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**

For the transition period from_____ to _____
Commission file number: 001-31326

ELOXX PHARMACEUTICALS, INC.
(Exact Name of Registrant as Specified in Its Charter)

Delaware	**84-1368850**
(State or Other Jurisdiction of Incorporation or Organization)	**(I.R.S. Employer Identification No.)**

950 Winter Street
Waltham, Massachusetts 02451
(Address of Principal Executive Offices and Zip Code)

(781) 577-5300
(Registrant's Telephone Number, Including Area Code)

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

Title of each class	Name of each exchange on which registered
Common Stock, $0.01 par value	**The OTCQB Market**

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

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

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

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

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

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

Large accelerated filer	☐	Accelerated filer	☐
Non-accelerated filer	☐	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 Act). Yes ☐ No ☒

The aggregate market value of the voting and non-voting common equity held by non-affiliates of the registrant, based on the closing price for such stock as reported on the OTCQB Market on June 30, 2017, the last business day of the registrant's most recently completed second quarter, was: $7,092,700.

As of December 31, 2017, there were 27,527,738 shares of the Registrant's common stock, par value $0.01 per share, outstanding.

ELOXX PHARMACEUTICALS INC.
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Special Note Regarding Forward-Looking Statements

This Annual Report on Form 10-K, or this report and the other documents we have filed with the SEC that are incorporated herein by reference, contains forward-looking statements that involve substantial risks and uncertainties. All statements, other than statements of historical facts, including statements regarding our strategy, future operations, future financial position, future revenues, projected costs, prospects, plans and objectives of management, are forward-looking statements. The words “anticipate,” “believe,” “estimate,” “expect,” “intend,” “may,” “plan,” “predict,” “project,” “target,” “potential,” “will,” “would,” “could,” “should,” “continue,” and similar expressions are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words. We may not actually achieve the plans, intentions or expectations disclosed in our forward-looking statements, and you should not place undue reliance on our forward-looking statements. Actual results or events could differ materially from the plans, intentions and expectations disclosed in the forward-looking statements we make. In particular, you should consider the numerous risks described in the “Risk Factors” section in this Report on Form 10-K.

Although we believe the expectations reflected in the forward-looking statements are reasonable, we cannot guarantee future results, level of activity, performance or achievements. You should not rely upon forward-looking statements as predictions of future events. Unless required by law, we will not undertake and we specifically disclaim any obligation to release publicly the result of any revisions which may be made to any forward-looking statements to reflect events or circumstances after the date of such statements or to reflect the occurrence of events, whether or not anticipated. In that respect, we wish to caution readers not to place undue reliance on any such forward-looking statements, which speak only as of the date they are made.

This report and the other documents incorporated by reference herein includes statistical and other industry and market data that we obtained from industry publications and research, surveys and studies conducted by third parties. Industry publications and third party research, surveys and studies generally indicate that their information has been obtained from sources believed to be reliable, although they do not guarantee the accuracy or completeness of such information. While we believe these industry publications and third party research, surveys and studies are reliable, we have not independently verified such data.

The following are some risks and uncertainties, among others, that could cause actual results to differ materially from those expressed or implied by forward looking statements in this prospectus:

- risks related to the reverse merger and potentially significant, unexpected costs and liabilities arising with respect to the historic Sevion business and operations;
- risks related to our ability to obtain adequate financing in the future through product licensing, public or private equity or debt financing or otherwise; general business conditions; competition; business abilities and judgment of personnel; and the availability of qualified personnel;
- risks related to the ability to obtain the capital necessary to find our operations;
- risks related to our ability to progress any product candidates in preclinical or clinical trials;
- risks related to the scope, rate and progress of our preclinical studies and clinical trials and other research and development activities;
- the uncertainty of clinical trial results and the fact that positive results from preclinical studies are not always indicative of positive clinical results;
- risks that our product candidates may not prove to be safe and efficacious;
- risks relating to the cost of filing, prosecuting, defending and enforcing any patent claims and other intellectual property rights; and
- risks related to the competition for patient enrollment from drug candidates in development.

PART I

ITEM 1. BUSINESS

Merger of Sevion Therapeutics, Inc. and Eloxx Pharmaceuticals, Limited

On December 19, 2017, the Sevion Therapeutics, Inc. ("Sevion") acquired Eloxx Pharmaceuticals, Limited ("Private Eloxx") pursuant to a merger between the companies (the "Transaction"). Upon consummation of the Transaction (the "Closing"), Sevion adopted the business plan of Private Eloxx and discontinued the pursuit of Sevion's business plan pre-Closing. In connection with the Transaction, Sevion agreed to acquire all of the outstanding capital stock of Private Eloxx in exchange for the issuance of an aggregate 20,316,656 shares of the Sevion's common stock, par value $0.01 per share (the "Common Stock"), after giving effect to a 1-for-20 reverse split effected immediately prior to the Transaction. As a result of the Transaction, Private Eloxx became a wholly-owned subsidiary of Sevion. While Sevion was the legal acquirer in the transaction, Private Eloxx was deemed the accounting acquirer. Immediately after giving effect to the Transaction, on December 19, 2017, Sevion changed its name to Eloxx Pharmaceuticals, Inc. ("Eloxx" or the "Company"). Our current trading symbol is "ELOX." Our principal executive offices are located in Waltham, Massachusetts and we have a research and development center in Rehovot, Israel. Our telephone number is (781) 577-5300.

Company Overview

We are a global biopharmaceutical company focused on discovering and developing novel therapeutics for the treatment of rare and ultra-rare premature stop codon diseases. We are harnessing the science of genetic read-through to develop novel drug product candidates that interact with the ribosome to overcome these premature stop codons. Our revolutionary small molecule approach is designed to unleash the potential to restore production of full length functional proteins with the goal of enabling a return toward normal cellular function. We believe there is a broad application of this approach to the over 1800 rare and ultra-rare diseases where nonsense mutation has been implicated in the cause or pathway of human disease.

Our research and development strategy is to target rare or ultra-rare diseases where a high unmet medical need, nonsense mutation bearing patient population has been identified. We focus on clinical indications where there is a high unmet medical need, established preclinical read-through or personalized medicine experiments that are predictive of clinical activity, and a definable path for Orphan Drug development, regulatory approval, patient access and commercialization. We believe patient advocacy to be an important element of patient focused drug development and seek opportunities to collaborate with patient advocacy groups throughout the discovery and development process. Our current clinical focus is on cystic fibrosis (or "CF") and cystinosis where we are advancing our lead drug product candidate, ELX-02.

We intend to be the global leader in the application of the science of translational read through and the associated pathway of nonsense mediated messenger ribonucleic acid ("mRNA") decay. We believe that expanding our expertise across these basic science areas of mRNA regulation, ribosomal function, and protein translation forms a solid foundation to support our discovery and development activities. Our compounds modulate the activity of the ribosome, the organelle within living cells responsible for protein production, a process also known as translation. These novel small molecule compounds are designed to allow the ribosome to read-through a nonsense mutation in mRNA (which is transcribed from the DNA sequence), to restore the translation process to produce full length, functional proteins and increase the amount of mRNA that would otherwise be degraded as part of a phenomenon called nonsense mediated mRNA decay. As our compounds target the general mechanism for protein production in the cell, we believe they have the potential to treat hundreds of genetic diseases where nonsense mutations have impaired gene function. Our subcutaneously injected small molecules have the potential to be self-administered and to be active at most tissue locations across the body.

We believe that our library of related novel small molecules hold the potential to be disease-modifying therapies that may change the course of hundreds of genetic diseases and improve the lives of patients. Our early

preclinical data in animal models of nonsense mutations suggests that drug product candidates from our read through compound library may have potential beneficial effects for each of the following diseases: cystic fibrosis, cystinosis, mucopolysaccharidosis type 1, Duchenne muscular dystrophy and Rett syndrome, and have demonstrated the potential for beneficial effects in multiple organs such as the brain, kidney, muscles and others. We intend to advance one or more additional molecules from our drug product candidate library toward clinical development by initiating the required investigational new drug ("IND")-enabling studies in 2018.

Currently our lead program ELX-02 is focused on development for cystic fibrosis and cystinosis patients with diagnosed nonsense mutations. To advance the program, we have held pre-IND pre-clinical trial application ("CTA") discussions with the Federal Agency for Medicines and Health Products (the "FAMHP") in Brussels Belgium and pre-IND discussions with the U.S. Food & Drug Administration (the "FDA") for cystic fibrosis and cystinosis, respectively. We are on-track for an expected mid-2018 submission of our IND and CTA. Approval of these submissions will be required for initiation of Phase 2 studies in cystic fibrosis and cystinosis in 2018.

As part of our clinical program, we have completed a Phase 1 single ascending dose ("SAD") study in a total of 60 healthy volunteers at sites in Israel (ClinicalTrials.gov Identifier: NCT02807961) and Belgium (ClinicalTrials.gov Identifier: NCT03292302). Currently ongoing is the Phase 1 multiple ascending dose ("MAD") study in 45 healthy volunteers in Belgium (ClinicalTrials.gov Identifier: NCT03309605). We anticipate that the Phase 1 MAD study will be completed in 2018. The results from the completed Phase 1 study will be included in the planned IND and CTA submissions.

We believe there is a significant unmet medical need in the treatment of cystic fibrosis patients carrying nonsense mutations on one or both alleles of the Cystic Fibrosis Transmembrane Conductance Regulator ("CFTR") gene. Cystic fibrosis is the most prevalent genetic disease in the western world and there are no currently approved therapies that target the impairment associated with Class 1 CFTR mutations. We believe that nonsense mutations may impact a similar proportion of patients diagnosed with cystinosis. There are no currently approved therapeutics that target the nonsense mutation mediated impairment of cystinosin the cystine-selective transport channel in the lysosomal membrane that is attributed as the cause for the accumulation of cystine in this disease state. Given the high proportion of pediatric patients in each of these rare orphan diseases we intend to apply for relevant Orphan Drug incentives in the US and Europe, including the Rare Pediatric Disease Priority Review Voucher in the U.S.

Currently, the European Medicines Agency (the "EMA") has designated ELX-02 as an orphan medicine for the treatment of mucopolysaccharidosis type I ("MPS I"), and the FDA has granted orphan drug designation to ELX-02 for the treatment of MPS I and for the treatment of Rett Syndrome.

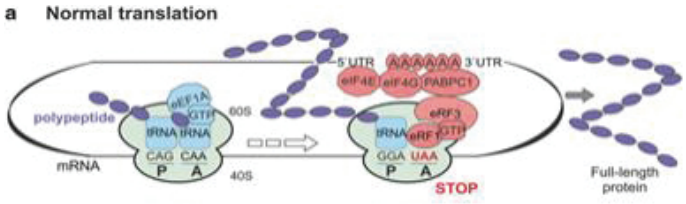
We hold worldwide development and commercialization rights to ELX-02 and novel compounds in our read-through library, for all indications, in all territories, under a license from the Technion Research and Development Foundation Ltd. Professor Timor Baasov, the inventor of our compounds, has served as our senior consultant since our incorporation.

Our Technology

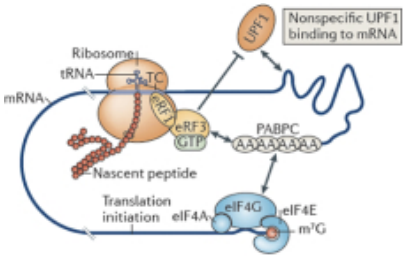
Nonsense mutations, also known as premature termination or stop codons, are single point mutations within the DNA sequence which are either inherited or acquired that result in premature termination of the translational process leading to truncated or absent proteins. Nonsense mutations are the cause of a large number of genetic diseases such as cystic fibrosis, cystinosis, mucopolysaccharidosis type 1 ("nmMPS-1"), Duchenne muscular dystrophy ("nmDMD"), Rett syndrome, and a variety of cancers. According to the human gene mutation database (http://www.hgmd.cf.ac.uk/ac/index.php), nonsense mutations account for approximately twelve percent (12%) of patients with a given genetic disease. The disease phenotypes caused by nonsense mutations are frequently more severe than those caused by other kinds of mutations because these mutations often lead to a complete loss of protein production or function. In general, these diseases do not have specific therapies beyond symptomatic and palliative interventions.

In eukaryotic cells, the cytoplasmic ribosome is responsible for the production of proteins by a process called translation. As part of the translation process, the genetic information is transcribed to the mRNA arranged as codons that specify the corresponding amino acid, the building block of a protein. The ribosome pairs a specific mRNA codon with an aminoacyl transfer RNA (aa-tRNA) containing an anticodon sequence causing elongation of the nascent protein.

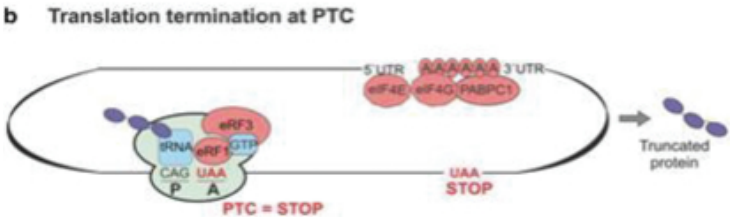
Normal translation termination in eukaryotic cells occurs when a natural (canonical) termination codon enters the ribosomal A site, the protein production site within the ribosome, and no complementary aa-tRNA is found. Termination codon recognition is not carried out by codon-anticodon interactions, since no tRNA anticodon is complementary to any of the mRNA termination codons. Rather, a complex of releasing factors recognize the termination codons and interact with the ribosome to release the completed protein, resulting in termination of the translation process.



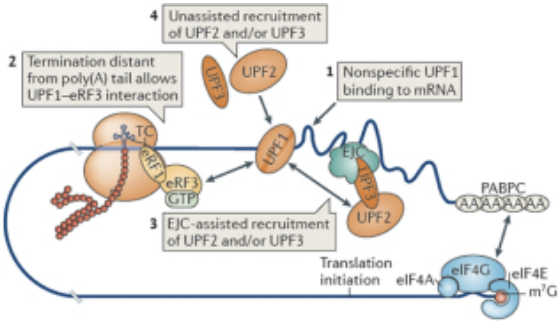
Translation terminates efficiently when the termination codon (“TC”) is in physical proximity to the 3’ poly(A) tail (AAAAAAAA) and/or the 5’ 7-methylguanosine (m7G) cap of the mRNA. Efficient translation termination prevents nonsense-mediated delay (“NMD”) of the mRNA.



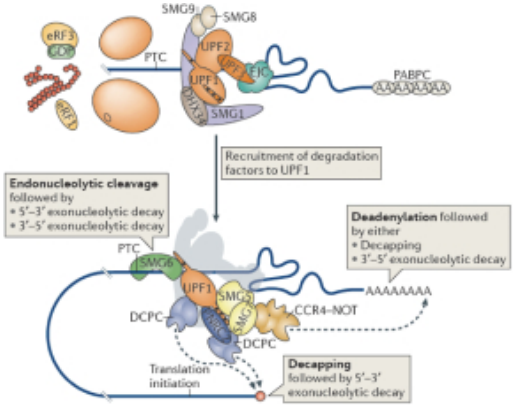
In the presence of a nonsense mutation the ribosome cannot pair the mRNA with a corresponding aa-tRNA and protein elongation stops and terminates, giving rise to a truncated protein.



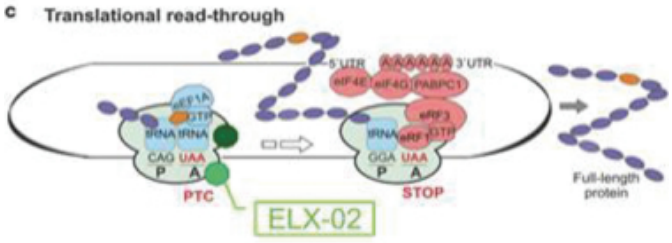
When the ribosome stalls after finding a premature termination codon, upstream protein factor 1 (“UPF1”), UPF2 and UPF3 are recruited. UPF1 binds nonspecifically to the mRNA, ribosome-associated eRF3 interacts with UPF1, thereby recruiting UPF2 and/or UPF3 (assisted by an exon–junction complex (“EJC”) bound to the 3’ untranslated region (“UTR”) or independently) and thus enables NMD. Some mRNAs may escape NMD for one or more rounds of translation, due to the inefficient recruitment of UPF1, UPF2 and/or UPF3 to the terminating ribosome.



The assembly of a protein complex including UPF1, UPF2, UPF3, suppressor of morphogenetic effect on genitalia 1 (SMG1), SMG8, SMG9, DEAH box polypeptide 34 (DHX34) and the EJC signals that the TC is a PTC. At this point, translation may terminate, ultimately leading to the dissociation of the individual ribosomal subunits, the release factors and the nascent protein.



Translation read-through across a premature termination codon (nonsense mutation) is a process in which the ribosome inserts related (near cognate) tRNAs which compete with the releasing factor complex and enable the insertion of a near cognate amino acid in the protein leading to translation of the full protein. Translation read-through across a nonsense mutation is a natural process that occurs at the rate of 1%. In such instances, the ribosome will not terminate the translational process prematurely regardless of a premature termination. ELX-02 is designed to enhance this natural process by increasing the read-through activity and the frequency of near cognate aa-tRNA binding within the A site of the ribosome. ELX-02 enables the production of sufficient amounts of full-length protein to restore activity of the mutated protein.



