Tenant is using electric current (including overhead fluorescent fixtures) in excess of .60 kilowatt hours per square foot of usable area in the Premises per month, as determined on an annualized basis ("**Excess Electrical Usage**"), then Landlord shall have the right to charge Tenant an amount equal to Landlord's reasonable estimate of Tenant's Excess Electrical Usage, and shall have the further right to install an electric current meter, sub-meter or check meter in the Premises (a "**Meter**") to measure the amount of electric current consumed in the Premises. The cost of such Meter, special conduits, wiring and panels needed in connection therewith and the installation, maintenance and repair thereof shall be paid by Tenant. Tenant shall pay to Landlord, from time to time, but no more frequently than monthly, for its Excess Electrical Usage at the Premises, plus Landlord's charge equal to 5% of Tenant's Excess Electrical Usage for Landlord's costs of maintaining, repairing and reading such Meter. The rate to be paid by Tenant for submetered electricity shall include any taxes or other charges in connection therewith.

**Section 10.2 Excess Electricity.** Tenant shall at all times comply with the rules and regulations of the utility company supplying electricity to the Building. Tenant shall not use any electrical equipment which, in Landlord's reasonable judgment, would exceed the capacity of the electrical equipment serving the Premises. If Landlord determines that Tenant's electrical requirements necessitate installation of any additional risers, feeders or other



electrical distribution equipment (collectively, “**Electrical Equipment**”), or if Tenant provides Landlord with evidence reasonably satisfactory to Landlord of Tenant’s need for excess electricity and requests that additional Electrical Equipment be installed, Landlord shall, at Tenant’s expense, install such additional Electrical Equipment, provided that Landlord, in its sole judgment, determines that (a) such installation is practicable and necessary, (b) such additional Electrical Equipment is permissible under applicable Requirements, and (c) the installation of such Electrical Equipment will not cause permanent damage to the Building or the Premises, cause or create a hazardous condition, entail excessive or unreasonable alterations, interfere with or limit electrical usage by other tenants or occupants of the Building or exceed the limits of the switchgear or other facilities serving the Building, or require power in excess of that available from the utility company serving the Building.

**Section 10.3 Elevators.** Landlord shall provide passenger elevator service to the Premises 24 hours per day, 7 days per week; provided, however, Landlord may limit passenger elevator service during times other than Ordinary Business Hours. Landlord shall provide at least one freight elevator serving the Premises, available upon Tenant’s prior request, on a non-exclusive “first come, first serve” basis with other Building tenants, on all Business Days from 8:00 a.m. to 5:00 p.m., excluding Tuesdays from 1:00 pm to 3:00 pm, which hours of operation are subject to change.

**Section 10.4 Heating, Ventilation and Air Conditioning.** Landlord shall furnish to the Premises heating, ventilation and air-conditioning (“**HVAC**”) in accordance with the Design Standards set forth in **Exhibit D** during Ordinary Business Hours. Landlord shall have access to all air-cooling, fan, ventilating and machine rooms and electrical closets and all other mechanical installations of Landlord (collectively, “**Mechanical Installations**”), and Tenant shall not construct partitions or other obstructions which may interfere with Landlord’s access thereto or the moving of Landlord’s equipment to and from the Mechanical Installations. No Tenant Party shall at any time enter the Mechanical Installations or tamper with, adjust, or otherwise affect such Mechanical Installations. Landlord shall not be responsible if the HVAC System fails to provide cooled or heated air, as the case may be, to the Premises in accordance with the Design Standards by reason of (i) any equipment installed by, for or on behalf of Tenant, which has an electrical load in excess of the average electrical load and human occupancy factors for the HVAC System as designed, or (ii) any rearrangement of partitioning or other Alterations made or performed by, for or on behalf of Tenant. Tenant shall install, if missing, blinds or shades on all windows, which blinds and shades shall be subject to Landlord’s approval, and shall keep operable windows in the Premises closed, and lower the blinds when necessary because of the sun’s position, whenever the HVAC System is in operation or as and when required by any Requirement. Tenant shall cooperate with Landlord and shall abide by the rules and regulations which Landlord may reasonably prescribe for the proper functioning and protection of the HVAC System.

**Section 10.5 Overtime Freight Elevators and HVAC.** The Fixed Rent does not include any charge to Tenant for the furnishing of any freight elevator service or HVAC to the Premises during any periods other than as set forth in Section 10.3 and Section 10.4 (“**Overtime Periods**”). If Tenant desires any such services during Overtime Periods, Tenant shall deliver notice to the Building office requesting such services at least 24 hours prior to the time Tenant requests such services to be provided; provided, however, that Landlord shall use reasonable efforts to arrange such service on such shorter notice as Tenant shall provide. If Landlord furnishes freight elevator or HVAC service during Overtime Periods, Tenant shall pay to Landlord the cost thereof at the then established rates for such services in the Building.

**Section 10.6 Cleaning.** Landlord shall cause the Premises (excluding any portions thereof used for the storage, preparation, service or consumption of food or beverages, as an exhibition area or classroom, for storage, as a shipping room, mail room or similar purposes, for private bathrooms, showers or exercise facilities, as a trading floor, or primarily for operation of computer, data processing, reproduction, duplicating or similar equipment) to be cleaned, substantially in accordance with the standards set forth in **Exhibit E**. Any areas of the Premises which Landlord is not required to clean hereunder or which require additional cleaning shall be cleaned, at Tenant’s expense, by Landlord’s cleaning contractor, at rates which shall be competitive with rates of other cleaning contractors providing comparable services to Comparable Buildings. Landlord’s cleaning contractor and its employees shall have access to the Premises at all times except between 8:00 a.m. and 5:30 p.m. on weekdays which are not Observed Holidays.

**Section 10.7 Water.** Landlord shall provide water in the core lavatories on each floor of the Building. If Tenant requires water for any additional purposes, Tenant shall pay for the cost of bringing water to the Premises and Landlord may install a meter to measure the water. Tenant shall pay the cost of such installation, and for all maintenance, repairs and replacements thereto, and for the reasonable charges of Landlord for the water consumed.

**Section 10.8 Refuse Removal.** Landlord shall provide refuse removal services at the Building for ordinary office refuse and rubbish. Tenant shall pay to Landlord, Landlord's reasonable charge for such removal to the extent that the refuse generated by Tenant exceeds the refuse customarily generated by general office tenants. Tenant shall not dispose of any refuse in the Common Areas, and if Tenant does so, Tenant shall be liable for Landlord's reasonable charge for such removal.

**Section 10.9 Directory.** The lobby shall contain a directory wherein the Building's tenants shall be listed. Tenant shall be entitled to a proportionate share of such listings, based on the rentable square footage of the Premises. Landlord shall provide initial building standard suite and directory signage and listings at its cost.

**Section 10.10 Telecommunications.** If Tenant requests that Landlord grant access to the Building to a telecommunications service provider designated by Tenant for purposes of providing telecommunications services to Tenant, Landlord shall use its good faith efforts to respond to such request within 30 days. Tenant acknowledges that nothing set forth in this Section 10.10 shall impose any affirmative obligation on Landlord to grant such request and that Landlord, in its sole discretion, shall have the right to determine which telecommunications service providers shall have access to Building facilities.

**Section 10.11 Service Interruptions.** Landlord reserves the right to suspend any service when necessary, by reason of Unavoidable Delays, accidents or emergencies, or for any Work of Improvement which, in Landlord's reasonable judgment, is necessary or appropriate, until such Unavoidable Delay, accident or emergency shall cease or such Work of Improvement is completed and Landlord shall not be liable for any interruption, curtailment or failure to supply services. Landlord shall use reasonable efforts to minimize interference with Tenant's use and occupancy of the Premises as a result of any such interruption, curtailment or failure of or defect in such service, or change in the supply, character and/or quantity of, electrical service, and to restore any such services, remedy such situation and minimize any interference with Tenant's business. The exercise of any such right or the occurrence of any such failure by Landlord shall not constitute an actual or constructive eviction, in whole or in part, entitle Tenant to any compensation, abatement or diminution of Rent, relieve Tenant from any of its obligations under this Lease, or impose any liability upon Landlord or any Indemnified Party by reason of inconvenience to Tenant, or interruption of Tenant's business, or otherwise. Landlord shall not be liable in any way to Tenant for any failure, defect or interruption of, or change in the supply, character and/or quantity of, electric service furnished to the Premises for any reason except if attributable to the gross negligence or willful misconduct of Landlord.

## ARTICLE 11

### INSURANCE; PROPERTY LOSS OR DAMAGE

**Section 11.1 Tenant's Insurance.** (a) Tenant, at its expense, shall obtain and keep in full force and effect during the Term:

(i) a policy of commercial general liability insurance on an occurrence basis against claims for personal injury, bodily injury, death and/or property damage occurring in or about the Building, under which Tenant is named as the insured and Landlord, Landlord's Agent and any Lessors and any Mortgagees whose names have been furnished to Tenant are named as additional insureds (the "**Insured Parties**"). Such insurance shall provide primary coverage without contribution from any other insurance carried by or for the benefit of the Insured Parties, and Tenant shall obtain blanket broad-form contractual liability coverage to insure its indemnity obligations set forth in Article 25. The minimum limits of liability applying exclusively to the Premises shall be a combined single limit with respect to each occurrence in an amount of not less than \$5,000,000; provided, however, that Landlord shall retain the right to require Tenant to increase such coverage from time to time to that amount of insurance which in Landlord's reasonable judgment is then being customarily required by landlords for similar office space in Comparable Buildings,

provided further however, that Landlord shall not increase such policy limits more than once per five (5) years. The self insured retention for such policy shall not exceed \$25,000. Tenant may satisfy the limits of liability required herein with a combination of umbrella and/or excess policies of insurance, provided that such policies comply with all of the provisions hereof (including, without limitation, with respect to scope of coverage and naming of the Insured Parties);

(ii) insurance against loss or damage by fire, and such other risks and hazards as are insurable under then available standard forms of "Special Form Causes of Loss" or "All Risk" property insurance policies, insuring Tenant's Property and all Alterations and improvements to the Premises (including the initial installations) to the extent such Alterations and improvements exceed the cost of the improvements typically performed in connection with the initial occupancy of tenants in the Building ("**Building Standard Installations**"), for the full insurable value thereof or replacement cost thereof, having a deductible amount, if any, not in excess of \$25,000;

(iii) during the performance of any Alteration, until completion thereof, Builder's Risk insurance on an "all risk" basis and on a completed value form including a Permission to Complete and Occupy endorsement, for full replacement value covering the interest of Landlord and Tenant (and their respective contractors and subcontractors) in all work incorporated in the Building and all materials and equipment in or about the Premises;

(iv) Workers' Compensation Insurance, as required by law;

(v) Business Interruption Insurance covering a minimum of one year of anticipated gross income;

(vi) if the Building or Real Property includes a parking garage or surface parking lot that is utilized by Tenant, Commercial Automobile Liability Insurance for any owned, non-owned or hired vehicles with a combined single limit with respect to each occurrence in an amount of not less than \$1,000,000; and

(vii) such other insurance in such amounts as the Insured Parties may reasonably require from time to time.

(b) All insurance required to be carried by Tenant (i) shall contain a provision that no act or omission of Tenant shall affect or limit the obligation of the insurance company to pay the amount of any loss sustained, and (ii) shall be effected under valid and enforceable policies issued by reputable insurers admitted to do business in the State of Washington and rated in Best's Insurance Guide, or any successor thereto as having a "Best's Rating" of "A-" or better and a "Financial Size Category" of at least "VII" or better, or, if such ratings are not then in effect, the equivalent thereof or such other financial rating as Landlord may at any time reasonably consider appropriate. Tenant agrees not to cancel the insurance required to be carried hereunder or materially change the same in a manner that causes any noncompliance under this Lease unless the Insured Parties receive 30 days' prior notice of the same, by certified mail, return receipt requested.

(c) On or prior to the Commencement Date, Tenant shall deliver to Landlord appropriate policies of insurance required to be carried pursuant to this Article 11, including evidence of waivers of subrogation and that the Insured Parties are named as additional insureds (the "**Policies**"). Evidence of each renewal or replacement of the Policies shall be delivered by Tenant to Landlord at least 10 days prior to the expiration of the Policies. In lieu of the Policies, Tenant may deliver to Landlord a certification from Tenant's insurance company, on the form currently designated "Acord 27" (Evidence of Property Insurance) and "Acord 25-S" (Certificate of Liability Insurance), or the equivalent, provided that attached thereto is an endorsement to Tenant's commercial general liability policy naming the Insured Parties as additional insureds, which endorsement is at least as broad as ISO policy form "CG 20 11 Additional Insured – Managers or Lessors of Premises" (pre-1999 edition) or its equivalent reasonably acceptable to Landlord, and which endorsement expressly provides coverage for the negligence of the additional insureds, which certification shall be binding on Tenant's insurance company, and which shall expressly provide that such certification conveys to the Insured Parties all the rights and privileges afforded under the Policies as primary insurance.

**Section 11.2 Waiver of Subrogation.** Landlord and Tenant shall each procure an appropriate clause in or endorsement to any property insurance covering the Real Property and personal property, fixtures and equipment located therein, wherein the insurer waives subrogation or consents to a waiver of right of recovery, and Landlord and Tenant agree not to make any claim against, or seek to recover from, the other for any loss or damage to its property or the property of others resulting from fire or other hazards to the extent covered by the property insurance that was required to be carried by that party under the terms of this Lease. Tenant acknowledges that Landlord shall not carry insurance on, and shall not be responsible for, (i) damage to any Above Building Standard Installations, (ii) Tenant's Property, and (iii) any loss suffered by Tenant due to interruption of Tenant's business.