Current Data Indicating the Mechanism of Action of ELX-02

ELX-02 is an advanced aminoglycoside with poor antibiotic activity and markedly decreased affinity for the prokaryotic and mitochondrial ribosomes. Aminoglycosides, such as gentamicin, are potent antibiotics that bind to the decoding site in the prokaryotic ribosome and prevent protein translation in bacteria. In eukaryotic cells, aminoglycosides induce a conformational change that reduces the codon-anticodon recognition, enhancing the ability of an aa-tRNA to compete with the release factor complex for binding to the premature termination codon and increasing the probability that translational read-through of premature termination codons occurs. Despite promising results, aminoglycoside use as a read through therapy is restricted since they cause damage to the kidney and ear after prolonged administration. In addition, prolonged administration of antibiotic aminoglycosides may cause antibiotic resistance and may damage the natural microflora. Because it stabilizes the ribosomal RNA (or “rRNA”), ELX-02 prevents the assembly of the NMD factors required to initiate decay of mRNA. In this manner the PTC is not recognized and the insertion of the near cognate amino acid to the nascent polypeptide drives translation to produce a full-length, functional protein.

ELX-02 is an investigational new chemical entity (NCE) advanced aminoglycoside optimized by successive rounds of medicinal chemistry to separate the sections of the molecule interacting with the prokaryotic ribosome responsible for the antibiotic activity from those portions of the molecule inducing translational read-through. ELX-02 has poor antibiotic activity and binds preferentially to the eukaryotic ribosome and is thereby designed to improve translational read-through. ELX-02's low affinity for the bacterial ribosome decouples the antibacterial activity from the read-through activity. When compared in laboratory tests to gentamicin, a classic aminoglycoside, ELX-02 thus far has shown a 100-fold lower antibacterial activity and nine-fold higher read-through activity for nonsense mutations; this has been attributed to higher selectivity towards the cytoplasmic eukaryotic ribosome. Consequently, ELX-02 could potentially be used to treat hundreds of genetic diseases caused by nonsense mutations.

Our Disease Focus

We believe that the segment of cystic fibrosis and cystinosis patients with diagnosed nonsense mutations on one or both alleles represents a high unmet medical need as there are currently no approved therapeutics targeting the impairment caused by these mutations. There are existing in vitro assays, animal models and/or biomarker screens that have been demonstrated to be useful in assessing the potential therapeutic benefit of development compounds for these disease states. The design of clinical trials and the endpoints for measuring clinical benefit have been established for the currently approved therapeutics for these disorders. We believe these to be attractive development targets based on the potential use of these precedents to de-risk the program.

We believe that our library of related novel small molecules hold the potential to be disease-modifying therapies that may change the course of hundreds of genetic diseases and improve the lives of patients. Our early preclinical data in animal models of nonsense mutations suggest that drug product candidates from our read through compound library may have potential beneficial effects for each of the following diseases: cystic fibrosis, cystinosis, mucopolysaccharidosis type 1, Duchenne muscular dystrophy and Rett syndrome, and have demonstrated the potential for beneficial effects in multiple organs such as the brain, kidney, muscles and others. We intend to advance one or more additional molecules from our drug product candidate library toward clinical development by initiating the required investigational new drug (IND)-enabling studies in 2018.

Nonsense Mutation Cystic Fibrosis

Cystic fibrosis (CF) is the most prevalent genetic disease in the western world and affects an estimated 70,000 to 100,000 patients worldwide, with the vast majority of affected individuals in the United States, Canada, Europe and Australia. CF is the most common fatal inherited disease in Caucasians. The incidence of CF varies across the globe. CF affects one out of 3,500 births in the United States, one out of 2,000 to 3,000 in Europe, and one out of 2,500 in Australia.

Approximately 13% of the CF patients carry a nonsense mutation on the CFTR gene. CF is a progressive disease caused by a deficiency in CFTR activity with insufficient ionic transconductance in the cell membrane, which, in turn, leads to the accumulation of thick mucus in vital organs, particularly the lungs, pancreas and gastrointestinal tract. As a result, CF patients experience respiratory infections, chronic lung inflammation, and poor absorption of nutrients as well as many other conditions, and, in most cases, progressive respiratory failure. Although the life expectancy of CF patients has improved, the median age of death in the United States in 2014 was only 29 years, with a vast majority of such deaths resulting from respiratory failure.

The disease occurs at a rate of 1 in 2,500–6,000 newborns, depending on the region and ethnic origin. Patients with CF caused by nonsense mutations have some of the most severe forms of the disease and, other than palliative therapies, no treatment currently exists for them.

Mutations in the gene that encodes CFTR protein, which play a critical role in regulating the viscosity of the mucus layer that lines human organs, cause CF. The CFTR protein forms an ion channel that regulates the flow of ions in and out of the cells of vital organs such as the lungs, pancreas and gastrointestinal tract. We refer to

this as ion flow. When CFTR protein expels the ions, osmosis draws water out of the cell and hydrates the cell surface. Through regulation of the location of the ions across the cell membrane, the amount of salts in the fluid both inside and outside the cell remains balanced.

In CF patients, the CFTR gene is defective, and as a result, CF patients lack the functional CFTR protein ion channel necessary to regulate ion flow. An altered ion concentration gradient between the inside and the outside of the cell reduces the amount of water molecules outside the cell, causing the accumulation of thick mucus on the epithelial surface as shown in Figure 1.

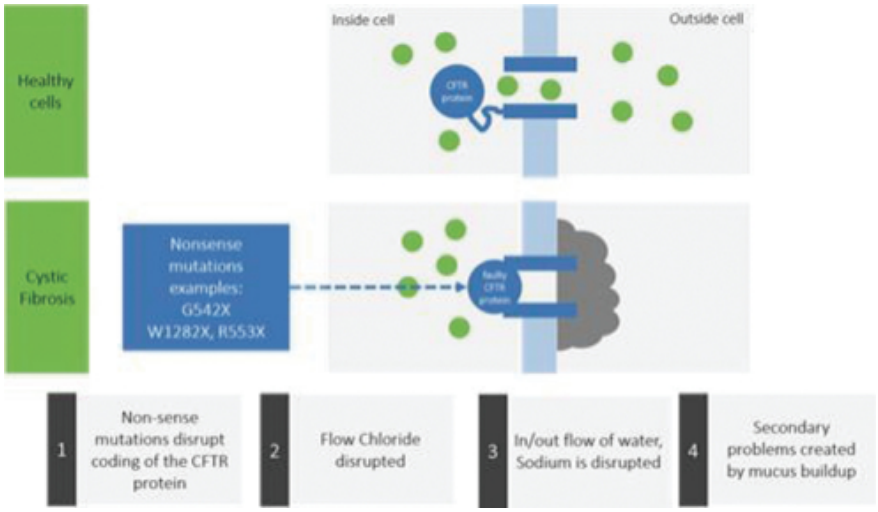


Figure 1: Ion Flow in Normal CFTR Protein Compared to Mutant CFTR Protein

The deficiency in CFTR protein activity in CF patients is particularly problematic in the lungs, where the build-up of thick mucus obstructs airflow and impairs proper immune response, which leads to chronic infection and persistent inflammation. In the pancreas and the gastrointestinal tract, the build-up of mucus prevents the release of digestive enzymes that help the body break down food and impairs the absorption of nutrients, resulting in poor growth and development.

Nonsense mutation Cystinosis

Cystinosis is an ultra-rare autosomal recessive lysosomal storage disease. Mutations in the *CTNS* gene (cystinosin), on the short arm of chromosome 17 (17p13), cause the primary defect in the disease. Cystinosin is a ubiquitous cystine-selective transport channel in the lysosomal membrane. Loss-of-function mutations prevent cystine efflux from the lysosome, causing massive accumulation of intra-lysosomal cystine in tissues throughout the body, and lead to apoptotic cell death, impaired physiology and end organ damage.

Affected children may appear fairly well until the age of 4-6 months, when progressive dysfunction and atrophy of the proximal renal tubule cause Fanconi syndrome and failure to thrive. By 10-12 years of age, dialysis or kidney transplantation is required to treat end-stage renal disease. Although the renal allograft is spared, lifespan is diminished by the inexorable dysfunction of other organs.

The most common nonsense mutation in the CTNS gene is W138X which has an overall incidence rate of 1 in every 62,500 live births in Quebec, Canada.

Current treatment includes cysteamine bitartrate (Cystagon® or Procysbi®). Cystagon was approved in the USA and Europe in 1994 and Procysbi was approved in the USA and Europe in 2013. Both therapies delay but

do not cure the condition and despite treatment, patients eventually require dialysis and renal transplantation and experience significant morbidity in other organ systems.

Nonsense mutation Duchenne muscular dystrophy (nmDMD)

Muscular dystrophies are genetic disorders involving progressive muscle wasting and weakness. DMD is the most common and one of the most severe types of muscular dystrophy. DMD occurs when a mutation in the dystrophin gene prevents the cell from making a functional dystrophin protein. Dystrophin is a muscle membrane associated protein and is critical to the structural and membrane stability of muscle fibers in skeletal, diaphragm and heart muscle. The absence of normally functioning dystrophin results in muscle fragility, such that muscle injury occurs when muscles contract or stretch during normal use. As muscle damage progresses, connective tissue and fat replace muscle fibers, resulting in inexorable muscle weakness.

Because the dystrophin gene is located on the X chromosome, DMD occurs almost exclusively in young boys. According to Parent Project Muscular Dystrophy, DMD occurs in approximately 1 in 3,500 live male births, while information from Moat, et al. (2013) in the European Journal of Human Genetics indicate prevalence of approximately 1 in 5,000 live male births. Genetic tests are available to determine if a patient's DMD is caused by a nonsense mutation. Based on information from Prior, et al. (1995) in the American Journal of Human Genetics, we estimate that a nonsense mutation is the cause of DMD in approximately 13% of patients. Overall, we estimate that there are approximately 7,000 nmDMD patients worldwide, with approximately 85% of such patients outside of the United States, including in Europe, Latin America, Asia Pacific, Middle East and Northern Africa regions. nmDMD is an ultra-rare, life threatening disorder. Without treatment, patients with DMD typically lose walking ability by their early teens, require ventilation support in their late teens and, eventually, experience premature death due to heart and lung failure. The average age of death for DMD patients is in their mid-twenties.

Two main treatments have received approval for DMD, Translarna™ (ataluren), which has received approval in the European Union ("EU") for the treatment of underlying cause of nmDMD, and received a complete response letter from the FDA and is not approved in the US. Another marketed product is EXONDYS 51® (eteplirsen) Injection, approved in the US for the treatment of DMD patients who are amenable for exon 51 skipping.

Nonsense mutation Mucopolysaccharidosis type I (nmMPS I)

Mucopolysaccharidosis type I (MPS I) is a chronic, progressive genetic disorder caused by a deficiency of the enzyme alpha-L-iduronidase (IDUA). The deficiency of this enzyme leads to the accumulation of a class of molecules called glycosaminoglycans (GAGs). The accumulation of GAGs causes disruption in the movement of molecules inside the cell and leads to the subsequent dysfunction of cells, tissues and organs. Globally, MPS I occurs in about 1 in every 100,000 births for the severe form and 1 in 500,000 for the attenuated form. About 70% of MPS I patients carry one of two nonsense mutations, Q70X and W402X. Estimates suggest that 50%- 80% of all MPS I patients present with the severe form.

MPS I is broadly classified in two groups; severe MPS I and the attenuated MPS I. The symptoms of the severe form of MPS I develop after birth and progress rapidly, causing progressive respiratory, cardiac and musculoskeletal manifestations along with coarse facies, hepatosplenomegaly, hernias, deafness, and a shortened life expectancy. Lack of reabsorption of cerebrospinal fluid (CSF) in the severe phenotype leads to communicating hydrocephalus, delayed neuromotor and impaired cognitive development. Patients usually have increased intracranial pressure due to accumulation of macromolecules, which causes optic atrophy, corneal clouding, glaucoma and vision problems including corneal opacity, acute blindness and corneal thickening. Children with severe MPS I often die in the first decade of life due to respiratory failure, cardiac valvulopathy, and cardiorespiratory problems. The attenuated form of MPS I progresses slowly and usually manifests in early childhood. Patients with the attenuated phenotype have valvular, left ventricular diastolic and systolic abnormalities. Patients typically face cervical spinal cord injury, carpal tunnel syndrome and joint stiffness along with other deformities like kyphosis, scoliosis and spondylolisthesis. Children with attenuated MPS I have

decreased intelligence quotient and language skills as compared to healthy children. Patients also suffer from recurrent headaches and optic nerve compression due to increased levels of CSF.

Treatment of severe and attenuated forms of MPS I is aimed at slowing the progression of the disease and improving the quality of life. Treatment can be broken into two classifications: supportive, symptom-based treatment and disease-specific treatment. The symptom-based treatment is coordinated by a specialized team to maintain patients' health and prevent the comorbidity which may arise due to the progression of the disease. The disease-specific treatments include enzyme replacement therapy (ERT) and hematopoietic stem cell transplantation (HSCT). HSCT is considered the standard of care for children with severe MPS I. HSCT therapy is based on the principle that donor-derived hematopoietic stem cells (HSC) engraft in the recipient and can differentiate into numerous cell types, thus providing enzyme to deficient cells via metabolic cross-correction and clearing GAG storage material from host tissues. Recombinant α-L-iduronidase is used for the ERT treatment in the form of Laronidase and is currently licensed in the US, Europe, and Canada for treating non-CNS manifestations of MPS I. In this treatment, drugs are administered exogenously by weekly intravenous infusion. At this time, more effective and affordable strategies are being developed as an alternative approach to treat patients with MPS disorders.

Nonsense mutation Rett Syndrome

Rett syndrome is a X-linked neurodevelopmental disorder that predominantly affects girls and has a worldwide incidence of 1 in every 10,000-15,000 female births. The condition is characterized by normal development for the first 6-18 months of age, followed by a period of regression in which the girls lose language and motor skills and purposeful hand use is replaced by repetitive stereotyped hand movements. Decelerating head growth and autistic features such as diminished eye contact and emotional withdrawal also occur. Additional characteristics include anxiety, respiratory dysfunctions, impairment of sleeping patterns, cardiac abnormalities, seizures, loss of locomotion, and bone density deficits. Furthermore, girls with Rett syndrome tend to be growth-retarded and have a reduced life-span. Currently, no treatment exists for the underlying cause of the disease. Treatment is symptomatic and palliative. Thus, a high unmet medical need exists for patients with Rett syndrome.

Loss-of-function mutations in the gene encoding the transcriptional regulator methyl-CpG binding protein 2 ("Mecp2") account for most cases of Rett syndrome. Mecp2 is a transcriptional repressor that binds to methylated promoters and recruits the histone deacetylases ("HDACs") machinery to induce chromatin condensation. In neurons, Mecp2 has been implicated in the modulation of specific neuronal target genes in an activity-dependent manner, such as brain-derived neurotrophic factor ("BDNF"), but also has been implicated in both repression and activation of a large number of genes, in modulation of RNA splicing, and most recently has been suggested to affect global chromatin structure impacting the entire neuronal genome.

Recent work in mouse models of Rett syndrome suggests that the clinical condition may be reversible, insofar as the reintroduction of functional Mecp2, either ubiquitously or selectively, in the brain of Mecp2-deficient mice significantly improved at least some of their Rett-like behavioral deficits. Collectively, these results indicate that the neurological defects seen in Rett syndrome are amenable to rescue, either by gene or protein reintroduction or by the reactivation of a silenced or dysfunctional Mecp2 allele.

Nonsense mutations in the Mecp2 gene account for approximately 30% of Rett syndrome cases. The most prominent nonsense mutations found in Rett syndrome, R168X, R255X, R270X and R294X, are all caused by a change of arginine to the stop codon, UGA.

Currently, no cure for Rett Syndrome exists. Treatment of Rett syndrome focuses on the management of symptoms, e.g., physical, occupational and speech-language therapy. Medicines can be used for seizure control and movement disorders along with treatments for breathing and gastrointestinal symptoms. The long-term prognosis of Rett patients is unknown. Patients have numerous comorbidities that are thought to contribute to a shortened lifespan.

Status of Clinical Programs

We are conducting a Phase 1 program in healthy volunteers that is designed to support studies of ELX-02 in patient populations in any indication caused by nonsense mutations and assess the safety of ELX-02. This initial phase of testing includes a small number of healthy volunteers. The studies assess the effects of ELX-02 on humans and measure bioavailability, excretion, safety and side effects, as well as the pharmacokinetics (what the body does to the drug) with increasing doses. Phase 1 studies include single ascending dose SAD, or Phase 1a, and multiple ascending dose MAD, or Phase 1b, studies.