**Section 11.3 Restoration. (a)** If the Premises are damaged by fire or other casualty, or if the Building is damaged such that Tenant is deprived of reasonable access to the Premises, the damage shall be repaired by Landlord, to substantially the condition of the Premises prior to the damage, subject to the provisions of any Mortgage or Superior Lease, but Landlord shall have no obligation to repair or restore (i) Tenant's Property or (ii) except as provided in Section 11.3(b), any Alterations or improvements to the Premises to the extent such Alterations or improvements exceed Building Standard Installations ("**Above Building Standard Installations**"). So long as Tenant is not in default beyond applicable grace or notice provisions in the payment or performance of its obligations under this Section 11.3, and provided Tenant timely delivers to Landlord either Tenant's Restoration Payment (as hereinafter defined) or the Restoration Security (as hereinafter defined) or Tenant expressly waives any obligation of Landlord to repair or restore any of Tenant's Above Building Standard Installations, then until the restoration of the Premises is Substantially Completed or would have been Substantially Completed but for Tenant Delay, Fixed Rent, Tenant's Tax Payment and Tenant's Operating Payment shall be reduced in the proportion by which the area of the part of the Premises which is not usable (or accessible) and is not used by Tenant bears to the total area of the Premises.

**(b)** As a condition precedent to Landlord's obligation to repair or restore any Above Building Standard Installations, Tenant shall (i) pay to Landlord upon demand a sum ("**Tenant's Restoration Payment**") equal to the amount, if any, by which (A) the cost, as estimated by a reputable independent contractor designated by Landlord, of repairing and restoring all Alterations and Initial Installations in the Premises to their condition prior to the damage, exceeds (B) the cost of restoring the Premises with Building Standard Installations, or (ii) furnish to Landlord security (the "**Restoration Security**") in form and amount reasonably acceptable to Landlord to secure Tenant's obligation to pay all costs in excess of restoring the Premises with Building Standard Installations. If Tenant shall fail to deliver to Landlord either (1) Tenant's Restoration Payment or the Restoration Security, as applicable, or (2) a waiver by Tenant, in form satisfactory to Landlord, of all of Landlord's obligations to repair or restore any of the Above Building Standard Installations, in either case within 15 days after Landlord's demand therefor, Landlord shall have no obligation to restore any Above Building Standard Installations and Tenant's abatement of Fixed Rent, Tenant's Tax Payment and Tenant's Operating Payment shall cease when the restoration of the Premises (other than any Above Building Standard Installations) is Substantially Complete.

**Section 11.4 Landlord's Termination Right.** Notwithstanding anything to the contrary contained in Section 11.3, (a) if the Premises are totally damaged or are rendered wholly untenable, (b) if the Building shall be so damaged that, in Landlord's reasonable opinion, substantial alteration, demolition, or reconstruction of the Building shall be required (whether or not the Premises are so damaged or rendered untenable), (c) if any Mortgagee shall require that the insurance proceeds or any portion thereof be used to retire the Mortgage debt or any Lessor shall terminate the Superior Lease, as the case may be, or (d) if the damage is not fully covered, except for deductible amounts, by Landlord's insurance policies, then in any of such events, Landlord may, not later than 60 days following the date of the damage, terminate this Lease by notice to Tenant. If this Lease is so terminated, (a) the Term shall expire upon the 30th day after such notice is given, (b) Tenant shall vacate the Premises and surrender the same to Landlord, (c) Tenant's liability for Rent shall cease as of the date of the damage, and (d) any prepaid Rent for any period after the date of the damage shall be refunded by Landlord to Tenant.

**Section 11.5 Tenant's Termination Right.** If the Premises are totally damaged and are thereby rendered wholly untenable, or if the Building shall be so damaged that Tenant is deprived of reasonable access to the Premises, and if Landlord elects to restore the Premises, Landlord shall, within 60 days following the date of the damage, cause a contractor or architect selected by Landlord to give notice (the "**Restoration Notice**") to Tenant of the date by which such contractor or architect estimates the restoration of the Premises (excluding any Above Building Standard Installations) shall be Substantially Completed. If such date, as set forth in the Restoration Notice, is more

than 15 months from the date of such damage, then Tenant shall have the right to terminate this Lease by giving notice (the“**Termination Notice**”) to Landlord not later than 30 days following delivery of the Restoration Notice to Tenant. If Tenant delivers a Termination Notice, this Lease shall be deemed to have terminated as of the date of the giving of the Termination Notice, in the manner set forth in the second sentence of Section 11.4.

**Section 11.6 Final 18 Months.** Notwithstanding anything to the contrary in this Article 11, if any damage during the final 18 months of the Term renders the Premises wholly untenantable, either Landlord or Tenant may terminate this Lease by notice to the other party within 30 days after the occurrence of such damage and this Lease shall expire on the 30th day after the date of such notice. For purposes of this Section 11.6, the Premises shall be deemed wholly untenantable if Tenant shall be precluded from using more than 50% of the Premises for the conduct of its business and Tenant’s inability to so use the Premises is reasonably expected to continue for more than 90 days.

**Section 11.7 Landlord’s Liability.** Any Building employee to whom any property shall be entrusted by or on behalf of Tenant shall be deemed to be acting as Tenant’s agent with respect to such property and neither Landlord nor its agents shall be liable for any damage to such property, or for the loss of or damage to any property of Tenant by theft or otherwise. None of the Insured Parties shall be liable for any injury or damage to persons or property or interruption of Tenant’s business resulting from fire or other casualty, any damage caused by other tenants or persons in the Building or by construction of any private, public or quasi-public work, or any latent defect in the Premises or in the Building (except that Landlord shall be required to repair the same to the extent provided in Article 6). No penalty shall accrue for delays which may arise by reason of adjustment of casualty insurance on the part of Landlord or Tenant, or for any Unavoidable Delays arising from any repair or restoration of any portion of the Building, provided that Landlord shall use reasonable efforts to minimize interference with Tenant’s use and occupancy of the Premises during the performance of any such repair or restoration.

## ARTICLE 12

### EMINENT DOMAIN

#### Section 12.1 Taking.

(a) **Total Taking.** If all or substantially all of the Real Property, the Building or the Premises shall be acquired or condemned for any public or quasi-public purpose (a “**Taking**”), this Lease shall terminate and the Term shall end as of the date of the vesting of title and Rent shall be prorated and adjusted as of such date.

(b) **Partial Taking.** Upon a Taking of only a part of the Real Property, the Building or the Premises then, except as hereinafter provided in this Article 12, this Lease shall continue in full force and effect, provided that from and after the date of the vesting of title, Fixed Rent and Tenant’s Proportionate Share shall be modified to reflect the reduction of the Premises and/or the Building as a result of such Taking.

(c) **Landlord’s Termination Right.** Whether or not the Premises are affected, Landlord may, by notice to Tenant, within 60 days following the date upon which Landlord receives notice of the Taking of all or a portion of the Real Property, the Building or the Premises, terminate this Lease.

(d) **Tenant’s Termination Right.** If the part of the Real Property so Taken contains more than 20% of the total area of the Premises occupied by Tenant immediately prior to such Taking, or if, by reason of such Taking, Tenant no longer has reasonable means of access to the Premises, Tenant may terminate this Lease by notice to Landlord given within 30 days following the date upon which Tenant is given notice of such Taking. If Tenant so notifies Landlord, this Lease shall end and expire upon the 30th day following the giving of such notice. If a part of the Premises shall be so Taken and this Lease is not terminated in accordance with this Section 12.1 Landlord, without being required to spend more than it collects as an award, shall, subject to the provisions of any Mortgage or Superior Lease, restore that part of the Premises not so Taken to a self-contained rental unit substantially equivalent (with respect to character, quality, appearance and services) to that which existed immediately prior to such Taking, excluding Tenant’s Property and any Above Building Standard Installations.

(e) **Apportionment of Rent.** Upon any termination of this Lease pursuant to the provisions of this Article 12, Rent shall be apportioned as of, and shall be paid or refunded up to and including, the date of such termination.

**Section 12.2 Awards.** Upon any Taking, Landlord shall receive the entire award for any such Taking, and Tenant shall have no claim against Landlord or the condemning authority for the value of any unexpired portion of the Term or Tenant's Alterations; and Tenant hereby assigns to Landlord all of its right in and to such award. Nothing contained in this Article 12 shall be deemed to prevent Tenant from making a separate claim in any condemnation proceedings for the then value of any Tenant's Property or Above Building Standard Installations included in such Taking and for any moving expenses, provided any such award is in addition to, and does not result in a reduction of, the award made to Landlord.

**Section 12.3 Temporary Taking.** If all or any part of the Premises is Taken temporarily during the Term for any public or quasi-public use or purpose, Tenant shall give prompt notice to Landlord and the Term shall not be reduced or affected in any way and Tenant shall continue to pay all Rent payable by Tenant without reduction or abatement and to perform all of its other obligations under this Lease, except to the extent prevented from doing so by the condemning authority, and Tenant shall be entitled to receive any award or payment from the condemning authority for such use, which shall be received, held and applied by Tenant as a trust fund for payment of the Rent falling due.

## ARTICLE 13

### ASSIGNMENT AND SUBLETTING

#### Section 13.1 Consent Requirements.

(a) **No Transfers.** Except as expressly set forth herein, Tenant shall not assign, mortgage, pledge, encumber, or otherwise transfer this Lease, whether by operation of law or otherwise, and shall not sublet, or permit, or suffer the Premises or any part thereof to be used or occupied by others (whether for desk space, mailing privileges or otherwise), without Landlord's prior consent in each instance. Any assignment, sublease, mortgage, pledge, encumbrance or transfer in contravention of the provisions of this Article 13 shall be void and shall constitute an Event of Default.

(b) **Collection of Rent.** If, without Landlord's consent, this Lease is assigned, or any part of the Premises is sublet or occupied by anyone other than Tenant or this Lease is encumbered (by operation of law or otherwise), Landlord may collect rent from the assignee, subtenant or occupant, and apply the net amount collected to the Rent herein reserved. No such collection shall be deemed a waiver of the provisions of this Article 13, an acceptance of the assignee, subtenant or occupant as tenant, or a release of Tenant from the performance of Tenant's covenants hereunder, and in all cases Tenant shall remain fully liable for its obligations under this Lease.

(c) **Further Assignment/Subletting.** Landlord's consent to any assignment or subletting shall not relieve Tenant from the obligation to obtain Landlord's consent to any further assignment or subletting. In no event shall any permitted subtenant assign or encumber its sublease or further sublet any portion of its sublet space, or otherwise suffer or permit any portion of the sublet space to be used or occupied by others.

**Section 13.2 Tenant's Notice.** If Tenant desires to assign this Lease or sublet all or any portion of the Premises (sometimes referred to herein as a "Transfer"), Tenant shall give notice thereof to Landlord, which shall be accompanied by (a) with respect to an assignment of this Lease, the date Tenant desires the assignment to be effective, and (b) with respect to a sublet of all or a part of the Premises, a description of the portion of the Premises to be sublet, the commencement date of such sublease and the rent per rentable square foot Tenant will ask for such portion of the Premises ("**Tenant's Asking Rate**"). Such notice shall be deemed an irrevocable offer from Tenant to Landlord of the right, at Landlord's option, (1) to terminate this Lease with respect to such space as Tenant proposes to sublease (the "**Partial Space**"), upon the terms and conditions hereinafter set forth, or (2) if the proposed transaction is an assignment of this Lease or a subletting of 50% or more of the rentable square footage of the Premises, to terminate this Lease with respect to the entire Premises. Such option may be exercised by notice from Landlord to Tenant within 30 days after delivery of Tenant's notice. If Landlord exercises its option to terminate this Lease with respect to all or a portion of the Premises, (a) this Lease shall end and expire with respect to all or a portion of the Premises, as the case may be, on the date that such assignment or sublease was to commence, provided that such date is in no event earlier than 90 days after the date of the above notice unless Landlord agrees to such earlier date, (b) Rent shall be apportioned, paid or refunded as of such date, (c) Tenant, upon Landlord's request, shall enter into an amendment of this Lease ratifying and confirming such total or partial termination, and setting forth any appropriate modifications to the terms and provisions hereof, and (d) Landlord shall be free to lease the Premises (or any part thereof) to Tenant's prospective assignee or subtenant or to any other party. Tenant shall pay all costs to make the Partial Space a self-contained rental unit and to install any required Building corridors.

**Section 13.3 Intentionally Deleted.**

**Section 13.4 Conditions to Assignment/Subletting.** (a) If Landlord does not exercise Landlord's option provided under Section 13.2, and provided that no Event of Default then exists, Landlord's consent to the proposed assignment or subletting shall not be unreasonably withheld or delayed. Such consent shall be granted or denied within 30 days after delivery to Landlord of (i) a true and complete statement reasonably detailing the identity of the proposed assignee or subtenant ("**Transferee**"), the nature of its business and its proposed use of the Premises, (ii) current financial information with respect to the Transferee, including its most recent financial statements, and (iii) all of the terms of the proposed Transfer and the consideration therefor, together with a copy of all existing executed and/or proposed documentation pertaining to the proposed Transfer, including all existing operative documents to be executed to evidence such Transfer or the agreements incidental or related to such Transfer, and (iv) any other information Landlord may reasonably request, provided that:

(i) in Landlord's reasonable judgment, the Transferee is engaged in a business or activity, and the Premises will be used in a manner, which (1) is in keeping with the then standards of the Building, (2) is for the Permitted Uses, and (3) does not violate any restrictions set forth in this Lease, any Mortgage or Superior Lease or any negative covenant as to use of the Premises required by any other lease in the Building;

(ii) the Transferee is reputable with sufficient financial means to perform all of its obligations under this Lease or the sublease, as the case may be;

(iii) if Landlord has, or reasonably expects to have within 5 months thereafter, comparable space available in the Building, neither the Transferee nor any person or entity which, directly or indirectly, controls, is controlled by, or is under common control with, the Transferee is then an occupant of the Building;

(iv) the Transferee is not a person or entity (or affiliate of a person or entity) with whom Landlord is then or has been within the prior 6 months negotiating in connection with the rental of space in the Building;

(v) there shall be not more than 2 subtenants in each floor of the Premises;

(vi) Intentionally deleted;

(vii) Tenant shall, upon demand, reimburse Landlord for all reasonable expenses incurred by Landlord in connection with such assignment or sublease, including any investigations as to the acceptability of the Transferee and all legal costs reasonably incurred in connection with the granting of any requested consent;

(viii) Intentionally deleted;

(ix) the proposed Transfer is either a sublease or a non-collateral complete assignment;

(x) the proposed Transfer would not cause Landlord to be in violation of any Requirements or any other lease, Mortgage, Superior Lease or agreement to which Landlord is a party and would not give a tenant of the Real Property a right to cancel its lease; and

(xi) the Transferee shall not be either a governmental agency or an instrumentality thereof, nor shall the Transferee be entitled, directly or indirectly, to diplomatic or sovereign immunity, regardless of whether the Transferee agrees to waive such diplomatic or sovereign immunity, and shall be subject to the service of process in, and the jurisdiction of the courts of, the County of King and State of Washington.

The parties hereby agree, without limitation as to other reasonable grounds for withholding consent, that it shall be reasonable under this Lease and under applicable law for Landlord to withhold consent to any proposed Transfer based upon any of the foregoing criteria.

(b) With respect to each and every subletting and/or assignment approved by Landlord under the provisions of this Lease:

(i) the form of the proposed assignment or sublease shall be reasonably satisfactory to Landlord;

(ii) no sublease shall be for a term ending later than one day prior to the Expiration Date;

(iii) no Transferee shall take possession of any part of the Premises until an executed counterpart of such sublease or assignment has been delivered to Landlord and approved by Landlord as provided in Section 13.4(a);

(iv) if an Event of Default occurs prior to the effective date of such assignment or subletting, then Landlord's consent thereto, if previously granted, shall be immediately deemed revoked without further notice to Tenant, and if such assignment or subletting would have been permitted without Landlord's consent pursuant to Section 13.8, such permission shall be void and without force and effect, and in either such case, any such assignment or subletting shall constitute a further Event of Default hereunder; and

(v) each sublease shall be subject and subordinate to this Lease and to the matters to which this Lease is or shall be subordinate; and Tenant and each Transferee shall be deemed to have agreed that upon the occurrence and during the continuation of an Event of Default hereunder, Tenant has hereby assigned to Landlord, and Landlord may, at its option, accept such assignment of, all right, title and interest of Tenant as sublandlord under such sublease, together with all modifications, extensions and renewals thereof then in effect and such Transferee shall, at Landlord's option, attorn to Landlord pursuant to the then executory provisions of such sublease, except that Landlord shall not be (A) liable for any previous act or omission of Tenant under such sublease, (B) subject to any counterclaim, offset or defense not expressly provided in such sublease or which theretofore accrued to such Transferee against Tenant, (C) bound by any previous modification of such sublease not consented to by Landlord or by any prepayment of more than one month's rent, (D) bound to return such Transferee's security deposit, if any, except to the extent Landlord shall receive actual possession of such deposit and such Transferee shall be entitled to the return of all or any portion of such deposit under the terms of its sublease, or (E) obligated to make any payment to or on behalf of such Transferee, or to perform any work in the sublet space or the Building, or in any way to prepare the subleased space for occupancy, beyond Landlord's obligations under this Lease. The provisions of this Section 13.4(b)(v) shall be self-operative, and no further instrument shall be required to give effect to this provision, provided that the Transferee shall execute and deliver to Landlord any instruments Landlord may reasonably request to evidence and confirm such subordination and attornment.

**Section 13.5 Binding on Tenant; Indemnification of Landlord.** Notwithstanding any assignment or subletting or any acceptance of rent by Landlord from any Transferee, Tenant and any guarantor shall remain fully liable for the payment of all Rent due and for the performance of all the covenants, terms and conditions contained in this Lease on Tenant's part to be observed and performed, and any default under any term, covenant or condition of this Lease by any Transferee or anyone claiming under or through any Transferee shall be deemed to be a default under this Lease by Tenant. Tenant shall indemnify, defend, protect and hold harmless Landlord from and against any and all Losses resulting from any claims that may be made against Landlord by the Transferee or anyone claiming under or through any Transferee or by any brokers or other persons or entities claiming a commission or similar compensation in connection with the proposed assignment or sublease, irrespective of whether Landlord shall give or decline to give its consent to any proposed assignment or sublease, or if Landlord shall exercise any of its options under this Article 13.



**Section 13.6 Tenant's Failure to Complete.** If Landlord consents to a proposed assignment or sublease and Tenant fails to execute and deliver to Landlord such assignment or sublease within 90 days after the giving of such consent, or the amount of space subject to any such sublease varies by more than 10% from that specified in the notice given by Tenant to Landlord pursuant to Section 13.2, or the net effective rent payable under such sublease is less than 95% of Tenant's Asking Rate, or if there are any changes in the terms and conditions of the proposed assignment or sublease such that Landlord would initially have been entitled to refuse its consent to such Transfer under this Article 13, then Tenant shall again comply with all of the provisions and conditions of Sections 13.2, 13.3 and 13.4 before assigning this Lease or subletting all or part of the Premises.

**Section 13.7 Profits.** If Tenant enters into any assignment or sublease permitted hereunder or consented to by Landlord, Tenant shall, within 60 days of Landlord's consent to such assignment or sublease (or if such assignment or sublease is permitted hereunder without Landlord's prior consent, within 60 days of the effective date of such assignment or sublease), deliver to Landlord a list of Tenant's reasonable third-party brokerage fees, legal fees and architectural fees paid or to be paid in connection with such transaction and, in the case of any sublease, any actual costs incurred by Tenant in separately demising the sublet space (collectively, "**Transaction Costs**"), together with a list of all of Tenant's Property to be transferred to such Transferee. The Transaction Costs shall be amortized, on a straight-line basis, over the term of any sublease. Tenant shall deliver to Landlord evidence of the payment of such Transaction Costs promptly after the same are paid. In consideration of such assignment or subletting, Tenant shall pay to Landlord:

(a) In the case of an assignment, on the effective date of the assignment, 50% of all sums and other consideration paid to Tenant by the Transferee for or by reason of such assignment (including key money, bonus money and any sums paid for services rendered by Tenant to the Transferee in excess of fair market value for such services and sums paid for the sale or rental of Tenant's Property, less the then fair market or rental value thereof, as reasonably determined by Landlord) after first deducting the Transaction Costs; or

(b) In the case of a sublease, 50% of any consideration payable under the sublease to Tenant by the Transferee which exceeds on a per square foot basis the Fixed Rent, Tenant's Tax Payment and Tenant's Operating Payment accruing during the term of the sublease in respect of the sublet space (together with any sums paid for services rendered by Tenant to the Transferee in excess of fair market value for such services and sums paid for the sale or rental of Tenant's Property, less the then fair market or rental value thereof, as reasonably determined by Landlord) after first deducting the monthly amortized amount of Transaction Costs. The sums payable under this clause shall be paid by Tenant to Landlord monthly as and when paid by the subtenant to Tenant.

The amount payable under this Section 13.7 with respect to any particular Transfer is sometimes referred to herein as the "**Transfer Premium.**" Landlord or its authorized representatives shall have the right at all reasonable times to audit the books, records and papers of Tenant relating to any Transfer, and shall have the right to make copies thereof. If the Transfer Premium respecting any Transfer shall be found understated, such event shall, at Landlord's option, be deemed to be an incurable Event of Default (as such term is defined in Section 15.1 below) and Tenant shall, within thirty (30) days after demand, pay the deficiency, and if understated by more than five percent (5%), Tenant shall pay Landlord's costs of such audit.

#### **Section 13.8 Transfers.**

(a) **Related Entities.** If Tenant is a legal entity, the transfer (by one or more transfers), directly or indirectly, by operation of law or otherwise, of a majority of the stock or other beneficial ownership interest in Tenant (collectively, "**Ownership Interests**") or of all or substantially all of the assets of Tenant shall be deemed a voluntary assignment of this Lease; provided, however, that the provisions of this Article 13 shall not apply to the transfer of Ownership Interests in Tenant if and so long as Tenant is publicly traded on a nationally recognized stock exchange. For purposes of this Article the term "transfers" shall be deemed to include (x) the issuance of new Ownership Interests which results in a majority of the Ownership Interests in Tenant being held by a person or entity which does not hold a majority of the Ownership Interests in Tenant on the Effective Date (y) the sale, mortgage, hypothecation or pledge of more than an aggregate of fifty percent (50%) of Tenant's net assets, and (z) except as provided below, the sale or transfer of all or substantially all of the assets of Tenant in one or more transactions or the merger, consolidation or conversion of Tenant into or with another business entity. The provisions of Section 13.1 shall

not apply to transactions with a business entity into or with which Tenant is merged, consolidated or converted or to which all or substantially all of Tenant's assets are transferred so long as (i) such transfer was made for a legitimate independent business purpose and not for the purpose of transferring this Lease, (ii) the successor to Tenant has a tangible net worth computed in accordance with generally accepted accounting principles consistently applied (and excluding goodwill, organization costs and other intangible assets) that is sufficient to meet the obligations of Tenant under this Lease and is at least equal to the net worth of Tenant (1) immediately prior to such merger, consolidation, conversion or transfer, or (2) on the Effective Date, whichever is greater, (iii) proof satisfactory to Landlord of such net worth is delivered to Landlord at least 10 days prior to the effective date of any such transaction, (iv) any such transfer shall be subject and subordinate to all of the terms and provisions of this Lease, and the transferee shall assume, in a written document reasonably satisfactory to Landlord and delivered to Landlord upon or prior to the effective date of such transfer, all the obligations of Tenant under this Lease, (v) Tenant and any guarantor shall remain fully liable for all obligations to be performed by Tenant under this Lease, and (vi) such transfer does not cause Landlord to be in default under any existing lease at the Real Property. Tenant may also, upon prior notice to Landlord, permit any business entity which controls, is controlled by, or is under common control with the original Tenant (a "**Related Entity**") to sublet all or part of the Premises for any Permitted Uses and for so long as such entity remains a Related Entity, provided the Related Entity is in Landlord's reasonable judgment of a character and engaged in a business which is in keeping with the standards for the Building. Such sublease shall not be deemed to vest in any such Related Entity any right or interest in this Lease nor shall it relieve, release, impair or discharge any of Tenant's obligations hereunder. For the purposes hereof, "**control**" shall be deemed to mean ownership of not less than 50% of all of the Ownership Interests of such corporation or other business entity. Notwithstanding the foregoing, Tenant shall have no right to assign this Lease or sublease all or any portion of the Premises without Landlord's consent pursuant to this Section 13.8 if Tenant is not the initial Tenant herein named or a person or entity who acquired Tenant's interest in this Lease in a transaction approved by Landlord, or if an Event of Default by Tenant exists under this Lease.

**(b) Applicability.** The limitations set forth in this Section 13.8 shall apply to Transferee(s) and guarantor(s) of this Lease, if any, and any transfer by any such entity in violation of this Section 13.8 shall be a transfer in violation of Section 13.1.

**(c) Modifications, Takeover Agreements.** Any modification, amendment or extension of a sublease and/or any other agreement by which a landlord of a building other than the Building or its affiliate agrees to assume the obligations of Tenant under this Lease shall be deemed a sublease for the purposes of Section 13.1 hereof.

**Section 13.9 Assumption of Obligations.** No assignment or transfer shall be effective unless and until the Transferee executes, acknowledges and delivers to Landlord an agreement in form and substance reasonably satisfactory to Landlord whereby the Transferee (a) assumes Tenant's obligations under this Lease and (b) agrees that, notwithstanding such assignment or transfer, the provisions of Section 13.1 hereof shall be binding upon it in respect of all future assignments and transfers.

**Section 13.10 Tenant's Liability.** The joint and several liability of Tenant and any successors-in-interest of Tenant and the due performance of Tenant's obligations under this Lease shall not be discharged, released or impaired by any agreement or stipulation made by Landlord, or any grantee or assignee of Landlord, extending the time, or modifying any of the terms and provisions of this Lease, or by any waiver or failure of Landlord, or any grantee or assignee of Landlord, to enforce any of the terms and provisions of this Lease.

**Section 13.11 Listings in Building Directory.** The listing of any name other than that of Tenant on the doors of the Premises, the Building directory or elsewhere shall not vest any right or interest in this Lease or in the Premises, nor be deemed to constitute Landlord's consent to any assignment or transfer of this Lease or to any sublease of the Premises or to the use or occupancy thereof by others. Any such listing shall constitute a privilege revocable in Landlord's discretion by notice to Tenant.