We conducted a SAD study at the Tel Aviv Sourasky Medical Center in Israel ("TASMC") between July 12, 2016 and March 15, 2017 and between November 2017 and December 2017 at SGS in Antwerp, Belgium. The study was designed as a Phase 1a, randomized, double-blinded, placebo-controlled, single dose escalation study to evaluate the safety, tolerability and pharmacokinetics of ELX-02 in healthy adult volunteers. The study was designed and executed in compliance with the International Conference of Harmonisation Good Clinical Practices E6 guideline and in compliance with applicable regulatory requirements in Israel, the United States and the European Union. Subjects were allocated to one of seven cohorts and received doses of ELX-02 ranging between 0.3 mg/kg and 7.5 mg/kg injected either IV (only in the 0.3 mg/kg) or SC. A total of 60 subjects participated in the study. The study did not show acute or chronic changes in vital signs, chemistry, hematology, biomarkers of early tubular injury, changes in serum creatinine, evidence of aberrant translational read-through of housekeeping genes or impact in auditory function using a battery of tests that included pure tone audiometry ("PTA"), high frequency audiometry ("HFA"), tympanometry, and Speech Reception Threshold ("SRT"), or vestibular function, using electronystagmography ("ENG"), the Dizziness Handicap Inventory ("DHI") and the Tinnitus handicap Inventory ("THI"). No significant adverse events ("SAEs"), or serious adverse events of interest ("AEOIs") or deaths occurred in the study. We did report an AEOI of unclear physiological significance when we observed high frequency pure tone fluctuations outside the normal hearing range in a single subject at 5 mg/kg in the Israeli cohort.

We are also conducting a multiple ascending dose MAD study in healthy volunteers. The study has been designed as a Phase 1b, randomized, double-blinded, placebo-controlled, multiple dose escalating study in healthy male and female subjects. The study consists of 5 cohorts of 9 subjects each. Subjects will be randomized to receive nine doses of ELX-02 or placebo at a ratio of 2:1 in each cohort. The study has been reviewed and approved by the Federal Agency for Medicines and Health Products (FAMHP) in Belgium, and by the Institutional Review Board in August 2017 in Antwerp, Belgium. The screening began in October 2017 and the study commenced in November 2017.

In November 2017, we submitted a Pre-IND package to the FDA to initiate regulatory discussions around our submission of an IND supporting our Phase 2 study of cystinosis in the U.S. In December 2017, we received FDA's very productive written response, and we are on track for a mid-2018 IND submission in the U.S., and, subject to regulatory review of the IND and the IND becoming effective, we are targeting the 4th quarter 2018 for the first FPFV for our phase 2 cystinosis study in the U.S.

In January 2018, we held a Pre-CTA regulatory meeting with the FAMHP to discuss our submission of a CTA supporting our Phase 2 study of cystic fibrosis in Belgium. Based upon our very productive regulatory

dialogue with FAMHP, we are on track for a mid-2018 CTA submission in Belgium, and, subject to regulatory review and approval of the CTA, we are targeting the 4th quarter 2018 for the first patient first visit (FPFV) for our phase 2 cystic fibrosis study in Belgium.

Status of Preclinical Programs

We have completed a comprehensive series of preclinical studies to assess the safety, pharmacokinetics and pharmacology of ELX-02.

Safety and Pharmacokinetic Studies of ELX-02

A comprehensive toxicology program in accordance with the ICH guideline M3 (R2) was completed for ELX-02 to support clinical studies.

We conducted repeated subcutaneous-dose toxicity studies in rats and beagle dogs for up to 28 days at dose levels significantly higher than those intended for humans. Both of these species are routinely selected for toxicology testing. Both species exhibited renal toxicities that were monitorable and reversible at doses higher than those intended for humans. The toxicology data generated thus far in these species suggest the kidney and urinary bladder may be a target organ at higher exposures. In addition, local injection site reactions were observed at all dose levels in both animal species. These injection site reactions are likely due to the unique anatomy of the cutaneous musculature in animals compared to humans and available literature suggests that injection site reactions in animals bear a poor concordance between animal and humans. Based on the 28-day rat study, the expected safety margin is more than 50X at the starting dose in the MAD study (0.1 mg/kg/dose) and 30X times the starting dose to be tested in subjects with CF (0.3 mg/kg/dose). At the anticipated efficacious clinical doses of 1 or 2.5 mg/kg the safety margin based on steady state plasma AUC values in the rat study are anticipated to be approximately 10 or 4X, respectively. The rat 28-day data is used to define the safety margin since the rat was determined to be the most sensitive species. We believe these data provide support for human clinical trials with durations up to 4 weeks, but we plan to complete long-term toxicity studies prior to initiation of our Phase 3 clinical trials. In definitive repeat-dose toxicity studies in rats and dogs, ELX-02 given as intermittent (twice weekly) SC doses over a 28-day period had little or no effect on body weight, food consumption, clinical signs of toxicity, ophthalmology, cardiovascular parameters, hematology or coagulation parameters. ELX-02 has no cochlear toxicity as evidenced in anatomic and functional hearing studies in 28-day rat studies at exposures where renal toxicity was noted (240 mg/kg/day). We are currently conducting 3-month toxicology studies in juvenile rats and in young dogs, as well as chronic toxicology studies in these 2 species for 6- and 9-months, respectively. The 3-month studies have both completed the in-life phase with no mortality and no significant in-life toxicity noted. Both studies are in reporting phase and pathology review. ELX-02 was not genotoxic in the core battery of in vitro and in vivo genotoxicity assays. As an aminoglycoside, ELX-02 has poor oral bioavailability but is 100% bioavailable following SC administration. In rats and dogs, ELX-02's pharmacokinetic profile is comparable to that of conventional aminoglycosides. Additionally, ELX-02 does not undergo metabolization and is excreted unchanged almost exclusively via the urine.

Pharmacology Studies of ELX-02

We have conducted a series of preliminary studies to demonstrate the primary pharmacodynamics of ELX-02 in several genetic disease indications. We have tested the translational read-through capabilities of ELX-02 in vitro and in vivo, in cells and in animal models of nonsense mutations.

We have shown the in vitro read-through activity of ELX-02 in an array of plasmids engineered to contain nonsense mutations of genetic diseases and in cell-based models of CF, cystinosis, DMD, MPS 1, and Rett syndrome.

In CF, ELX-02 induced about 30% of wild type CFTR levels after 48 h in heterozygous G542/F508del human bronchial epithelial cells. In the G542X transgenic mouse, ELX-02 showed a ~5-fold increase in CFTR activity compared to control after twice weekly treatment for four weeks with 60 mg/kg.

In DMD, ELX-02 induced a 35-fold increase in read-through in the R3381X mutation in the dystrophin gene in vitro, and in a preliminary study in the mdx mouse increased muscle force (forelimb grip strength tests) and motor activity (rotarod performance) and showing a trend of decreased serum creatine kinase (a measure of muscle injury).

In MPS 1, ELX-02 induced a 48-fold and a 98-fold increase in read-through of the W392X and Q70X mutations, respectively, in the in vitro assay of the Idua gene. In primary mouse embryonic fibroblasts carrying the Idua W392X mutation, ELX-02 led to a dose-dependent increase in α-L-iduronidase activity up to 24-fold and a concomitant reduction in stored GAGs to control levels. In Idua-W392X ($Idua^{tm1Kmke}$) mice, ELX-02 treatment for 4-week resulted in elevated levels of α-L-iduronidase activity and reduced GAG storage in the brain, spleen, heart, liver, kidneys, lungs, and femoral bone in a dose-dependent manner. In brain and spleen tissues of the Idua-W392X mouse model, ELX-02 treatment reduced the compensatory increases seen in the activity of the lysosomal enzymes ß-glucuronidase and ß-hexosaminidase.

In Rett syndrome, ELX-02 increased translational read-through of multiple nonsense mutations of the *MECP2* gene, R168X (14-fold), R255X (32-fold), R270X (83-fold), and R294X (25-fold) in vitro. In fibroblasts derived from a human male Rett syndrome patient carrying the R294X mutation, ELX-02 increased Mecp2 protein translation and expression levels in nuclei. In neurons and glial cells derived from stem cells overexpressing Mecp2 R168X-GFP and Mecp2 R255X-GFP, ELX-02 induced a dose-dependent increase in Mecp2-GFP protein. In $Mecp2^{R168X}$ cells, ELX-02 increased BDNF mRNA levels by ~ 4-fold, suggesting a downstream effect of the increased Mecp2 protein. In female $Mecp2^{R168X/x}$ mice, ELX-02 was measurable in and increased Mecp2 in the brain and lengthened the latency period of time to fall and in distance traveled on a rotarod test.

In cystinosis, ELX-02 increased read-through of the W138X mutation in the CTNS gene by 30-fold in vitro. In primary homozygous W138X fibroblasts, ELX-02 led to a dose-dependent increase in normalized CTNS mRNA levels, suggesting a decrease in nonsense mediated mRNA decay, and a corresponding reduction in cystine levels to wild-type levels, suggesting translation of a functional CTNS channel.

Intellectual Property

Patents and Trade Secrets

Our licensed and owned patents and patent applications relate to our lead compounds that exhibit read-through properties and include patent applications directed to new compositions of matter and to methods of treating genetic diseases such as cystic fibrosis, cystinosis, Duchenne's muscular dystrophy, ataxia-telengiectasia, Hurler syndrome, hemophilia A and B, Usher syndrome, Tay-Sachs and Rett syndrome, including combination therapies with existing treatments for these indications, such as CFTR modulators for the CF indication.

As of August, 29 2013, we licensed two pending U.S. provisional patent applications and subsequent Patent Cooperation Treaty ("PCT") applications claiming priority from these, from which we have so far gained patent protection in the United States and in Europe, Japan, Canada and Israel for composition of matter, methods of use, and combination therapies relating to our lead compound, ELX-02 (formerly known as NB124) and other compounds (e.g. ELX-03; formerly known as NB84). Additional patent applications are pending in India, as are divisional applications in Europe, Israel and Japan. If we continue to pursue protection, and if any patents issue based on these applications, we expect such patents to expire between 2027 and 2031, depending on any extensions of term for which we may be eligible that we may be granted.

As of June 04, 2015, we own a PCT application for methods of use relating to our lead compound, ELX-02, and other related compounds for treatment of Rett Syndrome and we intend to seek patent protection in the United States and in selected jurisdictions (Canada, Europe, Hong Kong, India, Israel, and Japan) for such

methods. If any patents are issued in connection with this application, we expect such patents to expire in 2036, depending on any extensions of term for which we may be eligible that we may be granted.

In addition, we have four pending PCT applications, filed on September 2, 2016, all of which generally relate to new compositions of matter and to methods of treating genetic diseases.

As of March 15, 2018, we have a pending patent application in India related to the large-scale synthesis of our compound, ELX-02, and other related new compounds, and we intend to seek similar patent protection in the United States and in selected jurisdictions worldwide. If any patents are issued based on this application, we expect such patents to expire in 2037, depending on any extensions of term for which we may be eligible that we may be granted.

With respect to our synthetic-aminoglycosides-based technology platform, we primarily rely on trade secrets and know-how to protect the proprietary nature of our platform. However, trade secrets and know-how can be difficult to protect. We seek to protect our proprietary technology and processes, in part, by confidentiality agreements with our employees, consultants, scientific advisors and contractors. We also seek to preserve the integrity and confidentiality of our data, know-how 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. To the extent that our consultants, contractors or collaborators use intellectual property owned by others in their work for us, disputes may arise as to the rights in related or resulting know-how and inventions.

License Agreements

Research and License Agreement with Technion Research and Development Foundation Ltd.

On August 29, 2013, we entered into a license agreement with the Technion Research and Development Foundation Ltd., or TRDF, which was further amended and addended to reflect, inter alia, the assignment of patents and extension of research periods, with respect to certain technology relating to aminoglycosides and the redesign of aminoglycosides for the treatment of human genetic diseases caused by premature stop mutations and further results of the research of the technology, in order to develop and commercialize products based on such technology. The license agreement provides us with an exclusive, worldwide, non-transferrable license, with a right to grant sublicenses, and royalty-bearing licenses to the TRDF inventions, TRDF patent rights, TRDF's interest in the joint inventions and joint patent rights, and certain materials and research results owned by TRDF, solely with respect to products in the field of prevention, diagnosis or treatment of any human disease or condition therefor. In return for the license we will pay TRDF (i) milestone payments with respect to each licensed product upon the achievement of certain pre-defined goals by us or one of our sublicensees as follows: $100,000 upon first dosing of a patient in Phase II clinical study; $1,000,000 upon first dosing of a patient in pivotal study; $1,000,000 upon first filing on a new drug application (NDA); (ii) certain royalties on a low- to mid- single-digit percentage of all net sales (subject to change in the case of (a) sublicensing to a big pharmaceutical or biotechnology company, or (a) payment of royalties to third parties, or (c) commercialization by a third party of an authorized generic to a licensed product); (iii) a low- to mid- double-digit percentage of any non-royalty sublicense income; (iv) an exit fee in the amount of a one digit percentage of any consideration paid upon an exit event (as defined in the agreement); and (v) in the case of an initial public offering for a number of ordinary shares equal to 3% of our outstanding shares on a fully diluted basis (as defined in the agreement) immediately prior to the closing of such initial public offering. If we distribute any dividends prior to an exit event, TRDF will be entitled to dividends as if it was holding 3% of our outstanding shares. In addition to the milestone payments, we undertook to annually fund the research activities under the license, currently in the amount of $0.1 million per year. The license agreement further provides TRDF with an additional pre-emptive right, in force until the first exit event, to invest an amount equal to up to 5% of the amount contemplated to be

raised in a proposed investment. TRDF is also entitled, until the closing of an exit event, to appoint an observer to the board under certain restrictions such as confidentiality or conflict of interest. In addition, we will reimburse TRDF for all patent filing expenses as of the effective date of the license agreement and for past patent filing expenses in the amount of several hundred thousand New Israeli Shekels upon the occurrence of certain conditions.

Under the license agreement, TRDF reserved the right, for itself, the Technion and other not-for-profit research organizations to utilize the technology solely for educational purposes. Furthermore, Professor Bassov, the principal investigator, had ongoing research programs involving covered compounds (as defined in the agreement) that are being funded by the National Institute of Health in the U.S., or the NIH, under sub-awards from the University of Alabama and the University of Michigan and it is possible that such research programs will overlap with the research conducted according to the terms of the agreement. In the case of any such overlap, the work product of such research will be subject to the terms and conditions of such sub-awards, including certain obligations under 35 U.S.C. §§ 200-212 or 37 C.F.R § 401 et seq. in the case of any TRDF inventions that are also "subject invention" as defined in 35 U.S.C. §201.

The license agreement shall continue in full force and effect on a product-by-product and country-by-country basis until the expiration of all payment obligations for any such licensed product as described above. Upon the expiration, we will have a fully-paid up, worldwide non-exclusive, perpetual, irrevocable license (with the right to grant sublicenses) to use certain materials and the research results, solely with respect to products in the field of prevention, diagnosis or treatment of any human disease or condition.

Manufacturing

ELX-02 is manufactured under current Good Manufacturing Practice ("cGMP") conditions and is formulated as a sterile frozen liquid in glass vials for parenteral subcutaneous (SC injection) administration.

We do not own or operate manufacturing or distribution facilities for the production of clinical quantities of ELX-02 or for our other preclinical product candidates. We currently rely, and expect to continue to rely, on third parties for the manufacture, packaging, labeling and distribution of clinical supplies of ELX-02 as well as any other candidate that we may develop.

We engage separate manufacturers for drug substance and drug product. We have a relationship with a manufacturer that is capable of providing fill and finish services for our clinical product at the current scale. To support later clinical trials, transfer of the manufacturing and release to a manufacturer with higher lot scale capacity will be needed for our clinical product.

All of our current drug candidates are organic compounds of low molecular weight. We have selected our lead compounds not only on the basis of their potential efficacy and safety but also for their ease of synthesis and reasonable cost of their starting materials. ELX-02 is manufactured in reliable and reproducible synthetic processes. We currently rely on a single third-party manufacturing source for the production of a key raw material, produced by bacterial fermentation. We do not currently have any agreements with third-party manufacturers for the long-term commercial supply of ELX-02 or the fermentation-derived starting material, although we may seek to establish such arrangements in the future.

We currently obtain supplies of ELX-02 from third-party manufacturers pursuant to agreements that include specific supply timelines and volume expectations. If a manufacturer should become unavailable to us for any reason, we would seek to obtain supply from another manufacturer engaged by us for the applicable product or service. In the event that we were unable to procure the applicable supply from a currently qualified manufacturer, we believe that there are a number of potential replacements for each of our outsourced services, however we would likely experience delays in our ability to supply ELX-02 in advancing our clinical trials while we identify and qualify replacement suppliers.

Government Regulation

Drug Development and Approval in the United States

The preclinical studies and clinical testing, manufacture, labeling, storage, record keeping, advertising, promotion, export, and marketing, among other things, of our product candidates are subject to extensive regulation by governmental authorities in the United States, the European Union and other territories. In the United States, pharmaceutical products are regulated by the FDA under the Federal Food, Drug, and Cosmetic Act (the "FDCA") and other laws, including, in the case of biologics, the Public Health Service Act. Failure to comply with FDA requirements, both before and after product approval, may subject us and/or our partners, contract manufacturers, and suppliers to administrative or judicial sanctions, including FDA refusal to approve applications, warning letters, product recalls, product seizures, total or partial suspension of production or distribution, fines and/or criminal prosecution.