**Section 13.12 Lease Disaffirmance or Rejection.** If at any time after an assignment by Tenant named herein, this Lease is not affirmed or is rejected in any bankruptcy proceeding or any similar proceeding, or upon a termination of this Lease due to any such proceeding, Tenant named herein, upon request of Landlord given after such disaffirmance, rejection or termination (and actual notice thereof to Landlord in the event of a disaffirmance or rejection or in the event of termination other than by act of Landlord), shall (a) pay to Landlord all Rent and other

charges due and owing by the assignee to Landlord under this Lease to and including the date of such disaffirmance, rejection or termination, and (b) as "tenant," enter into a new lease of the Premises with Landlord for a term commencing on the effective date of such disaffirmance, rejection or termination and ending on the Expiration Date, at the same Rent and upon the then executory terms, covenants and conditions contained in this Lease, except that (i) the rights of Tenant named herein under the new lease shall be subject to the possessory rights of the assignee under this Lease and the possessory rights of any persons or entities claiming through or under such assignee or by virtue of any statute or of any order of any court, (ii) such new lease shall require all defaults existing under this Lease to be cured by Tenant named herein with due diligence, and (iii) such new lease shall require Tenant named herein to pay all Rent which, had this Lease not been so disaffirmed, rejected or terminated, would have become due under the provisions of this Lease after the date of such disaffirmance, rejection or termination with respect to any period prior thereto. If Tenant named herein defaults in its obligations to enter into such new lease for a period of 10 days after Landlord's request, then, in addition to all other rights and remedies by reason of default, either at law or in equity, Landlord shall have the same rights and remedies against Tenant named herein as if it had entered into such new lease and such new lease had thereafter been terminated as of the commencement date thereof by reason of Tenant's default thereunder.

## ARTICLE 14

### ACCESS TO PREMISES

**Section 14.1 Landlord's Access.** (a) Landlord, Landlord's agents and utility service providers servicing the Building may erect, use and maintain concealed ducts, pipes and conduits in and through the Premises provided such use does not cause the usable area of the Premises to be reduced beyond a *de minimis* amount. Landlord shall promptly repair any damage to the Premises caused by any work performed pursuant to this Article 14.

(b) Landlord, any Lessor or Mortgagee and any other party designated by Landlord and their respective agents shall have the right to enter the Premises at all reasonable times, upon prior reasonable written notice except in the case of emergency (in which event no notice shall be required), to examine the Premises, to show the Premises to prospective purchasers, Mortgagees, Lessors or tenants and their respective agents and representatives or others and to perform Work of Improvement to the Premises or the Building. Landlord shall use commercially reasonable efforts to minimize the disturbance to Tenant's use of the Premises and shall abide by Tenant's reasonable security rules and procedures.

All parts (except surfaces facing the interior of the Premises) of all walls, windows and doors bounding the Premises, all balconies, terraces and roofs adjacent to the Premises, all space in or adjacent to the Premises used for shafts, stacks, stairways, mail chutes, conduits and other mechanical facilities, Building System, Building facilities and Common Areas are not part of the Premises, and Landlord shall have the use thereof and access thereto through the Premises for the purposes of Building operation, maintenance, alteration and repair.

**Section 14.2 Building Name.** Landlord has the right at any time to change the name, number or designation by which the Building is commonly known.

**Section 14.3 Light and Air.** If at any time any windows of the Premises are temporarily darkened or covered over by reason of any Work of Improvement, any of such windows are permanently darkened or covered over due to any Requirement or there is otherwise a diminution of light, air or view by another structure which may hereafter be erected (whether or not by Landlord), Landlord shall not be liable for any damages and Tenant shall not be entitled to any compensation or abatement of any Rent, nor shall the same release Tenant from its obligations hereunder or constitute an actual or constructive eviction.

**ARTICLE 15**

**DEFAULT**

**Section 15.1 Tenant's Defaults.** Each of the following events shall be an "Event of Default" hereunder:

- (a) Tenant fails to pay when due any installment of Rent within three (3) business days following Tenant's receipt of written notice of such overdue amount; or
- (b) Tenant fails to observe or perform any other term, covenant or condition of this Lease and such failure continues for more than 30 days (10 days with respect to a default under Article 3, Article 9 or Section 26.10) after notice by Landlord to Tenant of such default, or if such default (other than a default under Article 3, Article 9 or Section 26.10) is of a nature that it cannot be completely remedied within 30 days, failure by Tenant to commence to remedy such failure within said 30 days, and thereafter diligently prosecute to completion all steps necessary to remedy such default, provided in all events the same is completed within 90 days; or
- (c) if Landlord applies or retains any part of the security held by it hereunder, and Tenant fails to deposit with Landlord the amount so applied or retained by Landlord, within 5 days after notice by Landlord to Tenant stating the amount applied or retained, as applicable; or
- (d) Tenant files a voluntary petition in bankruptcy or insolvency, or is adjudicated a bankrupt or insolvent, or files any petition or answer seeking any reorganization, liquidation, dissolution or similar relief under any present or future federal bankruptcy act or any other present or future applicable federal, state or other statute or law, or makes an assignment for the benefit of creditors or seeks or consents to or acquiesces in the appointment of any trustee, receiver, liquidator or other similar official for Tenant or for all or any part of Tenant's property; or
- (e) A court of competent jurisdiction shall enter an order, judgment or decree adjudicating Tenant bankrupt, or appointing a trustee, receiver or liquidator of Tenant, or of the whole or any substantial part of its property, without the consent of Tenant, or approving a petition filed against Tenant seeking reorganization or arrangement of Tenant under the bankruptcy laws of the United States, as now in effect or hereafter amended, or any state thereof, and such order, judgment or decree shall not be vacated or set aside or stayed within 60 days from the date of entry thereof.

The notice periods provided herein are in lieu of, and not in addition to, any notice periods provided by law.

**Section 15.2 Landlord's Remedies.** (a) Upon the occurrence of an Event of Default, Landlord, at its option, and without limiting the exercise of any other right or remedy Landlord may have on account of such Event of Default, and without any further demand or notice, may give to Tenant 3 days' notice of termination of this Lease, in which event this Lease and the Term shall come to an end and expire (whether or not the Term shall have commenced) upon the expiration of such 3 day period with the same force and effect as if the date set forth in the notice was the Expiration Date stated herein; and Tenant shall then quit and surrender the Premises to Landlord, but Tenant shall remain liable for damages as provided in this Article 15, and/or, to the extent permitted by law, Landlord may remove all persons and property from the Premises, which property shall be stored by Landlord at a warehouse or elsewhere at the risk, expense and for the account of Tenant.

- (b) If Landlord elects to terminate this Lease, then Landlord shall be entitled to recover from Tenant the aggregate of:
  - (i) The worth at the time of award of the unpaid rent earned as of the date of the termination hereof;
  - (ii) The worth at the time of award of the amount by which the unpaid rent which would have been earned after the date of termination hereof until the time of award exceeds the amount of such rental loss that Tenant proves could have been reasonably avoided;

(iii) The worth at the time of award of the amount by which the unpaid rent for the balance of the Term after the time of award exceeds the amount of such rental loss that Tenant proves could have been reasonably avoided;

(iv) Any other amount necessary to compensate Landlord for the detriment proximately caused by Tenant's failure to perform its obligations under this Lease or which, in the ordinary course of things, would be likely to result therefrom; and

(v) Any other amount which Landlord may hereafter be permitted to recover from Tenant to compensate Landlord for the detriment caused by Tenant's default. For the purposes of this Section 15.2(b), "rent" shall be deemed to be and to mean all sums of every nature required to be paid by Tenant pursuant to the terms of this Lease, whether to Landlord or to others, the "time of award" shall mean the date upon which the judgment in any action brought by Landlord against Tenant by reason of such Event of Default is entered or such earlier date as the court may determine; the "worth at the time of award" of the amounts referred to in Sections 15.2(b)(i) and 15.2(b)(ii) shall be computed by allowing interest on such amounts at the Interest Rate; and the "worth at the time of award" of the amount referred to in Section 15.2(b)(iii) shall be computed by discounting such amount at the discount rate of the Federal Reserve Bank of San Francisco at the time of award plus 1% per annum.

**Section 15.3 Recovering Rent as It Comes Due.** Upon any Event of Default, in addition to any other remedies available to Landlord at law or in equity or under this Lease, Landlord may elect to continue this Lease in effect after Tenant's default and recover rent as it becomes due. Accordingly, if Landlord does not elect to terminate this Lease, Landlord may, from time to time, enforce all of its rights and remedies under this Lease, including the right to recover all Rent as it becomes due. Such remedy may be exercised by Landlord without prejudice to its right thereafter to terminate this Lease in accordance with the other provisions contained in this Article 15. Landlord's reentry to perform acts of maintenance or preservation of, or in connection with efforts to relet, the Premises, or any portion thereof, or the appointment of a receiver upon Landlord's initiative to protect Landlord's interest under this Lease shall not terminate Tenant's right to possession of the Premises or any portion thereof and, until Landlord elects to terminate this Lease, this Lease shall continue in full force and Landlord may pursue all its remedies hereunder. Nothing in this Article 15 shall be deemed to affect Landlord's right to indemnification, under the indemnification clauses contained in this Lease, for Losses arising from events occurring prior to the termination of this Lease.

**Section 15.4 Reletting on Tenant's Behalf.** If Tenant abandons the Premises or if Landlord elects to reenter or takes possession of the Premises pursuant to any legal proceeding or pursuant to any notice provided by Requirements, and until Landlord elects to terminate this Lease, Landlord may, from time to time, without terminating this Lease, recover all Rent as it becomes due pursuant to Section 15.3 and/or relet the Premises or any part thereof for the account of and on behalf of Tenant, on any terms, for any term (whether or not longer than the Term), and at any rental as Landlord in its reasonable discretion may deem advisable, and Landlord may make any Work of Improvement to the Premises in connection therewith. Tenant hereby irrevocably constitutes and appoints Landlord as its attorney-in-fact, which appointment shall be deemed coupled with an interest and shall be irrevocable, for purposes of reletting the Premises pursuant to the immediately preceding sentence. If Landlord elects to so relet the Premises on behalf of Tenant, then rentals received by Landlord from such reletting shall be applied:

(a) First, to reimburse Landlord for the costs and expenses of such reletting (including costs and expenses of retaking or repossessing the Premises, removing persons and property therefrom, securing new tenants, and, if Landlord maintains and operates the Premises, the costs thereof) and necessary or reasonable Work of Improvement.

(b) Second, to the payment of any indebtedness of Tenant to Landlord other than Rent due and unpaid hereunder.

(c) Third, to the payment of Rent due and unpaid hereunder, and the residue, if any, shall be held by Landlord and applied in payment of other or future obligations of Tenant to Landlord as the same may become due and payable.

Should the rentals received from such reletting, when applied in the manner and order indicated above, at any time be less than the total amount owing from Tenant pursuant to this Lease, then Tenant shall pay such deficiency to Landlord, and if Tenant does not pay such deficiency within 5 days of delivery of notice thereof to Tenant, Landlord may bring an action against Tenant for recovery of such deficiency or pursue its other remedies hereunder or under Washington law.

**Section 15.5 General.** (a) All rights, powers and remedies of Landlord hereunder and under any other agreement now or hereafter in force between Landlord and Tenant shall be cumulative and not alternative and shall be in addition to all rights, powers and remedies given to Landlord at law or in equity. The exercise of any one or more of such rights or remedies shall not impair Landlord's right to exercise any other right or remedy including any and all rights and remedies of Landlord under Washington law.

(b) If, after Tenant's abandonment of the Premises, Tenant leaves behind any of Tenant's Property, then Landlord shall store such Tenant's Property at a warehouse or any other location at the risk, expense and for the account of Tenant, and such property shall be released only upon Tenant's payment of such charges, together with moving and other costs relating thereto and all other sums due and owing under this Lease. If Tenant does not reclaim such Tenant's Property within the period permitted by law, Landlord may sell such Tenant's Property in accordance with law and apply the proceeds of such sale to any sums due and owing hereunder, or retain said Property, granting Tenant credit against sums due and owing hereunder for the reasonable value of such Property.

(c) To the extent permitted by law, Tenant hereby waives all provisions of, and protections under, any Requirement to the extent same are inconsistent and in conflict with specific terms and provisions hereof.

**Section 15.6 Interest.** If any payment of Rent is not paid when due, interest shall accrue on such payment, from the date such payment became due until paid at the Interest Rate. Tenant acknowledges that late payment by Tenant of Rent will cause Landlord to incur costs not contemplated by this Lease, the exact amount of such costs being extremely difficult and impracticable to fix. Such costs include, without limitation, processing and accounting charges, and late charges that may be imposed on Landlord by the terms of any note secured by a Mortgage covering the Premises. Therefore, in addition to interest, if any amount is not paid when due, a late charge equal to 5% of such amount shall be assessed. Such interest and late charges are separate and cumulative and are in addition to and shall not diminish or represent a substitute for any of Landlord's rights or remedies under any other provision of this Lease.

**Section 15.7 Other Rights of Landlord.** If Tenant fails to pay any Additional Rent when due, Landlord, in addition to any other right or remedy, shall have the same rights and remedies as in the case of a default by Tenant in the payment of Fixed Rent. If Tenant is in arrears in the payment of Rent, Tenant waives Tenant's right, if any, to designate the items against which any payments made by Tenant are to be credited, and Landlord may apply any payments made by Tenant to any items Landlord sees fit, regardless of any request by Tenant. Landlord reserves the right, without liability to Tenant and without constituting any claim of constructive eviction, to suspend furnishing or rendering to Tenant any property, material, labor, utility or other service, whenever Landlord is obligated to furnish or render the same at the expense of Tenant, in the event that (but only for so long as) Tenant is in arrears in paying Landlord for such items for more than 5 days after notice from Landlord to Tenant demanding the payment of such arrears.

## ARTICLE 16

### LANDLORD'S RIGHT TO CURE; FEES AND EXPENSES

If Tenant defaults in the performance of its obligations under this Lease, Landlord, without waiving such default, may perform such obligations at Tenant's expense: (a) immediately, and without notice, in the case of emergency or if the default (i) materially interferes with the use by any other tenant of the Building, (ii) materially interferes with the efficient operation of the Building, (iii) results in a violation of any Requirement, or (iv) results or will result in a cancellation of any insurance policy maintained by Landlord, and (b) in any other case if such default continues after 10 days from the date Landlord gives notice of Landlord's intention to perform the defaulted obligation. All costs and expenses incurred by Landlord in connection with any such performance by it and all costs and expenses, including reasonable counsel fees and disbursements, incurred by Landlord in any action or proceeding (including any

unlawful detainer proceeding) brought by Landlord to enforce any obligation of Tenant under this Lease and/or right of Landlord in or to the Premises or as a result of any default by Tenant under this Lease, shall be paid by Tenant to Landlord on demand, with interest thereon at the Interest Rate from the date incurred by Landlord. Except as expressly provided to the contrary in this Lease, all costs and expenses which, pursuant to this Lease are incurred by Landlord and payable to Landlord by Tenant, and all charges, amounts and sums payable to Landlord by Tenant for any property, material, labor, utility or other services which, pursuant to this Lease, are attributable directly to Tenant's use and occupancy of the Premises or presence at the Building, or, at the request and for the account of Tenant, are provided, furnished or rendered by Landlord, shall become due and payable by Tenant to Landlord within 10 Business Days after receipt of Landlord's invoice for such amount.

#### ARTICLE 17

##### NO REPRESENTATIONS BY LANDLORD; LANDLORD'S APPROVAL

**Section 17.1 No Representations.** Except as expressly set forth herein, Landlord and Landlord's agents have made no warranties, representations, statements or promises with respect to the Building, the Real Property or the Premises and no rights, easements or licenses are acquired by Tenant by implication or otherwise. Tenant is entering into this Lease after full investigation and is not relying upon any statement or representation made by Landlord not embodied in this Lease.

**Section 17.2 No Money Damages.** Wherever in this Lease Landlord's consent or approval is required, if Landlord refuses to grant such consent or approval, whether or not Landlord expressly agreed that such consent or approval would not be unreasonably withheld, Tenant shall not make or exercise, and Tenant hereby waives, any claim for money damages (including any claim by way of set-off, counterclaim or defense) and/or any right to terminate this Lease based upon Tenant's claim or assertion that Landlord unreasonably withheld or delayed its consent or approval. Tenant's sole remedy shall be an action or proceeding to enforce such provision, by specific performance, injunction or declaratory judgment. In no event shall Landlord be liable for, and Tenant, on behalf of itself and all other Tenant Parties, hereby waives any claim for, any indirect, consequential or punitive damages, including loss of profits or business opportunity, arising under or in connection with this Lease. Similarly, Tenant shall not be liable for, and Landlord hereby waives any claim for, any indirect, consequential or punitive damages arising under or in connection with this Lease except with regard to such damages suffered by the Landlord Parties arising from a breach of Tenant's obligations under Section 8.1, Section 18.2 and Article 24 of this Lease.

**Section 17.3 Reasonable Efforts.** For purposes of this Lease, "reasonable efforts" by Landlord shall not include an obligation to employ contractors or labor at overtime or other premium pay rates or to incur any other overtime costs or additional expenses whatsoever.

#### ARTICLE 18

##### END OF TERM

**Section 18.1 Expiration.** Upon the expiration or other termination of this Lease, Tenant shall quit and surrender the Premises to Landlord vacant, broom clean and in good order and condition, ordinary wear and tear and damage for which Tenant is not responsible under the terms of this Lease excepted, and Tenant shall remove all of Tenant's Property and Specialty Alterations (excluding Initial Improvements).

**Section 18.2 Holdover Rent.** Landlord and Tenant recognize that Landlord's damages resulting from Tenant's failure to timely surrender possession of the Premises may be substantial, may exceed the amount of the Rent payable hereunder, and will be impossible to accurately measure. Accordingly, if possession of the Premises is not surrendered to Landlord on the Expiration Date or sooner termination of this Lease, in addition to any other rights or remedies Landlord may have hereunder or at law, Tenant shall (a) pay to Landlord for each month (or any portion thereof) during which Tenant holds over in the Premises after the Expiration Date or sooner termination of this Lease, a sum equal to 150% of the Rent payable under this Lease for the last full calendar month of the Term, (b) be liable to Landlord for (1) any payment or rent concession which Landlord may be required to make to any tenant obtained by Landlord for all or any part of the Premises (a "New Tenant") in order to induce such New Tenant not to terminate its lease by reason of the holding-over by Tenant, and (2) the loss of the benefit of the bargain if any New Tenant shall terminate its lease by reason of the holding-over by Tenant, and (c) indemnify Landlord against all claims for damages by any New Tenant. No holding-over by Tenant, nor the payment to Landlord of the amounts specified above, shall

operate to extend the Term hereof. Nothing herein contained shall be deemed to permit Tenant to retain possession of the Premises after the Expiration Date or sooner termination of this Lease, and no acceptance by Landlord of payments from Tenant after the Expiration Date or sooner termination of this Lease shall be deemed to be other than on account of the amount to be paid by Tenant in accordance with the provisions of this Section 18.2.

#### ARTICLE 19

##### QUIET ENJOYMENT

Provided this Lease is in full force and effect and no Event of Default then exists, Tenant may peaceably and quietly enjoy the Premises without hindrance by Landlord or any person lawfully claiming through or under Landlord, subject to the terms and conditions of this Lease and to all Superior Leases and Mortgages.

#### ARTICLE 20

##### NO SURRENDER; NO WAIVER; RELOCATION

**Section 20.1 No Surrender or Release.** No act or thing done by Landlord or Landlord's agents or employees during the Term shall be deemed an acceptance of a surrender of the Premises, and no provision of this Lease shall be deemed to have been waived by Landlord, unless such waiver is in writing and is signed by Landlord.

**Section 20.2 No Waiver.** The failure of either party to seek redress for violation of, or to insist upon the strict performance of, any covenant or condition of this Lease, or any of the Rules and Regulations, shall not be construed as a waiver or relinquishment for the future performance of such obligations of this Lease or the Rules and Regulations, or of the right to exercise such election but the same shall continue and remain in full force and effect with respect to any subsequent breach, act or omission. The receipt by Landlord of any Rent payable pursuant to this Lease or any other sums with knowledge of the breach of any covenant of this Lease shall not be deemed a waiver of such breach. No payment by Tenant or receipt by Landlord of a lesser amount than the monthly Rent herein stipulated shall be deemed to be other than a payment on account of the earliest stipulated Rent, or as Landlord may elect to apply such payment, nor shall any endorsement or statement on any check or any letter accompanying any check or payment as Rent be deemed an accord and satisfaction, and Landlord may accept such check or payment without prejudice to Landlord's right to recover the balance of such Rent or pursue any other remedy provided in this Lease.

**Section 20.3 Landlord's Option to Relocate Tenant.** Landlord shall have the right, at its option, at any time to relocate Tenant, upon not less than sixty (60) days advance written notice by Landlord to Tenant, to any floor of the Building in which the Premises are located so long as (i) the square footage of the Premises leased hereunder is not reduced; (ii) the floor to which the Premises is relocated is the 18th floor or higher in the Building; and (iii) the Premises has similar views. Rent shall not be changed because of the relocation of Tenant notwithstanding any increase in the square footage of the Premises to which Tenant is relocated unless the increase in square footage is caused by Tenant's request for additional space. In the event Landlord gives Tenant written notice of the relocation of Tenant after Tenant and Landlord have commenced or completed the approved installation of partitioning or other improvements, Landlord, at its cost, shall furnish Tenant with similar partitioning or other improvements of equal quality in the Premises to which Tenant is relocated. Landlord shall pay actual third-party expenses associated with relocation of Tenant's existing furniture, equipment and telephones.



ARTICLE 21

WAIVER OF TRIAL BY JURY; COUNTERCLAIM; ATTORNEYS' FEE

**Section 21.1 Jury Trial Waiver.** THE PARTIES HEREBY AGREE THAT THIS LEASE CONSTITUTES A WRITTEN CONSENT TO WAIVER OF TRIAL BY JURY PURSUANT TO THE PROVISIONS OF WASHINGTON LAW AND EACH PARTY DOES HEREBY CONSTITUTE AND APPOINT THE OTHER PARTY ITS TRUE AND LAWFUL ATTORNEY-IN-FACT, WHICH APPOINTMENT IS COUPLED WITH AN INTEREST, AND EACH PARTY DOES HEREBY AUTHORIZE AND EMPOWER THE OTHER PARTY, IN THE NAME, PLACE AND STEAD OF SUCH PARTY, TO FILE THIS LEASE WITH THE CLERK OR JUDGE OF ANY COURT OF COMPETENT JURISDICTION AS A STATUTORY WRITTEN CONSENT TO WAIVER OF TRIAL BY JURY.

LANDLORD'S INITIALS: SW TENANT'S INITIALS: JB

**Section 21.2 Waiver of Counterclaim.** If Landlord commences any summary proceeding against Tenant, Tenant will not interpose any counterclaim of any nature or description in any such proceeding (unless failure to interpose such counterclaim would preclude Tenant from asserting in a separate action the claim which is the subject of such counterclaim), and will not seek to consolidate such proceeding with any other action which may have been or will be brought in any other court by Tenant.

**Section 21.3 Attorneys' Fees.** It is the intention of the parties that in the event a party files an action to enforce compliance with this Lease, or to allege a breach of this Lease, the party that substantially prevails in that action shall be made whole by the other party. Accordingly, the substantially prevailing party shall be entitled to attorneys' fees and all necessary litigation expenses incurred in obtaining relief, including any enforcement of the judgment or appeal arising out of the action. It is the parties' further intent that the remedy of an award of attorney's fees and litigation expenses is to be liberally construed so that the aggrieved party is put in as good a position as if the other party had fully performed. Each party to this Lease shall pay its respective costs in connection with the negotiation, drafting, and execution of this Lease.

ARTICLE 22

NOTICES

Except as otherwise expressly provided in this Lease, all consents, notices, demands, requests, approvals or other communications given under this Lease shall be in writing and shall be deemed sufficiently given or rendered if delivered by hand (provided a signed receipt is obtained) or if sent by registered or certified mail (return receipt requested) or by a nationally recognized overnight delivery service making receipted deliveries, addressed to Landlord and Tenant as set forth in Article 1, and to any Mortgagee or Lessor who shall require copies of notices and whose address is provided to Tenant, or to such other address(es) as Landlord, Tenant or any Mortgagee or Lessor may designate as its new address(es) for such purpose by notice given to the other in accordance with the provisions of this Article 22. Any such approval, consent, notice, demand, request or other communication shall be deemed to have been given on the date of receipted delivery, refusal to accept delivery or when delivery is first attempted but cannot be made due to a change of address for which no notice is given or 3 Business Days after it shall have been mailed as provided in this Article 22, whichever is earlier.

ARTICLE 23

RULES AND REGULATIONS

All Tenant Parties shall observe and comply with the Rules and Regulations, as supplemented or amended from time to time. Landlord reserves the right, from time to time, to adopt additional Rules and Regulations and to amend the Rules and Regulations then in effect. Nothing contained in this Lease shall impose upon Landlord any obligation to enforce the Rules and Regulations or terms, covenants or conditions in any other lease against any other Building tenant, and Landlord shall not be liable to Tenant for violation of the same by any other tenant, its employees, agents, visitors or licensees, provided that Landlord shall enforce the Rules or Regulations against Tenant in a non-discriminatory fashion.

**ARTICLE 24**

**BROKER**

Landlord has retained Landlord's Agent as leasing agent in connection with this Lease and Landlord will be solely responsible for any fee that may be payable to Landlord's Agent. Landlord agrees to pay a commission to Tenant's Broker pursuant to a separate agreement. Each of Landlord and Tenant represents and warrants to the other that neither it nor its agents have dealt with any broker in connection with this Lease other than Landlord's Agent and Tenant's Broker. Each of Landlord and Tenant shall indemnify, defend, protect and hold the other party harmless from and against any and all Losses which the indemnified party may incur by reason of any claim of or liability to any broker, finder or like agent (other than Landlord's Agent and Tenant's Broker) arising out of any dealings claimed to have occurred between the indemnifying party and the claimant in connection with this Lease, and/or the above representation being false.

**ARTICLE 25**

**INDEMNITY**

**Section 25.1 Tenant's Indemnity.** Tenant shall use reasonable efforts to not do or permit to be done any act or thing upon the Premises or the Building which may subject Landlord to any liability or responsibility for injury, damages to persons or property or to any liability by reason of any violation of any Requirement, and shall exercise such control over the Premises as to reasonably protect Landlord against any such liability. Except to the extent of any such injury or damage resulting from the negligence or willful misconduct of Landlord or Landlord's agents or employees, Tenant shall indemnify, defend, protect and hold harmless each of the Indemnitees from and against any and all Losses, resulting from any claims (i) against the Indemnitees arising from any act, omission or negligence of all Tenant Parties, (ii) against the Indemnitees arising from any accident, injury or damage to any person or to the property of any person and occurring in or about the Premises, and (iii) against the Indemnitees resulting from any breach, violation or nonperformance of any covenant, condition or agreement of this Lease on the part of Tenant to be fulfilled, kept, observed or performed.