The process for obtaining regulatory approval to market a medicine is expensive, often takes many years, and can vary substantially based on the type, complexity, and novelty of the product candidates involved. The steps required before a drug may be approved for marketing of an indication in the United States generally include:

(a) preclinical laboratory tests and animal tests;

(b) submission to the FDA of an IND application for human clinical testing, which must become effective before human clinical trials may commence;

(c) adequate and well-controlled human clinical trials to establish the safety and efficacy of the product for its intended use;

(d) submission to the FDA of a NDA;

(e) FDA pre-approval inspection of the manufacturing and clinical study sites identified in the NDA; and

(f) FDA review and approval of the NDA.

Preclinical studies include laboratory evaluation of product chemistry and formulation, as well as toxicological and pharmacological animal studies to assess the potential safety and efficacy of the product candidates. Preclinical safety tests intended for submission to FDA must be conducted in compliance with FDA's Good Laboratory Practice ("GLP") regulations and the U.S. Department of Agriculture's Animal Welfare Act. The results of the preclinical tests, together with manufacturing information and analytical data, are submitted to the FDA as part of an IND application that must become effective before human clinical trials may be commenced. The IND will automatically become effective 30 days after receipt by the FDA, unless the FDA before that time raises concerns about the drug candidate or the conduct of the trials as outlined in the IND. The IND sponsor and the FDA must resolve any outstanding concerns before clinical trials can proceed. We cannot assure you that submission of an IND will result in FDA authorization to commence clinical trials or that once commenced, other concerns will not arise. FDA may stop the clinical trials by placing them on "clinical hold" because of concerns about the safety of the product being tested, or for other reasons.

Clinical trials involve the administration of the investigational product to healthy volunteers or to patients, under the supervision of qualified principal investigators. The conduct of clinical trials is subject to extensive regulation, including compliance with the FDA's bioresearch monitoring regulations and Good Clinical Practice ("GCP") requirements, which establish standards for conducting, recording data from, and reporting the results of clinical trials, and are intended to assure that the data and reported results are credible and accurate, and that the rights, safety, and well-being of study participants are protected.

Clinical trials must be conducted in accordance with protocols that detail the objectives of the study, the criteria for determining subject eligibility, the dosing plan, patient monitoring requirements, timely reporting of adverse events, and other elements necessary to ensure patient safety, and any efficacy criteria to be evaluated.

Each protocol must be submitted to FDA as part of the IND; further, each clinical study at each clinical site must be reviewed and approved by an independent institutional review board, prior to the recruitment of subjects. The institutional review board's role is to protect the rights and welfare of human subjects involved in clinical studies by evaluating, among other things, the potential risks and benefits to subjects, processes for obtaining informed consent, monitoring of data to ensure subject safety, and provisions to protect the subjects' privacy. Foreign studies conducted under an IND application must meet the same requirements that apply to studies being conducted in the United States. Data from a foreign study not conducted under an IND may be submitted in support of a NDA if the study was conducted in accordance with GCP and FDA is able to validate the data.

Clinical trials are typically conducted in three sequential phases, but the phases may overlap, and different trials may be initiated with the same drug candidate within the same phase of development in similar or differing patient populations. Phase I studies may be conducted in a limited number of patients but are usually conducted in healthy volunteer subjects. The drug is usually tested for safety and, as appropriate, for absorption, metabolism, distribution, excretion, pharmacokinetics and pharmacodynamics. Phase II usually involves studies in a larger, but still limited patient population to evaluate preliminarily the efficacy of the drug candidate for specific, targeted indications; to determine dosage tolerance and optimal dosage; and to identify possible short-term adverse effects and safety risks. Phase III trials are undertaken to gather additional information to evaluate the product's overall risk-benefit profile, and to provide a basis for physician labeling. Phase III trials evaluate clinical efficacy of a specific endpoint and test further for safety within an expanded patient population at geographically dispersed clinical study sites. Phase I, Phase II or Phase III testing might not be completed successfully within any specific time period, if at all, with respect to any of our product candidates. Results from one trial are not necessarily predictive of results from later trials. Furthermore, the FDA, sponsor or institutional review board may suspend clinical trials at any time on various grounds, including a finding that the subjects or patients are being exposed to an unacceptable health risk.

We must register each controlled clinical trial, other than Phase I trials, on a website administered by the NIH (http://clinicaltrials.gov). Registration must occur not later than 21 days after the first patient is enrolled, and the submission must include descriptive information (e.g., a summary in lay terms of the study design, type and desired outcome), recruitment information (e.g., target number of participants and whether healthy volunteers are accepted), location and contact information, and other administrative data (e.g., FDA identification numbers). Within one year of a trial's completion, information about the trial including characteristics of the patient sample, primary and secondary outcomes, trial results written in lay and technical terms, and the full trial protocol must be submitted to the FDA. The results information is posted to the website unless the drug has not yet been approved, in which case the FDA posts the information shortly after approval. A NDA, and certain other submissions to the FDA require certification of compliance with these clinical trials database requirements. There are proposals to expand these registration requirements to additional studies.

The results of the preclinical studies and clinical trials, together with other detailed information, including information on the manufacture and composition of the product and proposed labeling for the product, are submitted to the FDA as part of a NDA requesting approval to market the product candidate for a proposed indication. Under the Prescription Drug User Fee Act, as amended, the fees payable to the FDA for reviewing a NDA, as well as annual fees for commercial manufacturing establishments and for approved products, can be substantial. The NDA review fee alone can exceed $2.4 million subject to certain limited deferrals, waivers and reductions that may be available. Each NDA submitted to the FDA for approval is typically reviewed for administrative completeness and reviewability within sixty days following submission of the application. If the FDA finds the NDA sufficiently complete, the FDA will "file" the NDA, thus triggering a full review of the application. The FDA may refuse to file any NDA that it deems incomplete or not properly reviewable at the time of submission. Current FDA performance goals provide for action on an application within 12 months of submission. The FDA, however, may not approve a drug within these established timeline goals and its review clock for a particular NDA is subject to change from time to time because the review process is often significantly extended by FDA requests for additional information or clarification. As part of its review, the FDA may refer the NDA to an advisory committee composed of outside experts for evaluation and a recommendation

as to whether the application should be approved. Although the FDA is not bound by the recommendation of an advisory committee, the agency usually has followed such recommendations.

Further, the outcome of the review, even if generally favorable, may not be an actual approval but instead a "complete response letter" communicating the FDA's decision not to approve the application at that time, outlining the deficiencies in the NDA that need to be addressed in order to be eligible for approval, and identifying what information and/or data (including additional preclinical or clinical data) is required before the application can be approved. Even if such additional information and data are submitted, the FDA may decide that the NDA still does not meet the standards for approval. Data from clinical trials are not always conclusive and the FDA may interpret data differently than we do.

The FDA will typically inspect one or more clinical sites to assure compliance with GCP before approving an NDA. The FDA also will inspect the facility or the facilities at which the product is manufactured before the NDA is approved to assure compliance with cGMP. The FDA will not approve the product unless GCP and cGMP compliance is satisfactory. The FDA may also take into account results of inspections performed by certain counterpart foreign regulatory agencies in assessing compliance with GCP or cGMP. The FDA has entered into international agreements with foreign agencies, including the EMA, in order to facilitate this type of information sharing. If the FDA determines the application, clinical sites, manufacturing process or manufacturing facilities are not acceptable, it will outline the deficiencies in the submission and often will request additional testing or information.

The FDA may deny approval of a NDA if applicable statutory or regulatory criteria are not satisfied, or may require additional testing or information, which can delay the approval process. FDA approval of any application may include many delays or never be granted. If a product is approved, the approval will impose limitations on the indicated uses for which the product may be marketed, may require that warning statements be included in the product labeling, and may require that additional studies be conducted following approval as a condition of the approval. FDA also may impose restrictions and conditions on product distribution, prescribing or dispensing in the form of a Risk Evaluation Mitigation Strategy ("REMS"), or otherwise limit the scope of any approval. A REMS may include various elements, ranging from a medication guide to limitations on who may prescribe or dispense the drug, depending on what the FDA considers necessary for the safe use of the drug. To market a product for other indicated uses, or to make certain manufacturing or other changes, requires FDA review and approval of a NDA Supplement or new NDA and the payment of applicable review fees. Further post-marketing testing and surveillance to monitor the safety or efficacy of a product may be required. In addition, new government requirements may be established that could delay or prevent regulatory approval of our product candidates under development.

Under the Pediatric Research Equity Act of 2003 ("PREA"), NDAs or supplements to NDAs must contain data to assess the safety and effectiveness of the drug for the claimed indications in all relevant pediatric subpopulations and to support dosing and administration for each pediatric subpopulation for which the drug is determined by the FDA to be safe and effective. The FDA may grant deferrals for submission of data or full or partial waivers. Unless otherwise required by regulation, PREA does not apply to any drug for an indication for which orphan designation has been granted. As the FDA has not issued regulations applying PREA to orphan-designated indications, submission of a pediatric assessment is not presently required for an application to market a product for an orphan-designated indication. However, PREA compliance may be required if approval is sought for other indications for which the drug has not received orphan designation.

Notwithstanding the submission of any requested additional information, the FDA ultimately may decide that the application does not satisfy the regulatory criteria for approval.

The testing and approval process requires substantial time, effort and financial resources, and each may take years to complete. Data obtained from clinical trials are not always conclusive and may be susceptible to varying interpretations, which could delay, limit or prevent regulatory approval. The FDA may not grant approval on a timely basis, or at all.

We may encounter difficulties or unanticipated costs in our efforts to secure necessary FDA approvals, which could delay or preclude us from marketing our products. The FDA may refer applications for novel drug products or drug products that present difficult questions of safety or efficacy to an advisory committee for review, evaluation and recommendation as to whether the application should be approved and under what conditions. The advisory committee process may cause delays in the approval timeline. The FDA is not bound by the recommendation of an advisory committee, but it considers such recommendations carefully, particularly any negative recommendations or limitations, when making drug approval decisions.

The FDA may limit the indications for use, approve narrow labeling relegating a drug to second- line or later-line use, add limitations of use to the labeling or place other conditions on approvals, which could restrict the marketing of an approved product. Further, FDA may require that certain contraindications, warnings or precautions be included in the product labeling. After approval, some types of changes to the approved product, such as adding new indications, which may themselves require further clinical testing, or changing the manufacturing process are subject to further FDA review and approval.

Post-approval Requirements

After FDA approval of a product is obtained, we may be required to comply with a number of post-approval requirements, including, among other things, establishment registration and product listing, record-keeping requirements, reporting certain adverse reactions and production problems to the FDA, providing updated safety and efficacy information, and complying with requirements concerning advertising and promotional labeling. As a condition of approval of an NDA, the FDA may require the applicant to conduct additional clinical trials or other post-market testing and surveillance to further monitor and assess the drug's safety and efficacy.

The FDA also has the authority to require a REMS to ensure the safe use of the drug. In determining whether a REMS is necessary, the FDA must consider the size of the population likely to use the drug, the seriousness of the disease or condition to be treated, the expected benefit of the drug, the duration of treatment, the seriousness of known or potential adverse events, and whether the drug is a new molecular entity. A REMS may be required to include various elements, such as a medication guide or patient package insert, a communication plan to educate health care providers of the drug's risks, limitations on who may prescribe or dispense the drug, or other measures that the FDA deems necessary to assure the safe use of the drug. In addition, the REMS must include a timetable to assess the strategy at 18 months, three years, and seven years after the strategy's approval. The FDA may also impose a REMS requirement on an approved drug if the FDA determines, based on new safety information, that a REMS is necessary to ensure that the drug's benefits outweigh its risks.

The FDA regulates strictly the marketing, labeling, advertising and promotion of drug products that are placed on the market. Although physicians may prescribe a drug for off-label uses, manufacturers may only promote for the approved indications and in accordance with the approved labeling. The FDA and other agencies actively enforce the laws and regulations prohibiting the promotion of off-label uses. Failure to comply with the laws and regulations governing advertising and promotion can have negative consequences, including adverse publicity, warning and untitled letters from the FDA, requests for corrective advertising or communications with doctors, and civil penalties or criminal prosecution.

In addition, the distribution of approved prescription pharmaceutical products is subject to the Prescription Drug Marketing Act ("PDMA"), which regulates the distribution of drugs and drug samples at the federal level and sets minimum standards for the registration and regulation of drug distributors by the states. Similarly, the Drug Supply Chain Security Act ("DSCSA"), regulates the distribution of prescription pharmaceutical drugs, requiring passage of a pedigree to track and trace each prescription drug at the saleable unit level through the distribution system. The DSCSA also imposes obligations on drug manufacturers related to suspect product identification/removal, verification, dealing only with authorized trading partners, and other elements. The DSCSA will be effective incrementally over a 10-year period, with serialization of prescription drug products

distributed in the United States effective November 27, 2017 for drug manufacturers. The PDMA, DSCSA, and state laws limit the distribution of prescription pharmaceutical product samples and impose requirements to ensure accountability in distribution.

Also, quality control and manufacturing procedures must continue to conform to cGMP after approval. The FDA periodically inspects manufacturing facilities to assess compliance with cGMP, which imposes certain procedural and recordkeeping requirements. Accordingly, manufacturers must continue to expend time, money and effort in the area of process and quality control to maintain compliance with cGMP and other aspects of regulatory compliance.

We rely, and expect to continue to rely, on third parties for the production of clinical and any future commercial quantities of our product candidates. Future FDA inspections may identify compliance issues at our facilities or at the facilities of our contract manufacturers that may disrupt production or distribution or require substantial resources to correct. In addition, discovery of problems with a product or the failure to comply with applicable requirements may result in restrictions on a product, manufacturer or holder of an approved NDA, including withdrawal or recall of the product from the market or other voluntary, FDA-initiated or judicial action that could delay or prohibit further marketing.

Once approval is granted, FDA may withdraw the approval if compliance with regulatory requirements is not maintained or if issues bearing on the product's safety or efficacy are discovered. Newly discovered or developed safety or effectiveness data or other information may also require changes to a product's approved labeling, including the addition of new warnings and contraindications, and also may require the implementation of other risk management measures. New government requirements, including those resulting from new legislation, may be established that could delay or prevent FDA approval of our products under development or negatively impact the marketing of any future approved products.

Orphan Drug Designation

We have received orphan drug designation from the FDA for ELX-02 for the treatment of MPS I for the treatment of Rett syndrome. The FDA may grant orphan drug designation to drugs intended to treat a "rare disease or condition," which is defined as a disease or condition that affects fewer than 200,000 individuals in the United States, or more than 200,000 individuals in the United States and for which there is no reasonable expectation that the cost of developing and making available in the United States a drug for this type of disease or condition will be recovered from sales in the United States for that drug. Orphan drug designation must be requested before submitting an application for marketing approval. Orphan drug designation does not convey any advantage in, or shorten the duration of, the regulatory review and approval process. Orphan drug designation can provide opportunities for grant funding towards clinical trial costs, tax advantages and FDA user-fee benefits. In addition, if a product which has an orphan drug designation subsequently receives the first FDA approval for the indication for which it has such designation, the product is entitled to orphan drug exclusivity, which means the FDA may not approve any other application to market the same drug for the same indication for a period of seven years, except in limited circumstances, such as a showing of clinical superiority to the product with orphan exclusivity. Competitors may receive approval of different drugs or biologics for the indications for which the orphan product has exclusivity.

Rare Pediatric Disease Designation and Priority Review Voucher

Some orphan drugs may also qualify for designation as a "rare pediatric disease" under Section 529 of the FDCA. Section 529 is similar to the Orphan Drug Act, as both require that the "rare disease or condition" affect fewer than 200,000 persons in the United States. In the Advancing Hope Act of 2016, Section 529 was changed so that the "rare pediatric disease" must also meet the additional criteria of being a serious or life-threatening disease in which the serious or life-threatening manifestations primarily affect individuals aged from birth to 18 years, including age groups often called neonates, infants, children, and adolescents. Under Section 529 of the

FDCA, FDA will award priority review vouchers to sponsors of rare pediatric disease product applications that meet these criteria. Under this program, a sponsor who receives an approval for a drug or biologic for a "rare pediatric disease" may qualify for a voucher that can be redeemed to receive a priority review of a subsequent marketing application for a different product.

Hatch-Waxman Exclusivity

Market and data exclusivity provisions under the FDCA can delay the submission or the approval of certain applications for competing products. The FDCA provides a five-year period of non-patent data exclusivity within the United States to the first applicant to gain approval of an NDA for a new chemical entity. A drug is a new chemical entity if the FDA has not previously approved any other new drug containing the same active moiety. During the exclusivity period, the FDA generally may not accept for review an abbreviated new drug application ("ANDA") or a 505(b)(2) NDA submitted by another company that references the previously approved drug. An ANDA or 505(b)(2) NDA may be submitted after four years if it contains a certification of patent invalidity or non-infringement.