**Section 25.2 Landlord's Indemnity.** Landlord shall indemnify, defend and hold harmless Tenant from and against all Losses incurred by Tenant arising from any accident, injury or damage to any person or the property of any person in or about the Common Areas (specifically excluding the Premises) to the extent attributable to the negligence or willful misconduct of Landlord or its employees or agents.

**Section 25.3 Indemnity as to Construction; Title 51 RCW.** Notwithstanding anything to the contrary in this Section, in compliance with RCW 4.24.115 as in effect on the date of this Lease, all provisions of this Lease pursuant to which Landlord or Tenant (the "Indemnitor") agrees to indemnify the other (the "Indemnitee") against liability for damages arising out of bodily injury to persons or damage to property relative to the construction, alteration, repair, addition to, subtraction from, improvement to or maintenance of any building, road or other structure, project, development or improvement attached to land, including the Premises, (i) shall not apply to damages caused by or resulting from the sole negligence of the Indemnitee, its agents or employees, and (ii) to the extent caused by or resulting from the concurrent negligence of (a) the Indemnitee or the Indemnitee's agents or employees and (b) the Indemnitor or the Indemnitor's agents or employees, shall apply only to the extent of the Indemnitor's negligence; provided, however, the limitations on indemnity set forth in this subsection shall automatically and without further act by either Landlord or Tenant be deemed amended so as to remove any of the restrictions contained in this Section 25.3 that are no longer required by then applicable law. Landlord and Tenant specifically agree that the provisions of this Section 25.3 also apply to any claim of injury or damage to the parties' respective employees or their property. Each of Landlord and Tenant acknowledges that as to such claims, it waives any right of immunity that it may have under Title 51 RCW as amended or replaced. This waiver and agreement was specifically negotiated by Landlord and Tenant and is solely for their benefit and is not intended as a waiver of their immunity under Title 51 RCW for any other purpose.

**Section 25.4 Defense and Settlement.** If any claim, action or proceeding is made or brought against any Indemnitee, then upon demand by an Indemnitee, Tenant, at its sole cost and expense, shall resist or defend such claim, action or proceeding in the Indemnitee's name (if necessary), by attorneys approved by the Indemnitee, which approval shall not be unreasonably withheld (attorneys for Tenant's insurer shall be deemed approved for purposes of this Section 25.4). Notwithstanding the foregoing, an Indemnitee may retain its own attorneys to participate or assist in defending any claim, action or proceeding involving potential liability in excess of the amount available under Tenant's liability insurance carried under Section 11.1 for such claim and Tenant shall pay the reasonable fees and disbursements of such attorneys. If Tenant fails to diligently defend or if there is a legal conflict or other conflict of interest, then Landlord may retain separate counsel at Tenant's expense. Notwithstanding anything herein contained to the contrary, Tenant may direct the Indemnitee to settle any claim, suit or other proceeding provided that (a) such settlement shall involve no obligation on the part of the Indemnitee other than the payment of money, (b) any payments to be made pursuant to such settlement shall be paid in full exclusively by Tenant at the time such settlement is reached, (c) such settlement shall not require the Indemnitee to admit any liability, and (d) the Indemnitee shall have received an unconditional release from the other parties to such claim, suit or other proceeding.

## ARTICLE 26

### MISCELLANEOUS

**Section 26.1 Delivery.** This Lease shall not be binding upon Landlord or Tenant unless and until Landlord shall have executed and delivered a fully executed copy of this Lease to Tenant.

**Section 26.2 Transfer of Real Property.** Landlord's obligations under this Lease shall not be binding upon the Landlord named herein after the sale, conveyance, assignment or transfer (collectively, a "**Landlord Transfer**") by such Landlord (or upon any subsequent landlord after the Landlord Transfer by such subsequent landlord) of its interest in the Building or the Real Property, as the case may be, and in the event of any such Landlord Transfer, Landlord (and any such subsequent Landlord) shall be entirely freed and relieved of all covenants and obligations of Landlord hereunder arising from and after the date of the Landlord Transfer, and the transferee of Landlord's interest (or that of such subsequent Landlord) in the Building or the Real Property, as the case may be, shall be deemed to have assumed all obligations under this Lease arising from and after the date of the Landlord Transfer.

**Section 26.3 Limitation on Liability.** The liability of Landlord for Landlord's obligations under this Lease, and under any and all documents, instruments or agreements relating to this Lease, including without limitation, any subordination, non-disturbance and attornment agreements and consents to sublease, shall be limited to Landlord's interest in the Real Property and Tenant shall not look to any other property or assets of Landlord or the property or assets of any direct or indirect partner, member, manager, shareholder, director, officer, principal, employee or agent of Landlord (collectively, the "**Parties**") in seeking either to enforce Landlord's obligations under this Lease or to satisfy a judgment for Landlord's failure to perform such obligations; and none of the Parties shall be personally liable for the performance of Landlord's obligations under this Lease.

**Section 26.4 Rent.** All amounts payable by Tenant to or on behalf of Landlord under this Lease, whether or not expressly denominated Fixed Rent, Tenant's Tax Payment, Tenant's Operating Payment, Additional Rent or Rent, shall constitute rent for the purposes of Section 502(b)(6) of the United States Bankruptcy Code.

**Section 26.5 Entire Document.** This Lease (including any Schedules and Exhibits referred to herein and all supplementary agreements provided for herein) contains the entire agreement between the parties and all prior negotiations and agreements are merged into this Lease. All of the Schedules and Exhibits attached hereto are incorporated in and made a part of this Lease, provided that in the event of any inconsistency between the terms and provisions of this Lease and the terms and provisions of the Schedules and Exhibits hereto, the terms and provisions of this Lease shall control.

**Section 26.6 Governing Law.** This Lease shall be governed in all respects by the laws of the State of Washington.

**Section 26.7 Unenforceability.** If any provision of this Lease, or its application to any person or entity or circumstance, shall ever be held to be invalid or unenforceable, then in each such event the remainder of this Lease or the application of such provision to any other person or entity or any other circumstance (other than those as to which it shall be invalid or unenforceable) shall not be thereby affected, and each provision hereof shall remain valid and enforceable to the fullest extent permitted by law.

**Section 26.8 Lease Disputes.** (a) Tenant agrees that all disputes arising, directly or indirectly, out of or relating to this Lease, and all actions to enforce this Lease, shall be dealt with and adjudicated in the state courts of the State of Washington or the United States District Court for the Western District of Washington and for that purpose hereby expressly and irrevocably submits itself to the jurisdiction of such courts. Tenant agrees that so far as is permitted under applicable law, this consent to personal jurisdiction shall be self-operative and no further instrument or action, other than service of process in one of the manners specified in this Lease, or as otherwise permitted by law, shall be necessary in order to confer jurisdiction upon it in any such court.

(b) To the extent that Tenant has or hereafter may acquire any immunity from jurisdiction of any court or from any legal process (whether through service or notice, attachment prior to judgment, attachment in aid of execution, execution or otherwise) with respect to itself or its property, Tenant irrevocably waives such immunity in respect of its obligations under this Lease.

**Section 26.9 Landlord's Agent.** Unless Landlord delivers notice to Tenant to the contrary, Landlord's Agent is authorized to act as Landlord's agent in connection with the performance of this Lease, and Tenant shall be entitled to rely upon correspondence received from Landlord's Agent. Tenant acknowledges that Landlord's Agent is acting solely as agent for Landlord in connection with the foregoing; and neither Landlord's Agent nor any of its direct or indirect partners, members, managers, officers, shareholders, directors, employees, principals, agents or representatives shall have any liability to Tenant in connection with the performance of this Lease, and Tenant waives any and all claims against any and all of such parties arising out of, or in any way connected with, this Lease, the Building or the Real Property.

**Section 26.10 Estoppel.** Within 15 days following request from Landlord, any Mortgagee or any Lessor, Tenant shall deliver to Landlord a statement executed and acknowledged by Tenant, in form reasonably satisfactory to Landlord, (a) stating the Commencement Date, the Rent Commencement Date and the Expiration Date, and that this Lease is then in full force and effect and has not been modified (or if modified, setting forth all modifications), (b) setting forth the date to which the Fixed Rent and any Additional Rent have been paid, together with the amount of monthly Fixed Rent and Additional Rent then payable, (c) stating whether or not, to the best of Tenant's knowledge, Landlord is in default under this Lease, and, if Landlord is in default, setting forth the specific nature of all such defaults, (d) stating the amount of the Security Deposit, if any, under this Lease, (e) stating whether there are any subleases or assignments affecting the Premises, (f) stating the address of Tenant to which all notices and communications under the Lease shall be sent, and (g) responding to any other matters reasonably requested by Landlord, such Mortgagee or such Lessor. Tenant acknowledges that any statement delivered pursuant to this Section 26.10 may be relied upon by any purchaser or owner of the Real Property or the Building, or all or any portion of Landlord's interest in the Real Property or the Building or any Superior Lease, or by any Mortgagee, or assignee thereof or by any Lessor, or assignee thereof.

**Section 26.11 Certain Interpretational Rules.** For purposes of this Lease, whenever the words "include", "includes", or "including" are used, they shall be deemed to be followed by the words "without limitation" and, whenever the circumstances or the context requires, the singular shall be construed as the plural, the masculine shall be construed as the feminine and/or the neuter and *vice versa*. This Lease shall be interpreted and enforced without the aid of any canon, custom or rule of law requiring or suggesting construction against the party drafting or causing the drafting of the provision in question. The captions in this Lease are inserted only as a matter of convenience and for reference and in no way define, limit or describe the scope of this Lease or the intent of any provision hereof.

**Section 26.12 Parties Bound.** The terms, covenants, conditions and agreements contained in this Lease shall bind and inure to the benefit of Landlord and Tenant and, except as otherwise provided in this Lease, to their respective legal representatives, successors, and assigns.

**Section 26.13 Memorandum of Lease.** This Lease shall not be recorded; however, at Landlord's request, Landlord and Tenant shall promptly execute, acknowledge and deliver a memorandum with respect to this Lease sufficient for recording and Landlord may record the memorandum. Within 10 days after the end of the Term, Tenant shall enter into such documentation as is reasonably required by Landlord to remove the memorandum of record.

**Section 26.14 Counterparts.** This Lease may be executed in 2 or more counterparts, each of which shall constitute an original, but all of which, when taken together, shall constitute but one instrument.

**Section 26.15 Survival.** All obligations and liabilities of Landlord or Tenant to the other which accrued before the expiration or other termination of this Lease, and all such obligations and liabilities which by their nature or under the circumstances can only be, or by the provisions of this Lease may be, performed after such expiration or other termination, shall survive the expiration or other termination of this Lease. Without limiting the generality of the foregoing, the rights and obligations of the parties with respect to any indemnity under this Lease, and with respect to any Rent and any other amounts payable under this Lease, shall survive the expiration or other termination of this Lease.

**Section 26.16 Inability to Perform.** The obligation of Tenant to pay Rent shall not be affected, impaired or excused by any Unavoidable Delays. Except as otherwise provided herein, Tenant shall be excused to the extent that Tenant's other obligations under this Lease are delayed or affected by any Unavoidable Delay. Landlord shall use reasonable efforts to promptly notify Tenant of any Unavoidable Delay which prevents Landlord from fulfilling any of its obligations under this Lease.

**Section 26.17 Tax Status of Beneficial Owner.** Tenant recognizes and acknowledges that Landlord and/or certain beneficial owners of Landlord may from time to time qualify as real estate investment trusts pursuant to Sections 856 et seq. of the Code and that avoiding (a) the loss of such status, (b) the receipt of any income derived under any provision of this Lease that does not constitute "rents from real property" (in the case of real estate investment trusts), and (c) the imposition of income, penalty or similar taxes (each an "Adverse Event") is of material concern to Landlord and such beneficial owners. In the event that this Lease or any document contemplated hereby could, in the opinion of counsel to Landlord, result in or cause an Adverse Event, Tenant agrees to cooperate with Landlord in negotiating an amendment or modification thereof and shall at the request of Landlord execute and deliver such documents reasonably required to effect such amendment or modification. Any amendment or modification pursuant to this Section shall be structured so that the economic results to Landlord and Tenant shall be substantially similar to those set forth in this Lease without regard to such amendment or modification. Without limiting any of Landlord's other rights under this Section, Landlord may waive the receipt of any amount payable to Landlord hereunder and such waiver shall constitute an amendment or modification of this Lease with respect to such payment. Tenant expressly covenants and agrees not to enter into any sublease or assignment which provides for rental or other payment for such use, occupancy, or utilization based in whole or in part on the net income or profits derived by any person from the property leased, used, occupied, or utilized (other than an amount based on a fixed percentage or percentages of receipts or sales), and that any such purported sublease or assignment shall be absolutely void and ineffective as a conveyance of any right or interest in the possession, use, occupancy, or utilization of any part of the Premises.

**Section 26.18 Confidentiality.** Landlord and Tenant shall take all reasonable actions in order to keep the terms of this Lease and all information (including any financial statements) provided by Landlord or Tenant to the other pursuant to this Lease confidential except to the extent necessary in order to perform their obligations hereunder or as required by law. No statements shall be made or released to the print or televised media with respect to this Lease without the prior written approval of both Landlord and Tenant. To the extent Landlord or Tenant disclose any such information to prospective purchasers, lenders, affiliates, directors, officers, employees, advisors, accountants, auditors, agents and representatives, all of same shall be advised of the confidential nature of such information. This provision shall survive expiration or termination of this Lease.

## ARTICLE 27

### SECURITY DEPOSIT

**Section 27.1 Security Deposit.** Tenant shall deposit the Security Deposit with Landlord upon the execution of this Lease in cash as security for the faithful performance and observance by Tenant of the terms, covenants and conditions of this Lease.



**LANDLORD ACKNOWLEDGMENT**

STATE OF \_\_\_\_\_ )  
 ) ss.:  
COUNTY OF \_\_\_\_\_ )

I, the undersigned, a Notary Public, in and for the County and State aforesaid, do hereby certify that\_\_\_\_\_, personally known to me to be the\_\_of 520 Pike Street, Inc., a Delaware corporation, and personally known to me to be the same person whose name is subscribed to the foregoing instrument, appeared before me this day in person and acknowledged that in such capacity of said corporation being authorized so to do, (s)he executed the foregoing instrument on behalf of said corporation, by subscribing the name of such corporation by himself/herself as such officer, as a free and voluntary act, and as the free and voluntary act and deed of said corporation, as partner or agent for the Landlord designated in the foregoing instrument, for the uses and purposes therein set forth.

IN WITNESS WHEREOF, I hereunto set my hand and official seal this\_\_ day of  
\_\_, 201 .

\_\_\_\_\_  
\_\_\_\_\_  
Printed Name  
Notary Public in and for the State of \_\_\_\_\_  
Residing at \_\_\_\_\_  
My Commission Expires: \_\_\_\_\_

TENANT ACKNOWLEDGMENT

STATE OF \_\_\_\_\_ )  
COUNTY OF \_\_\_\_\_ ) ss.

I, the undersigned, a Notary Public, in and for the County and State aforesaid, do hereby certify that\_\_\_\_, personally known to me to be the\_\_\_\_ofACHIEVE LIFE SCIENCES, INC., a Delaware corporation, and personally known to me to be the same person whose name is subscribed to the foregoing instrument, appeared before me this day in person and acknowledged that in such capacity of said corporation being authorized so to do, (s)he executed the foregoing instrument on behalf of said corporation, by subscribing the name of such corporation by himself/herself as such officer, as a free and voluntary act, and as the free and voluntary act and deed of said corporation, for the uses and purposes therein set forth.

GIVEN under my hand and official seal this \_\_\_\_\_ day of\_\_\_\_, 2017.

\_\_\_\_\_  
\_\_\_\_\_  
(print notary's name)  
Notary Public in and for the State of \_\_\_\_\_  
residing at \_\_\_\_\_  
My commission expires: \_\_\_\_\_



**EXHIBIT A-1**

**Floor Plan**

The floor plan which follows is intended solely to identify the general location of the Premises, and should not be used for any other purpose. All areas, dimensions and locations are approximate, and any physical conditions indicated may not exist as shown.

**EXHIBIT A-2**

**Legal Description**

Lots 10 and 11, Block 18, Addition to the Town of Seattle, as laid out by A.A. Denny (commonly known as A.A. Denny's 3rd Addition to the City of Seattle), according to the plat thereof recorded in Volume 1 of Plats, page 33, in King County, Washington, EXCEPT the southerly 10 feet of said Lot 11, condemned in King County Superior Court Cause No. 41394 for the widening of Pike Street, as provided by Ordinance No. 10051 of the City of Seattle.

SUBJECT TO AND TOGETHER WITH all rights and obligations granted and undertaken pursuant to: (a) Development and Parking Rights Agreement dated April 8, 1982 recorded under King County, Washington recording number 8204080464, as amended by agreements recorded under King County, Washington recording numbers 8208240318 and 8208240316, and as it may be further amended from time to time, and (b) Development Rights Agreement dated May 30, 1982 recorded under King County, Washington recording number 8208240314, as amended by agreement recorded under King County, Washington recording number 8208240316, and a Memorandum dated December 5, 1988 recorded under King County, Washington recording number 8812051221, and as it may be further amended from time to time.

## EXHIBIT B

### Definitions

**Base Rate:** The annual rate of interest publicly announced from time to time by Citibank, N.A., or its successor, in New York, New York as its “base rate” (or such other term as may be used by Citibank, N.A., from time to time, for the rate presently referred to as its “base rate”).

**Building Systems:** The mechanical, electrical, plumbing, sanitary, sprinkler, heating, ventilation and air conditioning, security, life-safety, elevator and other service systems or facilities of the Building up to the point of connection of localized distribution to the Premises (excluding, however, supplemental HVAC systems of tenants, sprinklers and the horizontal distribution systems within and servicing the Premises and by which mechanical, electrical, plumbing, sanitary, heating, ventilating and air conditioning, security, life-safety and other service systems are distributed from the base Building risers, feeders, panelboards, etc. for provision of such services to the Premises).

**Business Days:** All days, excluding Saturdays, Sundays and Observed Holidays.

**Code:** The Internal Revenue Code of 1986, as amended, and the regulations promulgated thereunder, as amended.

**Common Areas:** The lobby, plaza and sidewalk areas, parking garage, and other similar areas of general access and the areas on individual multi-tenant floors in the Building devoted to corridors, elevator lobbies, restrooms, and other similar facilities serving the Premises.

**Comparable Buildings:** First-class office buildings of comparable age and quality in the central business district of Seattle, Washington.

**Excluded Expenses:** (a) Taxes; (b) franchise or income taxes imposed upon Landlord; (c) mortgage amortization and interest; (d) leasing commissions; (e) the cost of tenant installations and decorations incurred in connection with preparing space for any Building tenant, including workletters and concessions; (f) rent under Superior Leases, if any; (g) management fees to the extent in excess of the greater of (A) five percent (5%) of the gross rentals and other revenues collected for the Real Property (plus reimbursable expenses payable in connection with property management services), and (B) fees charged by Landlord or related entities for the management by any of them of other first class properties in the area of the Building; (h) wages, salaries and benefits paid to any persons above the grade of property manager or chief engineer and their immediate supervisor; (i) legal and accounting fees relating to (A) disputes with tenants, prospective tenants or other occupants of the Building, (B) disputes with purchasers, prospective purchasers, mortgagees or prospective mortgagees of the Building or the Real Property or any part of either, or

(C) negotiations of leases, contracts of sale or mortgages; (j) costs of services provided to other tenants of the Building on a “rent-inclusion” basis which are not provided to Tenant on such basis;

(k) costs that are reimbursed out of insurance, warranty or condemnation proceeds, or which are reimbursed by Tenant or other tenants other than pursuant to an expense escalation clause; (l) costs in the nature of penalties or fines; (m) costs for services, supplies or repairs paid to any related entity in excess of costs that would be payable in an “arm’s length” or unrelated situation for comparable services, supplies or repairs; (n) allowances, concessions or other costs and expenses of improving or decorating any demised or demisable space in the Building; (o) advertising and promotional

expenses in connection with leasing of the Building; (p) the costs of installing, operating and maintaining a specialty improvement, including a cafeteria, lodging or private dining facility, or an athletic, luncheon or recreational club unless Tenant is permitted to make use of such facility without additional cost (other than payments for key deposits, use of towels, or other incidental items) or on a subsidized basis consistent with other users; (q) any costs or expenses (including fines, interest, penalties and legal fees) arising out of Landlord’s failure to timely pay Operating Expenses or Taxes; (r) costs incurred in connection with the removal, encapsulation or other treatment of asbestos or any other Hazardous Materials (classified as such on the Effective Date) existing in the Premises or Building as of the date hereof; (s) fines and penalties due to a violation of any law, code, ordinance or regulation; and (t) the cost of capital improvements other than those expressly included in Operating Expenses pursuant to Section 7.1.

**Governmental Authority:** The United States of America, the City of Seattle, County of King, or State of Washington, or any political subdivision, agency, department, commission, board, bureau or instrumentality of any of the foregoing, now existing or hereafter created, having jurisdiction over the Real Property.

**Hazardous Materials:** Any substances, materials or wastes currently or in the future deemed or defined in any Requirement as “hazardous substances,” “toxic substances,” “contaminants,” “pollutants” or words of similar import.

**HVAC System:** The Building System designed to provide heating, ventilation and air conditioning.

**Indemnitees:** Landlord, Landlord’s Agent, each Mortgagee and Lessor, and each of their respective direct and indirect partners, officers, shareholders, directors, members, managers, trustees, beneficiaries, employees, principals, contractors, servants, agents, and representatives.

**Lease Year:** The first Lease Year shall commence on the Commencement Date and shall end on the last day of the calendar month preceding the month in which the first anniversary of the Commencement Date occurs. Each succeeding Lease Year shall commence on the day following the end of the preceding Lease Year and shall extend for 12 consecutive months; provided, however, that the last Lease Year shall expire on the Expiration Date.

**Lessor:** A lessor under a Superior Lease.

**Losses:** Any and all losses, liabilities, damages, claims, judgments, fines, suits, demands, costs, interest and expenses of any kind or nature (including reasonable attorneys’ fees and disbursements) incurred in connection with any claim, proceeding or judgment and the defense thereof, and including all costs of repairing any damage to the Premises or the Building or the appurtenances of any of the foregoing to which a particular indemnity and hold harmless agreement applies.

**Mortgage(s):** Any mortgage, trust indenture or other financing document which may now or hereafter affect the Premises, the Real Property, the Building or any Superior Lease and the leasehold interest created thereby, and all renewals, extensions, supplements, amendments, modifications, consolidations and replacements thereof or thereto, substitutions therefor, and advances made thereunder.

**Mortgagee(s):** Any mortgagee, trustee or other holder of a Mortgage.

**Observed Holidays:** New Years Day, Martin Luther King Day, Presidents Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day, plus days observed by the State of Washington, the City of Seattle and/or the labor unions servicing the Building as holidays.

**Ordinary Business Hours:** 8:00 a.m. to 6:00 p.m. on Business Days.

**Prohibited Use:** Any use or occupancy of the Premises that in Landlord’s reasonable judgment would: (a) cause damage to the Building or any equipment, facilities or other systems therein; (b) impair the appearance of the Building; (c) interfere with the efficient and economical maintenance, operation and repair of the Premises or the Building or the equipment, facilities or systems thereof; (d) adversely affect any service provided to, and/or the use and occupancy by, any Building tenant or occupants; (e) violate the certificate of occupancy issued for the Premises or the Building; (f) materially and adversely affect the first-class image of the Building or (g) result in protests or civil disorder or commotions at, or other disruptions of the normal business activities in, the Building. Prohibited Use also includes the use of any part of the Premises for: (i) a restaurant or bar; (ii) the preparation, consumption, storage, manufacture or sale of food or beverages (except in connection with vending machines (provided that each machine, where necessary, shall have a waterproof pan thereunder and be connected to a drain) and/or warming kitchens installed for the use of Tenant’s employees only), liquor, tobacco or drugs; (iii) the business of photocopying, multilith or offset printing (except photocopying in connection with Tenant’s own business); (iv) a school or classroom; (v) lodging or sleeping; (vi) the operation of retail facilities (meaning a business whose primary patronage arises from the generalized solicitation of the general public to visit Tenant’s offices in person without a prior appointment) of a savings and loan association or retail facilities of any financial, lending, securities brokerage or investment activity;

(vii) a payroll office; (viii) a barber, beauty or manicure shop; (ix) an employment agency or similar enterprise; (x) offices of any Governmental Authority, any foreign government, the United Nations, or any agency or department of the foregoing; (xi) the manufacture, retail sale, storage of merchandise or auction of merchandise, goods or property of any kind to the general public which could reasonably be expected to create a volume of pedestrian traffic substantially in excess of that normally encountered in the Premises; (xii) the rendering of medical, dental or other therapeutic or diagnostic services; or (xiii) any illegal purposes or any activity constituting a nuisance.

**Requirements:** All present and future laws, rules, orders, ordinances, regulations, statutes, requirements, codes and executive orders, extraordinary and ordinary of (i) all Governmental Authorities, including, without limitation, (A) the Americans With Disabilities Act, 42 U.S.C. §12101 (et seq.), and any law of like import, and all rules, regulations and government orders with respect thereto, and (B) any of the foregoing relating to Hazardous Materials, environmental matters, public health and safety matters and landmarks protection, (ii) any applicable fire rating bureau or other body exercising similar functions, affecting the Real Property or the maintenance, use or occupation thereof, or any street, avenue or sidewalk comprising a part of or in front thereof or any vault in or under the same, (iii) all requirements of all insurance bodies affecting the Premises, (iv) utility service providers, and (v) Mortgagees or Lessors. "Requirements" shall also include the terms and conditions of any certificate of occupancy issued for the Premises or the Building, and any other covenants, conditions or restrictions affecting the Building and/or the Real Property from time to time.

**Rules and Regulations:** The rules and regulations annexed to and made a part of this Lease as **Exhibit F**, as they may be modified from time to time by Landlord.

**Specialty Alterations:** Alterations which are not standard office installations such as kitchens, executive bathrooms, raised computer floors, computer room installations, supplemental HVAC equipment, safe deposit boxes, vaults, libraries or file rooms requiring reinforcement of floors, internal staircases, slab penetrations, conveyors, dumbwaiters, and other Alterations of a similar character. All Specialty Alterations are Above-Building Standard Installations.