For some applications that do not qualify for five-year exclusivity, the FDCA provides a shorter three-year period of market exclusivity. Three-year exclusivity applies to an NDA, 505(b)(2) NDA, or supplement to an existing NDA or 505(b)(2) NDA if new clinical investigations, other than bioavailability studies, that were conducted or sponsored by the applicant, are deemed by the FDA to be essential to the approval of the application, for example, for new indications, dosages, strengths or dosage forms of an existing drug. This three-year exclusivity covers only the conditions of use associated with the new clinical investigations and, as a general matter, does not prohibit the FDA from approving ANDAs or 505(b)(2) NDAs for generic versions of the original, unmodified drug product. Five-year and three-year exclusivity will not delay the submission or approval of a full NDA; however, an applicant submitting a full NDA would be required to conduct or obtain a right of reference to all of the preclinical studies and adequate and well-controlled clinical trials necessary to demonstrate safety and effectiveness.

Pediatric Exclusivity

Pediatric exclusivity is another type of non-patent market exclusivity in the United States and, if granted, provides for the attachment of an additional six months of market protection to the term of any existing Orange Book-listed patents or regulatory exclusivity, including the non-patent exclusivity periods described above. This six-month exclusivity may be granted based on the voluntary completion of a pediatric study or studies in accordance with an FDA-issued "Written Request" for such a study or studies.

Regulation Outside the United States

In order to market any product outside of the United States, we would need to comply with numerous and varying regulatory requirements of other countries regarding safety and efficacy and governing, among other things, clinical trials, marketing authorization, commercial sales and distribution of any future approved products. Whether or not we obtain FDA approval for a product, we would need to obtain the necessary approvals by the comparable regulatory authorities of foreign countries before we can commence clinical trials or marketing of the product in those countries. The approval process varies from country to country and can involve additional product testing and additional administrative review periods. The time required to obtain approval in other countries might differ from and be longer than that required to obtain FDA approval. Regulatory approval in one country does not ensure regulatory approval in another, but a failure or delay in obtaining regulatory approval in one country may negatively impact the regulatory process in others.

Regulation in the European Union

We have obtained an orphan medicinal product designation from the European Commission, following an evaluation by the EMA's Committee for Orphan Medicinal Products, for ELX-02 for the treatment of nmMPS I.

The European Commission can grant orphan medicinal product designation to products for which the sponsor can establish that it is intended for the diagnosis, prevention, or treatment of (1) a life-threatening or chronically debilitating condition affecting not more than five in 10,000 people in the European Union, or (2) a life threatening, seriously debilitating or serious and chronic condition in the European Union and that without incentives it is unlikely that sales of the drug in the European Union would generate a sufficient return to justify the necessary investment. In addition, the sponsor must establish that there is no other satisfactory method approved in the European Union of diagnosing, preventing or treating the condition, or if such a method exists, the proposed orphan drug will be of significant benefit to patients. Orphan drug designation is not a marketing authorization. It is a designation that provides a number of benefits, including fee reductions, regulatory assistance, and the possibility to apply for a centralized EU marketing authorization, as well as 10 years of market exclusivity following a marketing authorization. During this market exclusivity period, neither the European Medicines Agency, nor the European Commission nor the Member States can accept an application or grant a marketing authorization for a “similar medicinal product.” A ‘similar medicinal product’ is defined as a medicinal product containing a similar active substance or substances as contained in an authorized orphan medicinal product, and which is intended for the same therapeutic indication. The market exclusivity period for the authorized therapeutic indication may be reduced to six years if, at the end of the fifth year, it is established that the orphan designation criteria are no longer met, including where it is shown that the product is sufficiently profitable not to justify maintenance of market exclusivity. In addition, a competing similar medicinal product may in limited circumstances be authorized prior to the expiration of the market exclusivity period, including if it is shown to be safer, more effective or otherwise clinically superior to our product. Our product can lose orphan designation, and the related benefits, prior to us obtaining a marketing authorization if it is demonstrated that the orphan designation criteria are no longer met.

Overview of Application Process

To obtain regulatory approval of a drug under the European Union’s regulatory systems and authorization procedures, an applicant may submit a Marketing Authorization Application (“MAA”) under a centralized, decentralized, or national procedure. The centralized procedure is compulsory for certain medicinal products, including orphan medicinal products, like ELX-02 and medicinal products produced by certain biotechnological processes, and optional for certain other innovative products. The centralized procedure enables applicants to obtain a marketing authorization that is valid in all EU member states based on a single application. Under the centralized procedure, the EMA’s Committee for Human Medicinal Products (“CHMP”), is required to adopt an opinion on a valid application within 210 days, excluding clock stops, during which additional written or oral information is to be provided by the applicant in response to questions. More specifically, on day 120 of the procedure, once the CHMP has received the preliminary assessment reports and opinions from the rapporteur and co- rapporteur, the CHMP prepares a list of potential outstanding issues, referred to as “other concerns” or “major objections.” These are sent to the applicant together with CHMP’s recommendation. The CHMP can make one of two recommendations: (1) the marketing authorization could be granted provided that satisfactory answers are given to the “other concerns” and/or “major objections” identified and that all conditions outlined in the list of outstanding issues are implemented and complied with; or (2) the product is not approvable since there are “major objections.”

Applicants have three months from the date of receiving the potential outstanding issues to respond to the CHMP, and can request a three-month extension if necessary. The granting of a marketing authorization will depend on the recommendations and potential major objections identified by the CHMP as well as the ability of the applicant to adequately respond to these findings. An accelerated assessment can be granted by the CHMP in exceptional cases, when a medicinal product is expected to be of major public health interest, in particular from the viewpoint of therapeutic innovation. In this circumstance, the EMA ensures that the opinion of the CHMP is given within 150 days. After the adoption of the CHMP opinion, a decision on the MAA must be adopted by the European Commission, after consulting the EU member states, which in total should be completed in 67 days.

An applicant for an MAA may request a re-examination in the event of a negative opinion, in connection with which CHMP appoints new rapporteurs. Within 60 days of receipt of the negative opinion, the applicant

must submit a document explaining the basis for its request for re-examination. The CHMP has 60 days to consider the applicant's request for re-examination. The applicant may request an oral explanation before the CHMP, which is routinely granted, following which CHMP will adopt a final opinion. The final opinion, whether positive or negative, is published by the CHMP shortly following the CHMP meeting at which the oral explanation takes place.

Conditional Marketing Authorizations

In specific circumstances, EU legislation enables applicants to obtain a marketing authorization on a conditional basis prior to obtaining the comprehensive clinical data required for an application for a full marketing authorization. Such conditional approvals may be granted for products designated as orphan medicinal products, if (1) the risk-benefit balance of the product is positive, (2) it is likely that the applicant will be in a position to provide the required comprehensive clinical trial data, (3) the product fulfills unmet medical needs, and (4) the benefit to public health of the immediate availability on the market of the medicinal product concerned outweighs the risk inherent in the fact that additional data are still required. A conditional marketing authorization may contain specific obligations to be fulfilled by the marketing authorization holder, including obligations with respect to the completion of ongoing or new studies, and with respect to the collection of pharmacovigilance data. Conditional marketing authorizations are valid for one year, and may be renewed annually, if the risk-benefit balance remains positive, and after an assessment of the need for additional or modified conditions and/or specific obligations. The timelines for the centralized procedure described above also apply with respect to the review by the CHMP of applications for a conditional marketing authorization. The granting of a conditional marketing authorization will depend on the applicant's ability to fulfill the conditions imposed within the agreed upon deadline.

Variations to Conditional Marketing Authorizations

After the granting of a conditional marketing authorization, the marketing authorization holder may submit an application to vary the conditional marketing authorization under a variation procedure. In the case of the introduction of an additional therapeutic indication, the timeframe for the variation procedure for the initial assessment of the dossier is generally 90 days (plus up to 20 days for validation).

In the framework of a variation application assessment procedure, however, the EMA may send one or more requests for supplementary information to the marketing authorization holder, requiring that additional information be provided by the marketing authorization holder to support its variation application. Such supplementary requests will be sent together with a timetable stating the date by when the marketing authorization holder must submit the requested data and, where appropriate, the extended evaluation period to be applied to such variation procedure. The 90-day variation procedure may be suspended for up to three months for the marketing authorization holder to submit its responses to such supplementary requests. The marketing authorization holder will be notified of the outcome of the CHMP's assessment of the variation procedure within 15 days from the adoption of the CHMP opinion. If unfavorable, the CHMP opinion may be subject to a re-examination procedure upon the marketing authorization holder's request. This may imply an additional minimum two-month procedure. If the CHMP opinion is favorable, the European Commission will vary the marketing authorization to introduce the additional therapeutic indication within approximately two months from the receipt of the final CHMP opinion.

Additional Requirements and Considerations

Prior to obtaining a marketing authorization in the European Union, applicants have to demonstrate compliance with all measures included in an EMA-approved Pediatric Investigation Plan ("PIP"), covering all subsets of the pediatric population, unless the EMA has granted (1) a product-specific waiver, (2) a class waiver, or (3) a deferral for one or more of the measures included in the PIP. In the case of orphan medicinal products, completion of an approved PIP can result in an extension of the aforementioned market exclusivity period from ten to twelve years.

In the European Union, independently generated data submitted as part of a full marketing authorization application dossier are protected by regulatory data protection ('data exclusivity') for a period of eight years from the granting of a marketing authorization for a 'reference product'. This means that for a period of eight years, competent authorities may not accept marketing authorization applications that rely on the independently generated data in the marketing authorization dossier of the reference product. Generic medicinal products that rely on the independently generated data of the reference product may not be placed on the market for 10 years from the granting of the initial marketing authorization for the reference medicinal product. These periods of data exclusivity and market exclusivity do not prevent other companies from obtaining a marketing authorization based on their own independently generated data.

Were we able to obtain a marketing authorization for ELX-02 for any indication in the European Union, we would be required to comply with a range of requirements applicable to the manufacturing, marketing, promotion and sale of medicinal products. We must, for example, comply with the EU's stringent pharmacovigilance or safety reporting rules, pursuant to which post-authorization studies and additional monitoring obligations can be imposed. Other requirements relate to, for example, the manufacturing of products and active pharmaceutical ingredients in accordance with good manufacturing practice standards. Competent authorities of EU member states may conduct inspections to verify our compliance with applicable requirements, and we will have to continue to expend time, money and effort to remain compliant. Non-compliance with EU requirements regarding safety monitoring or pharmacovigilance, and with requirements related to the development of products for the pediatric population, can also result in significant financial penalties in the EU Similarly, failure to comply with the EU's requirements regarding the protection of individual personal data can also lead to significant penalties and sanctions. Individual EU member states may also impose various sanctions and penalties in case we do not comply with locally applicable requirements.

Off-label promotion of medicinal products is prohibited in the European Union. The applicable laws at EU level and in the individual EU member states also prohibit the direct-to-consumer advertising of prescription-only medicinal products. Violations of the rules governing the promotion of medicinal products in the European Union could be penalized by administrative measures, fines and imprisonment. These laws may further limit or restrict our promotional activities with health care professionals. In addition, legislation adopted at the EU level and by individual EU member states require that promotional materials and advertising in relation to medicinal products comply with the product's Summary of Product Characteristics ("SmPC"), as approved by the competent authorities. The SmPC is the document that provides information to physicians concerning the safe and effective use of the medicinal product. Promotion of indications not covered by the SmPC is specifically prohibited.

The EMA is responsible for coordinating inspections to verify compliance with the principles of GCP, cGMP, GLP, and good pharmacovigilance practice ("GVP"). These inspections are also intended to verify compliance with other aspects of the supervision of authorized medicinal products in use in the European Union. The EMA coordinates any inspection requested by the CHMP in connection with the assessment of MAAs or matters referred to these committees. Inspections may be routine or triggered by issues arising during the assessment of the dossier or by other information, such as previous inspection experience. Inspections usually are requested during the initial review of an MAA but could arise post-authorization.

Inspectors are drawn from member states of the European Union and the European Economic Area. Following an inspection, the inspectors provide a written inspection report to the inspected site or applicant and provide an opportunity for response. Some inspection reports require follow-up and may result in additional adverse consequences due to critical or major findings. The inspectors and the CHMP will comment on any response from an inspected site or applicant and may monitor future compliance with any proposed corrective action plan.

In the GCP area, inspectors grade their findings according to the following scale:

- Critical: Conditions, practices or processes that adversely affect the rights, safety or well-being of the subjects or the quality and integrity of data. Observations classified as critical may include a pattern of deviations classified as major.
- Major: Conditions, practices or processes that might adversely affect the rights, safety or well-being of the subjects and/or the quality and integrity of data. Observations classified as major may include a pattern of deviations or numerous minor observations.
- Minor: Conditions, practices or processes that would not be expected to adversely affect the rights, safety or wellbeing of the subjects or the quality and integrity of data. Minor observations indicate the need for improvement of conditions, practices and processes.
- Comments: Suggestions on how to improve quality or reduce the potential for a deviation to occur in the future.

Possible consequences of critical and major findings include rejection of clinical trial data, causing significant delays in obtaining final marketing authorization, or other direct action by national regulatory authorities.

Early Access Programs

Many jurisdictions allow the supply of unauthorized medicinal products in the context of strictly regulated and exceptional early access programs, and some countries may provide reimbursement for drugs provided in the context of such programs. In the European Union, the legal basis for early access programs, also referred to as named-patient and compassionate use programs, is set out in the EU legislation regulating the authorization, manufacture, distribution and marketing of medicinal products. Detailed regulatory requirements applicable to early access programs have been adopted and implemented by EU member states in their national laws. The promotion, advertising and marketing of unauthorized medicinal products is generally prohibited, and authorization for early access programs must generally be obtained from national competent authorities, which might not grant such authorization. Obtaining authorization for an early access program in one country does not ensure that authorization will be obtained in another country. U.S. law permits “expanded access” (also known as compassionate use and treatment use) for certain patients with serious diseases who have no comparable alternative treatment options. To provide expanded access, sponsors must submit detailed regulatory information to the FDA. FDA authorization depends on several different factors, including whether expanded access will interfere with related clinical trials or drug development. Sponsors may not promote products as safe or effective for expanded-access uses.

Pharmaceutical Pricing and Reimbursement

The containment of healthcare costs has become a priority of federal, state and foreign governments, and the prices of pharmaceuticals have been a focus of this effort. The U.S. government, state legislatures and foreign governments have shown significant interest in implementing cost-containment programs to limit the growth of government-paid healthcare costs, including price controls, restrictions on reimbursement and requirements for substitution of generic products for branded prescription drugs. For example, the Medicare Prescription Drug, Improvement, and Modernization Act of 2003 expanded Medicare coverage for drug purchases by the elderly and changed the way Medicare covers and pays for pharmaceutical products. Cost reduction initiatives and other provisions of this law may decrease the coverage and reimbursement rate that we may receive for any approved products. Likewise, healthcare reform measures under the Patient Protection and Affordable Care Act of 2010, as amended by the Health Care and Education Reconciliation Act of 2010, referred to together as the Affordable Care Act, contain provisions that may reduce the profitability of drug products by increasing the minimum level of Medicaid rebates payable by manufacturers of brand-name drugs from 15.1% to 23.1%, effective 2011, extending the Medicaid rebate to Medicaid managed care plans, changing the Medicaid rebate rates for line

extensions or new formulations of oral solid dosage form, mandating discounts for certain Medicare Part D beneficiaries, and imposing a non-deductible annual fee on pharmaceutical manufacturers or importers who sell "branded prescription drugs," effective 2011, expanding the types of entities eligible for the "Section 340B discounts" for outpatient drugs, requiring manufacturers to participate in a coverage gap discount program, under which they must agree to offer 50% point-of-sale discounts off negotiated prices of applicable branded drugs to eligible beneficiaries during their coverage gap period, as a condition for the manufacturer's outpatient drugs to be covered under Medicare Part D and creating a process for approval of biologic therapies that are similar or identical to approved biologics. There are numerous steps required to implement the Affordable Care Act, and implementation remains ongoing. Congress also has enacted, and may continue to seek, legislative changes that alter, delay, or eliminate some of its provisions. On February 1, 2016, the Centers for Medicare and Medicaid Services released a long-awaited new rule, the Medicaid Program Covered Outpatient Drug Final Rule, effective April 1, 2016, implementing various provisions of the Affordable Care Act related to "covered outpatient drugs," including revising the calculation of "average manufacturer price" and addressing other issues relating to Medicaid price reporting and reimbursement. These and other changes contribute to the uncertainty of the ongoing implementation and impact of the Affordable Care Act; they also underscore the potential for additional reform going forward. Certain provisions of enacted or proposed legislative changes may negatively impact coverage and reimbursement of healthcare items and services.

Increasing pricing pressure continues from managed care organizations, government agencies and programs, particularly for new and innovative therapies, that could negatively affect the company's sales and profit margins. In the United States, these include practices of managed care groups, federal and state exchanges, and institutional and governmental purchasers. Changes to the health care system enacted as part of health care reform in the United States, as well as increased purchasing power of entities that negotiate on behalf of Medicare, Medicaid, and private sector beneficiaries, could negatively impact the company's sales and profit margins. Such pressures may also increase the risk of litigation or investigations by the government regarding pricing calculations. There has also been recent negative publicity and Congressional scrutiny around pharmaceutical drug pricing in the United States. These dynamics may give rise to negative reactions to pricing decisions for products for which we may receive regulatory approval in the future, possibly limiting our ability to generate revenue and attain profitability. Moreover, the pharmaceutical industry will likely face greater regulation and political and legal action in the future. In this healthcare regulatory climate, there may be significant delays in and impediments to obtaining coverage and reimbursement for newly approved drugs. Any regulatory approval of our products is limited to specific diseases and indications for which our products have been deemed safe and effective by the FDA. Coverage by federal healthcare programs may be more limited than the purposes for which the drug is approved by the FDA or comparable foreign regulatory authorities' coverage of the same products. In the United States and markets in other countries, sales of any products for which we receive regulatory approval for commercial sale will depend in part on the extent to which the costs of the products will be covered and reimbursed by third-party payors, including government healthcare programs such as Medicare and Medicaid, private health insurers and other organizations. Obtaining reimbursement for orphan drugs may be particularly difficult because of the higher prices typically associated with drugs directed at smaller populations of patients. In addition, third-party payors are likely to impose strict requirements for reimbursement in the use of a higher priced drug. Net prices for products may be reduced by mandatory discounts or rebates required by government healthcare programs or private payors and by any future relaxation of laws that presently restrict imports of products from countries where they may be sold at lower prices than in the United States.

The process for determining whether a payor will provide coverage for a product may be separate from the process for setting the price or reimbursement rate that the payor will pay for the product once coverage is approved. Third-party payors may limit coverage to specific products on an approved list, or formulary, which might not include all of the FDA approved products for a particular indication. Third-party payors are increasingly challenging the price and examining the cost-effectiveness of medical products and services. We may need to conduct expensive pharmacoeconomic studies in order to demonstrate the cost-effectiveness of our products. Our product candidates may not be considered cost-effective. In the future, we may need to conduct

direct head-to-head studies to demonstrate clinical superiority and cost-effectiveness. Our product candidates may not be considered clinically superior and cost-effective to competitor products.

The marketability of any products for which we receive regulatory approval for commercial sale may suffer if the government and other third-party payors fail to provide adequate coverage and reimbursement. In addition, there is an increasing emphasis on managed care in the United States that may negatively impact pharmaceutical pricing.

In some countries, particularly the countries of the European Union, the pricing of prescription pharmaceuticals is subject to governmental control. In these countries, pricing and reimbursement negotiations with governmental authorities can take considerable time after the receipt of marketing approval for a product. In addition, there can be considerable pressure by governments and other stakeholders on prices and reimbursement levels, including as part of cost containment measures. In some countries, governments can set conditions that must be satisfied for prices to be set at a certain value. Political, economic and regulatory developments may further complicate pricing and reimbursement negotiations, and pricing negotiations may continue after reimbursement has been obtained. Reference pricing used by various EU member states, and parallel distribution (arbitrage between low-priced and high-priced member states), can further reduce prices. In some countries we may be required to conduct a clinical trial or other studies that compare the cost-effectiveness of our product candidate to other available therapies in order to obtain reimbursement or pricing approval.

Freedom of Information Requests

We are also subject, in the United States and many other countries, to various regulatory schemes that require disclosure of clinical trial data or allow access to our data via freedom of information requests. We have been and may, from time to time, be notified by regulators, such as the EMA or the competent authorities of EU member states that they have received a freedom of information request for documents that they hold relating to our company, including information related to our product or our product candidates.

Fraud and Abuse Laws

Any present or future arrangements with third-party payors, healthcare providers and professionals and customers may expose us to broadly applicable fraud and abuse and other healthcare laws and regulations that may restrict certain marketing and contracting practices. These laws include, and are not limited to, anti-kickback and false claims statutes.

Both the federal Foreign Corrupt Practices Act (“FCPA”), and the UK Bribery Act of 2010 (“Bribery Act”), are broad in scope and will require companies to make and keep books and records that accurately and fairly reflect the transactions of the company and to devise and maintain an adequate system of internal accounting controls. The FCPA prohibits the offering, promising, giving, or authorizing others to give anything of value, either directly or indirectly, to a non-U.S. government official in order to improperly influence any act or decision, secure any other improper advantage, or obtain or retain business. Under the Bribery Act, companies which carry on a business or part of a business in the United Kingdom may be held liable for bribes given, offered or promised to any person, including non-UK government officials and private persons, by employees and persons associated with the company in order to obtain or retain business or a business advantage for the company.

The federal Anti-Kickback Statute prohibits, among other things, knowingly and willfully offering, paying, soliciting or receiving remuneration, directly or indirectly, in cash or kind, to induce or reward either the referral of an individual for, or the purchase, or order or recommendation of, any good or service, for which payment may be made under federal and state healthcare programs such as Medicare and Medicaid. This statute has been broadly interpreted to apply to manufacturer arrangements with prescribers, purchasers and formulary managers, among others. Although a number of statutory exemptions and regulatory safe harbors exist to protect certain

common activities from prosecution, the exemptions and safe harbors for this statute are narrow, and practices that involve compensation intended to induce prescriptions, purchases, or recommendations may be subject to scrutiny if they do not qualify for an exemption or safe harbor. Our practices may not always meet all of the criteria for safe harbor protection. Further, the Affordable Care Act amended the intent requirement of the federal anti-kickback and criminal health care fraud statutes. This amendment provides that a person or entity no longer needs to have knowledge of these statutes or specific intent to violate them. In addition, 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 federal False Claims Act. Several other countries, including the United Kingdom, have enacted similar anti-kickback, fraud and abuse laws and regulations.

The federal False Claims Act imposes civil penalties, including through civil whistleblower or qui tam actions, against individuals or entities for knowingly presenting, or causing to be presented, to the federal government, claims for payment that are false or fraudulent or making a false statement to avoid, decrease or conceal an obligation to pay money to the federal government. Several pharmaceutical and health care companies have been prosecuted under these laws for allegedly providing free product to customers with the expectation that the customers would bill federal programs for the free product. Other companies have been prosecuted for causing false claims to be submitted because of these companies' marketing of a product for unapproved, and thus non-reimbursable, uses. Potential liability under the federal False Claims Act includes mandatory treble damages and significant per claim penalties, currently set at $5,500 to $11,000 per false claim. The majority of states also have statutes or regulations similar to the federal anti-kickback statute and False Claims Act, which apply to items and services reimbursed under Medicaid and other state programs; furthermore, in several states, these statutes and regulations apply regardless of the payor. Sanctions under these federal and state laws may include civil monetary penalties, exclusion of a manufacturer's product from reimbursement under government programs, debarment, criminal fines, and imprisonment.

The Affordable Care Act included a provision requiring certain providers and suppliers of items and services to Federal Health Care Programs to report and return overpayments within sixty days after they are "identified," or the Overpayment Statute. In February 2016, the Centers for Medicare and Medicaid Services ("CMS") released long-awaited regulatory guidance (in the form of a final rule) to Medicare Part A and Part B providers and suppliers regarding how to comply with the Overpayment Statute. CMS had previously released a final rule addressing overpayments involving Medicare Part C and Part D providers in May 2014. Although Medicare Part A/B/C/D providers and suppliers have faced federal False Claims Act liability since 2010 for failures to comply with the Overpayment Statute, these final rules interpreting the Overpayment Statute provide guidance to providers and suppliers regarding how to comply appropriately with applicable obligations, and guidance to government regulators and enforcement authorities regarding monitoring and prosecuting suspected violations. This final rule is not directly applicable to manufacturers, but may impact their customers and potential customers who are Medicare providers and suppliers.

The federal Physician Payments Sunshine Act, enacted as part of the Affordable Care Act, and its implementing regulations, require manufacturers of drugs, devices, biologics and medical supplies to report to the Department of Health and Human Services information related to payments and other transfers of value made to covered recipients, such as physicians and teaching hospitals, as well as physician ownership and investment interests. Payments made to physicians and certain research institutions for clinical trials are included within the ambit of this law. Pharmaceutical manufacturers are required to report and disclose payments and ownership and investment interests held by physicians and their immediate family members during the preceding calendar year. Manufacturers were required to make these first reports for information collected in 2013 by March 31, 2014. Such information is publicly available from the Secretary of Health and Human Services in a searchable format, with data collected in each calendar year published the following June. Failure to submit required information may result in civil monetary penalties of up to $150,000 per year (and up to $1.0 million per year for "knowing failures") for all payments, transfers of value or ownership or investment interests not reported in an annual submission. If not preempted by this federal law, several states currently require pharmaceutical companies to report expenses relating to the marketing and promotion of pharmaceutical products and to report gifts and

payments to individual physicians in those states. Depending on the state, legislation may prohibit various other marketing related activities, or require the posting of information relating to clinical studies and their outcomes. In addition, certain states, such as California, Nevada, Connecticut and Massachusetts, require pharmaceutical companies to implement compliance programs or marketing codes and several other states are considering similar proposals. Manufacturers that fail to comply with these state laws can face civil penalties.

Statutory requirements to disclose publicly payments made to healthcare professionals and healthcare organizations have also been enacted in certain EU member states. In addition, self-regulatory bodies of the pharmaceuticals industry, such as the European Federation of Pharmaceutical Industries and Associations (EFPIA") have published codes of conduct to which its members have agreed to abide by, that require the public disclosure of payments made to healthcare professionals and healthcare organizations.

The Health Insurance Portability and Accountability Act of 1996 ("HIPAA"), as amended by the Health Information Technology for Economic and Clinical Health Act, imposes criminal liability for executing a scheme to defraud any healthcare benefit program and for knowingly and willfully falsifying, concealing or covering up a material fact or making any materially false statements in connection with the delivery of or payment for healthcare benefits, items or services. HIPAA also imposes obligations, including mandatory contractual terms, with respect to safeguarding the privacy, security and transmission of individually identifiable health information, and imposes criminal and civil liability for violations of these obligations. Recently, the U.S. federal government criminally prosecuted an employee of a pharmaceutical company for an alleged violation of the privacy requirements under HIPAA. Furthermore, certain privacy laws and genetic testing laws may apply directly to our operations and/or those of our collaborators and may impose restrictions on our use and dissemination of individuals' health information.

The foregoing discussion should be read in conjunction with the information appearing under "Risk Factors—Our relationships with customers, healthcare providers and professionals and third-party payors are or will be subject to applicable anti-kickback, fraud and abuse, transparency and other healthcare laws and regulations, which could expose us to criminal sanctions, civil penalties, contractual damages, reputational harm and diminished profits and future earnings" which contains important information regarding some of the risks to our business arising as a result fraud and abuse laws.

Competition

Our industry is highly competitive and subject to rapid and significant technological change. New therapies and treatments based on innovative discoveries emerge frequently.

Our potential competitors are public and private companies, pharmaceutical companies and biotechnology companies who may be engaged in targeting the same biological processes that our compounds impact and who may be developing products for the same indications as our investigational drug candidates. Potential competitors could also include academic institutions, government agencies, other public and private research organizations and charitable venture philanthropic organizations that conduct research, seek patent protection and/or establish collaborative arrangements for research, development, manufacturing and commercialization.

Many of our competitors have substantially greater financial resources, technical resources, expertise in research and development, manufacturing, preclinical testing, conducting clinical trials, obtaining regulatory approvals and marketing approved products than we do. These competitors also compete with us in recruiting and retaining qualified scientific and management personnel and establishing clinical trial sites and patient registration for clinical trials. As a result, our competitors may commercialize products more rapidly or effectively than we do, which would affect our competitive position, the likelihood that our drug candidates, if approved, would achieve and maintain market acceptance and our ability to generate meaningful revenues from our products.

Our commercial opportunity could be reduced or eliminated if our competitors develop and commercialize products that are safer, more effective, have fewer side effects, are more convenient or are more affordable than any products that we may develop. The key competitive factors affecting the success of ELX-02 and our other product candidates are their impact on the targeted diseases, superiority over competing products, long-term safety, convenience, price and the availability of coverage and reimbursement from government and other third-party payors.

Several companies are involved in researching and developing molecules targeting suppression of nonsense mutations and enhancement of translational read-through. PTC Therapeutics is developing ataluren (Translarna®) as translational read-through inducing drug. PTC has gained approval of ataluren for Duchenne muscular dystrophy under exceptional circumstances in the European Union. In January 2017, the European Commission renewed the conditional marketing authorization for ataluren to treat certain nonsense mutations of dystrophin. The renewal of the conditional marketing authorization is subject to a requirement to conduct an 18-month, randomized, placebo-controlled study of ataluren in nmDMD patients followed by an 18-month, open-label extension period with results expected by early 2021. Ataluren has not been approved by the FDA for any indication. Ten out of 11 members from a Peripheral and Central Nervous Systems Drugs Advisory Committee on September 28, 2017 stated more data are needed to prove the drug's efficacy. In a Complete Response Letter, the FDA's Office of Drug Evaluation I stated that it is unable to approve the ataluren application in its current form. Specifically, the letter indicated that evidence of effectiveness from one or more additional adequate and well-controlled clinical trials will be necessary to provide substantial evidence of effectiveness.

We believe that ELX-02 is the only drug candidate in clinical development designed to treat nonsense mutations in CFTR the underlying cause of cystic fibrosis and cystinosis, our lead indications. La Jolla Pharmaceuticals is testing a sub-fraction of gentamicin at a preclinical stage and PTC Therapeutics discontinued its CF program as ataluren did not show efficacy in a Phase 3 CF study.

Additional competition to ELX-02 may arise from other programs that do not target a specific CFTR mutation class but work via other mechanisms. Proteostasis Therapeutics is developing PTI-428, a CFTR amplifier in Phase 2; and Apteeus is developing TEE786 (Amlexanox), a NMD manipulator, in Phase 1. Other companies are developing RNA based therapeutics, gene therapy and cell therapy. Most of these products are in preclinical stages and these platforms face great technological challenges.

Employees

We currently have fifteen full-time employees. Of these employees, ten are located at our Rehovot, Israel research and development facility and five, including some executive officers, are located at our Waltham, Massachusetts facility. None of our employees are covered by a collective bargaining agreement and we have never experienced any work stoppage. We consider our relations with our employees to be good.

Additional Information

Our website address is http://www.eloxxpharma.com. Information on our website is not incorporated by reference herein. Copies of our Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K, and all amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Exchange Act, are available on our website as soon as reasonably practicable after we electronically file those reports with, or furnish them to the SEC. The public may read and copy any materials we file with the SEC at the SEC's Public Reference Room at 100 F Street, NE, Washington, DC 20549. The public may obtain information on the operation of the Public Reference Room by calling 1-800-SEC-0330. The SEC also maintains a website at http://www.sec.gov that contains reports, proxy and information statements, and other information regarding issuers that file electronically. (This website address is not intended to function as a hyperlink.)

ITEM 1A. RISK FACTORS

Investing in our common stock involves a high degree of risk. You should carefully consider the risks and uncertainties described below and all information contained in this report before you decide to purchase our common stock. If any of the possible adverse events described below actually occurs, we may be unable to conduct our business as currently planned and our financial condition and operating results could be harmed. In addition, the trading price of our common stock could decline due to the occurrence of any of the events described below, and you may lose all or part of your investment.

Risks Related to the Reverse Merger

The risks arising with respect to the historic Sevion business and operations may be different from what we anticipate, which could lead to significant, unexpected costs and liabilities and could materially and adversely affect our business going forward.

We may not have appreciated, understood or fully anticipated the extent of the risks associated with the recent reverse merger between Sevion and Ellox Limited. After the reverse merger, Sevion's historic business was discontinued, but prior to the transaction Sevion had a long operating history. As a consequence, we may be subject to claims, demands for payment, regulatory issues, costs and liabilities that were not and are not currently expected or anticipated. Notwithstanding our exercise of due diligence pre-transaction and risk mitigation strategies post-transaction, the risks involved with taking over a business with a long operating history and the costs and liabilities associated with these risks may be greater than we anticipate. Further, we do not have rights of indemnification against the pre-transaction stockholders of Sevion. We may not be able to contain or control the costs or liabilities associated with Sevion's historic business, which could materially and adversely affect our business, liquidity, capital resources or results of operation.