**Substantial Completion:** As to any construction performed by any party in the Premises, "Substantial Completion" or "Substantially Completed" means that such work has been completed, as reasonably determined by Landlord's architect, in accordance with (a) the provisions of this Lease applicable thereto, (b) the plans and specifications for such work, and (c) all applicable Requirements, except for minor details of construction, decoration and mechanical adjustments, if any, the noncompletion of which does not materially interfere with Tenant's use of the Premises or which in accordance with good construction practices should be completed after the completion of other work in the Premises or Building.

**Superior Lease(s):** Any ground or underlying lease of the Real Property or any part thereof heretofore or hereafter made by Landlord and all renewals, extensions, supplements, amendments, modifications, consolidations, and replacements thereof.

**Tenant Party:** Tenant and any subtenants or occupants of the Premises and their respective agents, contractors, subcontractors, employees, invitees or licensees.

**Tenant's Property:** Tenant's movable fixtures and movable partitions, telephone and other equipment, computer systems, telecommunications, data and other cabling, trade fixtures, furniture, furnishings, and other items of personal property which are removable without material damage to the Building.

**Unavoidable Delays:** Landlord's or Tenant's inability to fulfill or delay in fulfilling any of its obligations under this Lease expressly or impliedly to be performed by such party, or Landlord's or Tenant's inability to make or delay in making any repairs, additions, alterations, improvements or decorations, or Landlord's or Tenant's inability to supply or delay in supplying any equipment or fixtures, if Landlord's or Tenant's inability or delay is due to or arises by reason of strikes, labor troubles or by accident, or by any cause whatsoever beyond Landlord's or Tenant's reasonable control, including governmental preemption in connection with a national emergency, Requirements or shortages, or unavailability of labor, fuel, steam, water, electricity or materials, or delays caused by the other party hereto or other tenants, mechanical breakdown, acts of God, enemy action, civil commotion, fire or other casualty.

**EXHIBIT C**  
**WORK LETTER**

C-1

6219070.4

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**EXHIBIT D**

**Design Standards**

(a) **HVAC.** The Building HVAC System serving the Premises is designed to maintain average temperatures within the Premises during Ordinary Business Hours of (i) not less than 68° F. during the heating season when the outdoor temperature is 5° F. or more and (ii) not more than 78°F. and 50% humidity + 5% during the cooling season, when the outdoor temperatures are at 89° F. dry bulb and 73° F. wet bulb, with, in the case of clauses (i) and (ii), a population load per floor of not more than one person per 100 square feet of useable area, other than in dining and other special use areas per floor for all purposes, and shades fully drawn and closed, including lighting and power, and to provide at least .15 CFM of outside ventilation per square foot of rentable area. Use of the Premises, or any part thereof, in a manner exceeding the foregoing design conditions or rearrangement of partitioning after the initial preparation of the Premises which interferes with normal operation of the air-conditioning service in the Premises may require changes in the air- conditioning system serving the Premises at Tenant's expense.

(b) **Electrical.** The Building Electrical system serving the Premises is designed to provide:

- (i) 1.5 watts per rentable square foot of high voltage (480/277 volt) connected power for lighting, and
- (ii) 2.5 watts per rentable square foot of low voltage (120/208 volt) connected power for convenience receptacles.

**EXHIBIT E**

**Cleaning Specifications**

**GENERAL CLEANING**

**NIGHTLY**

**General Offices:**

1. All hard surfaced flooring to be swept using approved dustdown preparation.
2. Carpet sweep all carpets, moving only light furniture (desks, file cabinets, etc. not to be moved).
3. Hand dust and wipe clean all furniture, fixtures and window sills.
4. Empty all waste receptacles and remove wastepaper.
5. Wash clean all Building water fountains and coolers.
6. Sweep all private stairways.

**Lavatories:**

1. Sweep and wash all floors, using proper disinfectants.
2. Wash and polish all mirrors, shelves, bright work and enameled surfaces.
3. Wash and disinfect all basins, bowls and urinals.
4. Wash all toilet seats.
5. Hand dust and clean all partitions, tile walls, dispensers and receptacles in lavatories and restrooms.
6. Empty paper receptacles, fill receptacles from tenant supply and remove wastepaper.
7. Fill toilet tissue holders from tenant supply.
8. Empty and clean sanitary disposal receptacles.

**WEEKLY**

1. Vacuum all carpeting and rugs.
2. Dust all door louvers and other ventilating louvers within a person's normal reach.
3. Wipe clean all brass and other bright work.



**NOT MORE THAN 3 TIMES PER YEAR**

High dust premises complete including the following:

1. Dust all pictures, frames, charts, graphs and similar wall hangings not reached in nightly cleaning.
2. Dust all vertical surfaces, such as walls, partitions, doors, door frames and other surfaces not reached in nightly cleaning.
3. Dust all venetian blinds.
4. Wash all windows.

**EXHIBIT F**

**Rules and Regulations**

1. Nothing shall be attached to the outside walls of the Building. Other than Building standard blinds, no curtains, blinds, shades, screens or other obstructions shall be attached to or hung in or used in connection with any exterior window or entry door of the Premises, without the prior consent of Landlord.
2. No sign, advertisement, notice or other lettering visible from the exterior of the Premises shall be exhibited, inscribed, painted or affixed to any part of the Premises without the prior written consent of Landlord. All lettering on doors shall be inscribed, painted or affixed in a size, color and style acceptable to Landlord.
3. The grills, louvers, skylights, windows and doors that reflect or admit light and/or air into the Premises or Common Areas shall not be covered or obstructed by Tenant, nor shall any articles be placed on the window sills, radiators or convectors.
4. Landlord shall have the right to prohibit any advertising by any Tenant which, in Landlord's opinion, tends to impair the reputation of the Building, and upon written notice from Landlord, Tenant shall refrain from or discontinue such advertising.
5. Common Areas shall not be obstructed or encumbered by any Tenant or used for any purposes other than ingress of egress to and from the Premises and for delivery of merchandise and equipment in a prompt and efficient manner, using elevators and passageways designated for such delivery by Landlord.
6. Except in those areas designated by Tenant as "security areas," all locks or bolts of any kind shall be operable by the Building's Master Key. No locks shall be placed upon any of the doors or windows by Tenant, nor shall any changes be made in locks or the mechanism thereof which shall make such locks inoperable by the Building's Master Key. Tenant shall, upon the termination of its Lease, deliver to Landlord all keys of stores, offices and lavatories, either furnished to or otherwise procured by Tenant and in the event of the loss of any keys furnished by Landlord, Tenant shall pay to Landlord the cost thereof.
7. Tenant shall keep the entrance door to the Premises closed at all times.
8. All movement in or out of any freight, furniture, boxes, crates or any other large object or matter of any description must take place during such times and in such elevators as Landlord may prescribe. Landlord reserves the right to inspect all articles to be brought into the Building and to exclude from the Building all articles which violate any of these Rules and Regulations or the Lease. Landlord may require that any person leaving the public areas of the Building with any article to submit a pass, signed by an authorized person, listing each article being removed, but the establishment and enforcement of such requirement shall not impose any responsibility on Landlord for the protection of any Tenant against the removal of property from the Premises.
9. All hand trucks shall be equipped with rubber tires, side guards and such other safeguards as Landlord may require.
10. No Tenant Party shall be permitted to have access to the Building's roof, mechanical, electrical or telephone rooms without permission from Landlord.
11. Tenant shall not permit or suffer the Premises to be occupied or used in a manner offensive or objectionable to Landlord or other occupants of the Building by reason of noise, odors, vibrations or interfere in any way with other tenants or those having business therein.
12. Tenant shall not employ any person or persons other than the janitor of Landlord for the purpose of cleaning the Premises, unless otherwise agreed to by Landlord. Tenant shall not cause any unnecessary labor by reason of such Tenant's carelessness or indifference in the preservation of good order and cleanliness.

13. Tenant shall store all its trash and recyclables within its Premises. No material shall be disposed of which may result in a violation of any Requirement. All refuse disposal shall be made only through entryways and elevators provided for such purposes and at such times as Landlord shall designate. Tenant shall use the Building's hauler.

14. Tenant shall not deface any part of the Building. No boring, cutting or stringing of wires shall be permitted, except with prior consent of Landlord, and as Landlord may direct.

15. The water and wash closets, electrical closets, mechanical rooms, fire stairs and other plumbing fixtures shall not be used for any purposes other than those for which they were constructed and no sweepings, rubbish, rags, acids or other substances shall be deposited therein. All damages resulting from any misuse of the fixtures shall be borne by Tenant where a Tenant Party caused the same.

16. Tenant, before closing and leaving the Premises at any time, shall see that all lights, water faucets, etc. are turned off. All entrance doors in the Premises shall be kept locked by Tenant when the Premises are not in use.

17. No bicycles, in-line roller skates, vehicles or animals of any kind (except for seeing eye dogs) shall be brought into or kept by any Tenant in or about the Premises or the Building.

18. Canvassing or soliciting in the Building is prohibited.

19. Employees of Landlord or Landlord's Agent shall not perform any work or do anything outside of the regular duties, unless under special instructions from the office of Landlord or in response to any emergency condition.

20. Tenant is responsible for the delivery and pick up of all mail from the United States Post Office.

21. Landlord reserves the right to exclude from the Building during other than Ordinary Business Hours all persons who do not present a valid Building pass. Tenant shall be responsible for all persons for whom a pass shall be issued at the request of Tenant and shall be liable to Landlord for all acts of such persons.

22. Tenant shall not use the Premises for any purpose that may be dangerous to persons or property, nor shall Tenant permit in, on or about the Premises or Building items that may be

dangerous to persons or property, including, without limitation, firearms or other weapons (whether or not licensed or used by security guards) or any explosive or combustible articles or materials.

23. No smoking shall be permitted in, on or about the Premises, the Building or the Real Property.

24. Landlord shall not be responsible to Tenant or to any other person or entity for the non-observance or violation of these Rules and Regulations by any other tenant or other person or entity. Tenant shall be deemed to have read these Rules and Regulations and to have agreed to abide by them as a condition to its occupancy of the Premises.

25. The review/alteration of Tenant drawings and/or specifications by Landlord's Agent and any of its representatives is not intended to verify Tenant's engineering or design requirements and/or solutions. The review/alteration is performed to determine compatibility with the Building Systems and lease conditions. Tenant renovations must adhere to the Building's applicable Standard Operating Procedures and be compatible with all Building Systems.

**SUBSIDIARIES OF THE REGISTRANT**

Achieve Life Sciences Technologies Inc., incorporated under the federal laws of Canada

Achieve Life Science Inc., a Delaware Corporation

Extab Corporation, a Delaware Corporation

Achieve Pharma UK Limited, a Limited Company in the United Kingdom

**CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

We hereby consent to the incorporation by reference in the Registration Statements on Form S-8 (File Nos. 333-56704, 333-135697, 333-144552, 333-153206, 333-168820, 333-190480, 333-197937, 333-206569, and 333-221473) and Form S-3 (File Nos. 333-184829, and 333-207670) of Achieve Life Sciences, Inc. of our report dated March 1, 2018 relating to the financial statements and financial statement schedules, which appears in this Form 10-K.

Vancouver, Canada,

March 1, 2018

/s/ PricewaterhouseCoopers LLP

Chartered Professional Accountants

**Certification Pursuant to Rule 13a-14(a) or Rule 15d-14(a) of the Securities Exchange Act of 1934**

I, Richard Stewart, certify that:

1. I have reviewed this annual report on Form 10-K of Achieve Life Sciences, 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 officers and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
  - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
  - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officers and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
  - (a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
  - (b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: March 1, 2018

/s/ RICHARD STEWART

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Richard Stewart  
Chairman and Chief Executive Officer

**Certification Pursuant to Rule 13a-14(a) or Rule 15d-14(a) of the Securities Exchange Act of 1934**

I, John Bencich, certify that:

1. I have reviewed this annual report on Form 10-K of Achieve Life Sciences, 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 officers and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
  - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
  - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officers and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
  - (a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
  - (b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: March 1, 2018

/s/ JOHN BENCICH

John Bencich  
Executive Vice President, Chief Financial Officer and Chief  
Operating Officer

**Certification pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002**

I, Richard Stewart, Chairman and Chief Executive Officer of Achieve Life Sciences, Inc. (the "Company"), certify, pursuant to Rule 13a-14(b) or Rule 15d-14(b) of the Securities Exchange Act of 1934 and 18 U.S.C. Section 1350, that:

- (1) the Annual Report on Form 10-K of the Company for the year ended December 31, 2017 (the "Report") fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m or 780(d)); and
- (2) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Dated: March 1, 2018

/s/ RICHARD STEWART

Richard Stewart  
Chairman and Chief Executive Officer



**Certification pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002**

I, John Bencich, Executive Vice President, Chief Financial Officer and Chief Operating Officer of Achieve Life Sciences, Inc. (the "Company"), certify, pursuant to Rule 13a-14(b) or Rule 15d-14(b) of the Securities Exchange Act of 1934 and 18 U.S.C. Section 1350, that:

- (1) the Annual Report on Form 10-K of the Company for the year ended December 31, 2017 (the "Report") fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m or 780(d)); and
- (2) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Dated: March 1, 2018

/s/ JOHN BENCICH

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John Bencich  
Executive Vice President, Chief Financial Officer and Chief  
Operating Officer