Risks Related to Our Financial Position and Need for Additional Capital

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

Since our inception, we have incurred significant operating losses. Our net loss was $21.2 million and $9.8 million for 2017 and 2016, respectively. As of December 31, 2017, we had an accumulated deficit of $39.0 million. To date, we have financed our operations primarily through equity capital investments, and to a lesser extent from loans and grants from Israeli Innovation Authority of the Ministry of Economy and Industry, or the IIA. We have devoted substantially all of our financial resources and efforts to research and development. We expect that it will be many years, if ever, before we receive regulatory approval and have a product candidate ready for commercialization. We expect to continue to incur significant expenses and increasing operating losses for the foreseeable future. Our net losses may fluctuate significantly from quarter to quarter and year to year. We anticipate that our expenses will increase substantially if and as we:

- advance ELX-02 further into clinical trials;
- continue the preclinical development of our research programs and advance candidates into clinical trials;
- identify additional product candidates and advance them into preclinical development;
- pursue regulatory approval of product candidates;
- seek marketing approvals for our product candidates that successfully complete clinical trials;
- establish a sales, marketing and distribution infrastructure to commercialize any product candidates for which we obtain marketing approval;

- maintain, expand and protect our intellectual property portfolio;
- hire additional clinical, regulatory and scientific personnel;
- add operational, financial and management information systems and personnel, including personnel to support product development;
- acquire or in-license other product candidates and technologies; and
- operate as a public company.

We have never generated any revenue from product sales and may never be profitable. To become and remain profitable, we and our collaborators must develop and eventually commercialize one or more products with significant market potential. This will require us to be successful in a range of challenging activities, including completing preclinical studies and clinical trials of our product candidates, obtaining marketing approval for these product candidates, manufacturing, marketing and selling those product candidates for which we may obtain marketing approval, securing coverage and reimbursement for those product candidates, and satisfying any post-marketing requirements. We may never succeed in these activities and, even if we do, may never generate revenue that is significant or large enough to achieve profitability. Our failure to become and remain profitable would decrease the value of the company and could impair our ability to raise capital, maintain our research and development efforts, expand our business or continue our operations. A decline in the value of our company could also cause you to lose all or part of your investment.

We will need substantial additional funding. If we are unable to raise capital when needed, we would be forced to delay, reduce or eliminate our product development programs or commercialization efforts.

We expect our expenses to increase in connection with our ongoing activities, particularly as we continue the research and development of, continue and initiate clinical trials of and seek marketing approval for ELX-02, and as we become obligated to make milestone payments pursuant to our outstanding license agreements. In addition, if we obtain marketing approval for any of our current or future product candidates, we expect to incur significant commercialization expenses related to product sales, marketing, manufacturing and distribution of the approved product.

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

- the scope, progress, results and costs of drug discovery, clinical development, laboratory testing and clinical trials for ELX-02;
- the costs, timing and outcome of any regulatory review of ELX-02;
- the cost of any other product candidate programs we pursue;
- the costs and timing of commercialization activities, including manufacturing, marketing, sales and distribution, and securing coverage and reimbursement for any product candidates that receive marketing approval;
- the costs of preparing, filing and prosecuting patent applications, maintaining and enforcing our intellectual property rights and defending intellectual property-related claims;
- our ability to establish and maintain collaborations on favorable terms, if at all; and
- the extent to which we acquire or in-license other product candidates and technologies.

Identifying potential product candidates and conducting preclinical studies and clinical trials are time consuming, expensive and uncertain processes that take years to complete, and we may never generate the necessary data or results required to obtain marketing approval and achieve product sales for any of our current or future product candidates. In addition, our product candidates, if approved, may not achieve commercial success. Our commercial revenue, if any, will be derived from sales of products that we do not expect to be commercially available for many years, if at all.

Accordingly, we will need substantial additional funding in connection with our continuing operations and to achieve our goals. We expect that our existing cash and cash equivalents will be sufficient to enable us to meet our current operating plan at least through the end of the first quarter of 2019. However, our existing cash and cash equivalents may prove to be insufficient for these activities. If we are unable to raise capital when needed or on attractive terms, we would be forced to delay, reduce or eliminate our research and development programs, product portfolio expansion or future commercialization efforts. Adequate additional financing may not be available to us on acceptable terms, or at all. In addition, we may seek additional financing due to favorable market conditions or strategic considerations, even if we believe we have sufficient funds for our operating plans.

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

Until such time, if ever, as we can generate substantial product revenue, we expect to finance our cash needs through a combination of equity and debt financings, as well as entering into new collaborations, strategic alliances and licensing arrangements. We do not have any committed external source of funds, other than our collaborations, which are limited in scope and duration. To the extent that we raise additional capital through the sale of equity or convertible debt securities, your ownership interest will be diluted, and the terms of these securities may include liquidation or other preferences that adversely affect your rights as a common stockholder. Debt financing, if available, may involve agreements that include covenants limiting or restricting our ability to take specific actions, such as incurring additional debt, making capital expenditures or declaring dividends, and may be secured by all or a portion of our assets. If we raise funds by entering into new collaborations, strategic alliances or licensing arrangements in the future with third parties, we may have to relinquish valuable rights to our technologies, future revenue streams, research programs or product candidates or to grant licenses on terms that may not be favorable to us. If we are unable to raise additional funds through equity or debt financings or through collaborations, strategic alliances or licensing arrangements when needed, we may be required to delay, limit, reduce or terminate our product development or future commercialization efforts or grant rights to develop and market product candidates that we would otherwise prefer to develop and market ourselves.

Risks Related to Drug Discovery, Development, Regulatory Approval and Commercialization

We depend heavily on the success of our lead product candidate, ELX-02. If ELX-02 fails during development or suffers any material delays, it may adversely impact the commercial viability of ELX-02 and our business.

We currently have no products approved for sale. To date, we have invested substantially all of our efforts and financial resources in the research and development of ELX-02, which is currently our only product candidate in clinical development. Our ability to achieve and sustain profitability depends on obtaining regulatory approvals, and successfully commercializing (if ever), ELX-02 and any future product candidates, either alone or with third parties. Before obtaining regulatory approval for the commercial distribution of our therapeutic product candidates, we or a collaborator must conduct extensive preclinical studies and clinical trials to demonstrate the safety and efficacy in humans of our product candidates. The clinical trials, manufacturing and marketing of ELX-02, and any future product candidates, will be subject to extensive and rigorous review and regulation by numerous government authorities in the United States, the European Union and other jurisdictions where we intend to test and, if approved, market our current and future product candidates. Before obtaining regulatory approvals for the commercial sale of any product candidate, we must demonstrate through preclinical studies and clinical trials that the product candidate is safe and effective for use in each target indication, and potentially in specific patient populations, including the pediatric population. This process can take many years and may include post-marketing studies and surveillance, which would require the expenditure of substantial resources. Of the large number of drugs in development for approval in the United States and the European Union, only a small percentage successfully complete the FDA or EMA regulatory approval processes, as applicable, and are commercialized. Accordingly, even if we are able to obtain the requisite financing to continue to fund our research, development and clinical programs, we cannot assure you that ELX-02 or any of our future product candidates will be successfully developed or commercialized.

Preclinical studies and clinical trials are expensive, difficult to design and implement, can take many years to complete and are uncertain as to outcome. The start or end of a clinical trial is often delayed or halted due to changing regulatory requirements, manufacturing challenges, required clinical trial administrative actions, slower than anticipated patient enrollment, changing standards of care, availability or prevalence of use of a comparative therapeutic or required prior or combination therapy, clinical outcomes or financial constraints. For instance, delays or difficulties in patient enrollment or difficulties in retaining trial participants can result in increased costs, longer development times or termination of a clinical trial. Clinical trials of a new product candidate require the enrollment of a sufficient number of patients, including patients who are suffering from the disease the product candidate is intended to treat and who meet other eligibility criteria. Rates of patient enrollment are affected by many factors, including the size of the patient population, the eligibility criteria for the clinical trial, the age and condition of the patients, the stage and severity of disease, the nature of the protocol, the proximity of patients to clinical sites and the availability of effective treatments for the relevant disease.

We and our collaborating partners may be subject, directly or indirectly, to federal and state healthcare fraud and abuse and false claims laws and regulations. If we or our collaborating partners are unable to comply, or have not fully complied, with such laws, we could face substantial penalties.

All marketing activities associated with product candidates that are approved for sale in the United States, if any, will be, directly or indirectly through our customers, subject to numerous federal and state laws governing the marketing and promotion of pharmaceutical products in the United States, including, without limitation, the federal Anti-Kickback Statute, the federal False Claims Act and HIPAA. These laws may adversely impact, among other things, our proposed sales, marketing and education programs.

The federal Anti-Kickback Statute prohibits persons from knowingly and willfully soliciting, receiving, offering or paying remuneration, directly or indirectly, to induce either the referral of an individual, or the furnishing, recommending, or arranging for a good or service, for which payment may be made under a federal healthcare program, such as the Medicare and Medicaid programs. The term “remuneration” has been broadly interpreted to include anything of value, including for example, gifts, discounts, the furnishing of supplies or equipment, credit arrangements, payments of cash, waivers of co-payments and deductibles, ownership interests and providing anything at less than its fair market value. The reach of the Anti-Kickback Statute was also broadened by the Patient Protection and Affordable Care Act, as amended by the Health Care and Education Affordability Reconciliation Act, or the PPACA, which, among other things, amends the intent requirement of the federal Anti-Kickback Statute and the applicable criminal healthcare fraud statutes contained within 42 U.S.C. § 1320a-7b, effective March 23, 2010. Pursuant to the statutory amendment, a person or entity no longer needs to have actual knowledge of this statute or specific intent to violate it in order to have committed a violation. In addition, PPACA 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 civil False Claims Act (discussed below) or the civil monetary penalties statute, which imposes penalties against any person who is determined to have presented or caused to be presented a claim to a federal health program that the person knows or should know is for an item or service that was not provided as claimed or is false or fraudulent. The federal Anti-Kickback Statute is broad, and despite a series of narrow safe harbors, prohibits many arrangements and practices that are lawful in businesses outside of the healthcare industry. Penalties for violations of the federal Anti-Kickback Statute include criminal penalties and civil sanctions such as fines, imprisonment and possible exclusion from Medicare, Medicaid and other state or federal healthcare programs. Many states have also adopted laws similar to the federal Anti-Kickback Statute, some of which apply to the referral of patients for healthcare items or services reimbursed by any source, not only the Medicare and Medicaid programs, and do not contain identical safe harbors.

The federal False Claims Act imposes liability on any person who, among other things, knowingly presents, or causes to be presented, a false or fraudulent claim for payment by a federal healthcare program. The “qui tam” provisions of the False Claims Act allow a private individual to bring civil actions on behalf of the federal government alleging that the defendant has submitted a false claim to the federal government, and to share in any

monetary recovery. In addition, various states have enacted false claims laws analogous to the False Claims Act. Many of these state laws apply where a claim is submitted to any third-party payer and not merely a federal healthcare program. When an entity is determined to have violated the False Claims Act, it may be required to pay up to three times the actual damages sustained by the government, plus civil penalties of $5,500 to $11,000 for each separate false claim.

HIPAA created several new federal crimes, including health care fraud, and false statements relating to health care matters. The health care fraud statute prohibits knowingly and willfully executing a scheme to defraud any health care benefit program, including private third-party payers. The false statements statute prohibits knowingly and willfully falsifying, concealing or covering up a material fact or making any materially false, fictitious or fraudulent statement in connection with the delivery of or payment for health care benefits, items or services.

We are unable to predict whether we could be subject to actions under any of these or other fraud and abuse laws, or the impact of such actions. Moreover, to the extent that any of our product candidates, if approved for marketing, will be sold in a foreign country, we and our future collaborators, may be subject to similar foreign laws and regulations. If we or any of our future collaborators are found to be in violation of any of the laws described above and other applicable state and federal fraud and abuse laws, we may be subject to penalties, including civil and criminal penalties, damages, fines, exclusion from government healthcare reimbursement programs and the curtailment or restructuring or our operations, any of which could have a material adverse effect on our business, results of operations and financial condition.

Positive results from preclinical or in vitro and in vivo testing of ELX-02 are not necessarily predictive of the results of future clinical trials of ELX-02. If we cannot achieve positive results in our clinical trials for ELX-02, we may be unable to successfully develop, obtain regulatory approval for and commercialize ELX-02.

Positive results from our preclinical testing of ELX-02 in vitro and in vivo may not necessarily be predictive of the results from our planned clinical trials in humans. Many companies in the pharmaceutical and biotechnology industries have suffered significant setbacks in clinical trials after achieving positive results in preclinical and in vitro and in vivo studies, and we, or the third parties whose product candidates we expect to be co-administered with ELX-02, may face similar setbacks. Preclinical and clinical data are often susceptible to varying interpretations and analyses, and the FDA or EMA or other regulatory agencies may require changes to our protocols or other aspects of our clinical trials or require additional studies. Additionally, many companies that believed their product candidates performed satisfactorily in preclinical studies and clinical trials nonetheless failed to obtain FDA or EMA approval. If we fail to secure positive results from our clinical trials of ELX-02, the development timeline and regulatory approval and commercialization prospects for our lead product candidate, and, correspondingly, our business and financial prospects would be materially adversely affected.

Our product candidates, including ELX-02, may cause adverse effects or have other properties that could delay or prevent their regulatory approval or limit the scope of any approved label or market acceptance.

Undesirable side effects caused by our product candidates, such as ELX-02, could cause us or regulatory authorities to interrupt, delay or halt clinical trials and could result in the denial of regulatory approval by the FDA or other comparable foreign regulatory authorities. It is possible that, during the course of the clinical development of ELX-02, results of our clinical trials could reveal an unacceptable severity and prevalence of this or other side effects. For example, in preclinical testing of ELX-02, we observed renal toxicities in the animals we tested following administration of this compound at doses in excess of the doses we expect to administer in our clinical trials. As a result of this or any other side effects, our clinical trials could be suspended or terminated or not even allowed to commence, and the FDA or comparable foreign regulatory authorities could order us to cease further development, or deny approval, of our product candidates for any or all targeted indications. The drug-related side effects could affect patient recruitment or the ability of enrolled patients to complete the trial or result in potential product liability claims.

Additionally if one or more of our product candidates receive marketing approval, and we or others later identify undesirable side effects caused by such products, a number of potentially significant negative consequences could result, including:

- regulatory authorities may withdraw approvals of such product or impose restrictions on its distribution in a form of a modified risk evaluation and mitigation strategy;
- regulatory authorities may require additional labeling, such as additional warnings or contraindications;
- we may be required to change the way the product is administered or to conduct additional clinical studies;
- 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 the particular product candidate, if approved, and could significantly harm our business, results of operations and prospects.

Our clinical trials may be costly and lengthy, time-consuming and difficult to design and implement, may result in unforeseen costs and could be delayed or terminated, which may have a material adverse effect on our business, results of operations and financial condition.

For human trials, patients must be recruited and each product candidate must be tested at various doses and formulations for each clinical indication. In addition, to ensure safety and effectiveness, the effect of drugs often must be studied over a long period of time, especially for the chronic genetic diseases that we will be studying. Many of our programs focus on diseases with small patient populations making patient recruitment and enrollment difficult. Insufficient patient enrollment in our clinical trials could delay or cause us to abandon a product development program. We may decide to abandon development of a product candidate or a study at any time due to unfavorable results, or we may have to spend considerable resources repeating clinical trials or conducting additional trials, either of which would increase costs and delay any revenue from those product candidates, if any.

Failure or delay in the commencement or completion of our clinical trials may be caused by several factors, including:

- slower than expected rates of patient recruitment, particularly with respect to trials of rare diseases such as nmCF;
- determination of dosing issues;
- unforeseen safety issues;
- lack of effectiveness during clinical trials;
- inability to monitor patients adequately during or after treatment;
- inability or unwillingness of medical investigators and institutional review boards to follow our clinical protocols; and
- lack of sufficient funding to finance the clinical trials.

We may find it difficult to recruit and enroll patients in our clinical trials, which could cause significant delays in the completion of such trials or may cause us to abandon one or more clinical trials.

Some of the diseases that our product candidates are intended to treat are rare and ultra-rare and we expect only a subset of the patients with these diseases will be eligible for our clinical trials. Because ELX-02 targets small populations and patient numbers have not been determined definitively, we must be able to identify patients in order to complete our development programs and commercialize ELX-02 successfully.

In addition, the protocol for our clinical trials generally mandates that a patient cannot be involved in more than one clinical trial for the same indication. Therefore, subjects that participate in ongoing clinical trials for products that are competitive with our product candidates are not available to participate in our clinical trials. We cannot guarantee that any of our programs will identify a sufficient number of patients to complete clinical development and market our product candidates if approved. The combined number of patients in the United States, Japan and Europe and elsewhere may turn out to be lower than expected, may not be otherwise amenable to treatment with ELX-02, or new patients may become increasingly difficult to identify, all of which would adversely affect our results of operations and our business. An inability to recruit and enroll a sufficient number of patients for any of our current or future clinical trials would result in significant delays or may require us to abandon one or more clinical trials altogether, which could impact our ability to develop our product candidates and may have a material adverse effect on our business, results of operations and financial condition.

Because our clinical trials depend upon third-party researchers, scientists and consultants the results of our clinical trials and such research activities are subject to delays and other risks that are, to a certain extent, beyond our control, which could impair our clinical development programs and our competitive position.

We depend on independent investigators, consultants, researchers, medical experts, collaborators, chemists, toxicologist and a small number of medical institutions and third-party contract organizations to assist with our research efforts and conduct our preclinical and clinical trials and related activities. These collaborators, scientists, consultants and other third parties have provided, and we expect that they will continue to provide, valuable advice regarding our clinical development programs and product candidates. These collaborators, scientists, consultants and other third parties are not our employees, may have other commitments that would limit their future availability to us and typically will not enter into non-compete agreements with us. We cannot control the amount or timing of resources that they devote to our preclinical and or clinical development programs and they may not assign as great a priority to our preclinical or clinical development programs or pursue them as diligently as we would if we were undertaking such programs directly. If outside collaborators fail to devote sufficient time and resources to our preclinical and clinical development programs, or if their performance is substandard, the approval of anticipated NDAs and other marketing applications, and our introduction of new drugs, if any, may be delayed, which could impair our clinical development programs and would have a material adverse effect on our business and results of operations. The collaborators may also have relationships with other commercial entities, some of whom may compete with us and we may be unable to prevent them from establishing competing businesses or developing competing products. For example, if a key scientist acting as a principal investigator in any of our clinical trials identifies a potential product or compound that is more scientifically interesting to his or her professional interests, his or her availability to remain involved in our clinical trials could be restricted or eliminated, which may have a material adverse effect on our business, results of operations and financial condition.

We are subject to extensive governmental regulation including the requirement of FDA or comparable foreign regulatory authorities for approval of our product candidates before they can be marketed.

We, our product candidates, our suppliers, our contract manufacturers, our contract testing laboratories and our clinical trial sites and clinical trial researchers are subject to extensive regulation by the FDA and comparable foreign regulatory authorities. Failure to comply with applicable requirements of the FDA or comparable foreign regulatory authorities could result in, among other things, any of the following actions:

- warning letters;
- fines and other monetary penalties;
- unanticipated expenditures;
- holds on the initiation of clinical trials;
- delays in the FDA’s or other foreign regulatory authorities’ approving, or the refusal of any regulatory authority to approve, any product candidate;

- product recall or seizure;
- interruption of manufacturing or clinical trials;
- operating restrictions;
- injunctions; and
- criminal prosecutions.

In addition to the approval requirements, other numerous and pervasive regulatory requirements apply, both before and after approval of our product candidates, to us, our product candidates, and our suppliers, contract manufacturers, and contract laboratories, including requirements related to testing, manufacturing, quality control, labeling, advertising, promotion, distribution, export, reporting to the FDA of certain adverse experiences associated with use of the product candidate, and obtaining additional approvals for certain modifications to the product candidate or its labeling or claims.

We also are subject to inspection by the FDA and comparable foreign regulatory authorities, to determine our compliance with regulatory requirements, as are our suppliers, contract manufacturers, contract testing laboratories, and our clinical trial sites and clinical researchers and there can be no assurance that the FDA or any other comparable foreign regulatory authority, will not identify compliance issues that may disrupt production or distribution, or require substantial resources to correct. We may be required to make modifications to our manufacturing operations in response to these inspections, which may require significant resources and may have a material adverse effect upon our business, results of operations and financial condition.

The approval process for any product candidate may also be delayed by changes in government regulation, future legislation or administrative action or changes in policy of the FDA and comparable foreign regulatory authorities that occur prior to or during their respective regulatory reviews of such product candidate. Delays in obtaining regulatory approvals with respect to any product candidate may:

- delay commercialization of, and our ability to derive product revenues from, such product candidate;
- delay any regulatory-related milestone payments payable under outstanding collaboration agreements;
- require us to perform costly procedures with respect to such product candidate; or
- otherwise diminish any competitive advantages that we may have with respect to such product candidate.

We may not obtain the necessary U.S., EMA or other worldwide regulatory approvals to commercialize our product candidates in a timely manner, if at all, which would have a material adverse effect on our business, results of operations and financial condition.

We need FDA approval to commercialize our product candidates in the United States, EMA approval to commercialize our product candidates in the European Union and approvals from other foreign regulatory authorities to commercialize our product candidates elsewhere in the world. In order to obtain FDA approval of any of our product candidates, we must submit to the FDA an NDA demonstrating that the product candidate is safe for humans and effective for its intended use. This demonstration requires significant research and animal tests, which are referred to as preclinical studies, as well as human tests, which are referred to as clinical trials. In the European Union, we must submit a Marketing Authorization Application, or MAA, to the EMA. Satisfaction of the FDA's, the EMA's and foreign regulatory authorities' regulatory requirements typically takes many years, depends upon the type, complexity and novelty of the product candidate and requires substantial resources for research, development and testing. Even if we comply with all the requests of regulatory authorities, the authorities may ultimately reject the marketing applications that we file for our product candidates in the future, if any, or we might not obtain regulatory clearance in a timely manner. Companies in the pharmaceutical and biotechnology industries have suffered significant setbacks in advanced or late-stage clinical trials, even after

obtaining promising earlier trial results or in preliminary findings or other comparable authorities for such clinical trials. Further, even if favorable testing data is generated during the clinical trials of a product candidate, the applicable regulatory authority may not accept or approve the marketing application filed by a pharmaceutical or biotechnology company for the product candidate. Failure to obtain approval of the FDA, EMA or comparable foreign regulatory authorities of any of our product candidates in a timely manner, if at all, will severely undermine our business, financial condition and results of operation by reducing our potential marketable products and our ability to generate corresponding product revenues.

Our research and clinical efforts may not result in drugs that the FDA, EMA or foreign regulatory authorities consider safe for humans and effective for indicated uses, which would have a material adverse effect on our business, results of operations and financial condition. After clinical trials are completed for any product candidate, if at all, the FDA, EMA and foreign regulatory authorities have substantial discretion in the drug approval process of the product candidate in their respective jurisdictions and may require us to conduct additional clinical testing or perform post-marketing studies, which would cause us to incur additional costs. Incurring such costs may have a material adverse effect on our business, results of operations and financial condition.

Risks Related to Commercialization

If we are unable to establish sales and marketing capabilities or enter into agreements with third parties to market and sell any of our product candidates that obtain regulatory approval, we may be unable to generate any revenue.

We have no experience selling and marketing our product candidates or any other products. To successfully commercialize any products that may result from our clinical development programs and obtain regulatory approval, we will need to develop these capabilities, either on our own or with the assistance of others. We may seek to enter into collaborations with other entities to utilize their marketing and distribution capabilities, but we may be unable to do so on favorable terms, if at all. If any future collaborative partners do not commit sufficient resources to commercialize our future products, if any, and we are unable to develop the necessary marketing capabilities on our own, we will be unable to generate sufficient product revenue to sustain our business. We will be competing with many companies that currently have extensive and well-funded marketing and sales operations. Without an internal team or the support of a third party to perform marketing and sales functions, we may be unable to compete successfully against these more established companies or successfully commercialize any of our product candidates.

Developments by competitors may render our products or technologies obsolete or non-competitive which would have a material adverse effect on our business, results of operations and financial condition.

We compete with fully integrated biopharmaceutical companies and smaller biopharmaceutical companies that are collaborating with larger pharmaceutical companies, academic institutions, government agencies and other public and private research organizations. Our product candidates will have to compete with existing therapies and therapies under development by our competitors. In addition, our commercial opportunities may be reduced or eliminated if our competitors develop and market products that are less expensive, more effective or safer than our product candidates. Other companies have product candidates in various stages of preclinical or clinical development to treat diseases for which we are also seeking to develop product candidates. Some of these potential competing drugs are further advanced in development than our product candidates and may be commercialized earlier. Even if we are successful in developing effective drugs, our products may not compete successfully with products produced by our competitors.

Most of our competitors, either alone or together with their collaborative partners, operate larger research and development programs, staff and facilities and have substantially greater financial resources than we do, as well as significantly greater experience in:

- developing drugs;

- undertaking preclinical testing and human clinical trials;
- obtaining marketing approvals from the FDA and other regulatory authorities;
- formulating and manufacturing drugs; and
- launching, marketing and selling drugs.

These organizations also compete with us to attract qualified personnel, acquisitions and joint ventures candidates and for other collaborations. Efforts to compete and the pursuit of activities of our competitors may impose unanticipated costs on our business, which would have a material adverse effect on our business, results of operations and financial condition.

If we are unable to develop and commercialize our product candidates, our business will be adversely affected.

A key element of our strategy is to develop and commercialize a portfolio of new products. We seek to do so through our internal research programs and strategic collaborations for the development of new products. Research programs to identify new product candidates require substantial technical, financial and human resources, whether or not any product candidates are ultimately identified. Our research programs may initially show promise in identifying potential product candidates, yet fail to yield product candidates for clinical development for many reasons, including the following:

- a product candidate is not capable of being produced in commercial quantities at an acceptable cost, or at all;
- a product candidate that is developed and approved may not be accepted by patients, the medical community or third-party payors;
- competitors may develop alternatives that render our product candidates obsolete;
- the research methodology used may not be successful in identifying potential product candidates; or
- a product candidate may on further study be shown to have harmful side effects or other characteristics that indicate it is unlikely to be effective or otherwise does not meet applicable regulatory approval requirements.

Any failure to develop or commercialize any of our product candidates may have a material adverse effect on our business, results of operations and financial condition.

Risks Related to Our Business and Operations

Maintaining and improving our financial controls and the requirements of being a public company may strain our resources, divert management's attention and affect our ability to attract and retain qualified board members.

The trading market for our common stock is influenced by the research and reports that securities or industry analysts publish. As a public company, we are subject to the reporting requirements of the Exchange Act, the Sarbanes-Oxley Act of 2002, or the Sarbanes-Oxley Act, and OTCQB Market rules. The requirements of these rules and regulations have increased and will continue to significantly increase our legal and financial compliance costs, including costs associated with the hiring of additional personnel, making some activities more difficult, time-consuming or costly, and may also place undue strain on our personnel, systems and resources. The Exchange Act requires, among other things, that we file annual, quarterly and current reports with respect to our business and financial condition.

The Sarbanes-Oxley Act requires, among other things, that we maintain disclosure controls and procedures and internal control over financial reporting. Ensuring that we have adequate internal financial and accounting controls and procedures in place, as well as maintaining these controls and procedures, is a costly and time-consuming effort that needs to be re-evaluated frequently. Section 404 of the Sarbanes-Oxley Act, or Section 404, requires that we annually evaluate our internal control over financial reporting to enable management to report on, the effectiveness of those controls. In connection with the Section 404 requirements, we test our internal controls and could, as part of that documentation and testing, identify material weaknesses, significant deficiencies or other areas for further attention or improvement.

Implementing any appropriate changes to our internal controls may require specific compliance training for our directors, officers and employees, require the hiring of additional finance, accounting and other personnel, entail substantial costs to modify our existing accounting systems, and take a significant period of time to complete. These changes may not, however, be effective in maintaining the adequacy of our internal controls, and any failure to maintain that adequacy, or consequent inability to produce accurate financial statements on a timely basis, could increase our operating costs and could materially impair our ability to operate our business. Moreover, adequate internal controls are necessary for us to produce reliable financial reports and are important to help prevent fraud. As a result, our failure to satisfy the requirements of Section 404 on a timely basis could result in the loss of investor confidence in the reliability of our financial statements, which in turn could cause the market value of our common stock to decline.

Various rules and regulations applicable to public companies make it more difficult and more expensive for us to maintain directors' and officers' liability insurance, and we may be required to accept reduced coverage or incur substantially higher costs to maintain coverage. If we are unable to maintain adequate directors' and officers' liability insurance, our ability to recruit and retain qualified officers and directors, especially those directors who may be deemed independent for purposes of the OTCQB Market rules, will be significantly curtailed.

The requirements of being a public company may strain our resources and distract management.

As a public company, we are subject to the reporting requirements of the Exchange Act and the Sarbanes-Oxley Act of 2002, or the Sarbanes-Oxley Act. These requirements are extensive. The Exchange Act requires that we file annual, quarterly and current reports with respect to our business and financial condition. The Sarbanes-Oxley Act requires that we maintain effective disclosure controls and procedures and internal controls over financial reporting.

We may incur significant costs associated with our public company reporting requirements and costs associated with applicable corporate governance requirements. These applicable rules and regulations significantly increase our legal and financial compliance costs and make some activities more time consuming and costly. This may divert management's attention from other business concerns, which could have a material adverse effect on our business, financial condition and results of operations. We also expect that these applicable rules and regulations may make it more difficult and more expensive for us to obtain director and officer liability insurance and we may be required to accept reduced policy limits and coverage or incur substantially higher costs to obtain the same or similar coverage. As a result, it may be more difficult for us to attract and retain qualified individuals to serve on our board of directors or as executive officers. We are currently evaluating and monitoring developments with respect to these rules, and we cannot predict or estimate the amount of additional costs we may incur or the timing of such costs.

We are seeking to expand our business through strategic initiatives. Our efforts to identify opportunities or complete transactions that satisfy our strategic criteria may not be successful, and we may not realize the anticipated benefits of any completed acquisition or other strategic transaction.

Our business strategy includes expanding our products and capabilities. We regularly evaluate potential merger, acquisition, partnering and in-license opportunities that we expect will expand our pipeline or product offerings, and enhance our research platforms.

To manage effectively our current and future potential growth, we must continue to enhance and develop our global employee base, and our operational and financial processes. Supporting our growth strategy will require significant capital expenditures and management resources, including investments in research, development, sales and marketing, manufacturing and other areas of our operations. The development or expansion of our business, any acquired business or any acquired or in-licensed products may require a substantial capital investment by us. We may not have these necessary funds or they might not be available to us on acceptable terms or at all. We may also seek to raise funds by selling shares of our capital stock, which could dilute current stockholders' ownership interest in our company, or securities convertible into our capital stock, which could dilute current stockholders' ownership interest in our company upon conversion.

Our business could be affected by litigation, government investigations and enforcement actions.

We operate in many jurisdictions in a highly regulated industry and we could be subject to litigation, government investigation and enforcement actions on a variety of matters in the U.S. or foreign jurisdictions, including, without limitation, intellectual property, regulatory, product liability, environmental, whistleblower, Qui Tam, false claims, privacy, anti-kickback, anti-bribery, securities, commercial, employment, and other claims and legal proceedings which may arise from conducting our business.

The intended efficiency of our corporate structure depends on the application of the tax laws and regulations in the countries where we operate and we may have exposure to additional tax liabilities or our effective tax rate could change, which could have a material impact on our results of operations and financial position.

As a company with international operations, we are subject to income taxes, as well as non-income based taxes, in both the U.S. and various foreign jurisdictions. Significant judgment is required in determining our worldwide tax liabilities. Although we believe our estimates are reasonable, the ultimate outcome with respect to the taxes we owe may differ from the amounts recorded in our financial statements. If the Internal Revenue Service, or other taxing authority, disagrees with the positions we take, we could have additional tax liability, and this could have a material impact on our results of operations and financial position. Our effective tax rate could be adversely affected by changes in the mix of earnings in countries with different statutory tax rates, changes in the valuation of deferred tax assets and liabilities, changes in tax laws and regulations, changes in interpretations of tax laws, including pending tax law changes, changes in our manufacturing activities and changes in our future levels of research and development spending.

We have designed our corporate structure, the manner in which we develop and use our intellectual property, and our intercompany transactions between our affiliates in a way that is intended to enhance our operational and financial efficiency and increase our overall profitability. The application of the tax laws and regulations of various countries in which we operate and to our global operations is subject to interpretation. We also must operate our business in a manner consistent with our corporate structure to realize such efficiencies. The tax authorities of the countries in which we operate may challenge our methodologies for valuing developed technology or for transfer pricing. If tax authorities determine that the manner in which we operate results in our business not achieving the intended tax consequences, our effective tax rate could increase and harm our financial position and results of operations.

In addition, the U.S. federal government and other U.S. state and foreign governments are considering and may adopt tax reform measures that significantly increase our worldwide tax liabilities. The U.S. Congress, the Organization for Economic Co-operation and Development and other government agencies in countries where we and our affiliates operate have focused on issues related to the taxation of multinational corporations, including, for example, in the area of "base erosion and profit shifting," where payments are made between affiliates from a jurisdiction with high tax rates to a jurisdiction with lower tax rates. These changes and other prospective changes in the U.S. and other countries in which we and our affiliates operate could increase our effective tax rate, and harm our financial position and results of operations.

Changes in healthcare laws and implementing regulations, as well as changes in healthcare policy, may affect coverage and reimbursement of our product candidates in ways that we cannot currently predict and these changes could adversely affect our business and financial condition.

In the U.S., a number of legislative and regulatory initiatives have focused on containing the cost of healthcare. The Patient Protection and Affordable Care Act, or PPACA, was enacted in the U.S. in March 2010. This law substantially changes the way healthcare is financed by both governmental and private insurers in the U.S., and significantly impacts the pharmaceutical industry. PPACA contains a number of provisions that are expected to impact our business and operations, in some cases in ways we cannot currently predict. Changes that may affect our business include those governing enrollment in federal healthcare programs, reimbursement changes, rules regarding prescription drug benefits under health insurance exchanges, expansion of the 340B program, expansion of state Medicaid programs, fraud and abuse enforcement and rules governing the approval of biosimilar products. These changes will impact existing government healthcare programs and will result in the development of new programs, including Medicare payment for performance initiatives and improvements to the physician quality reporting system and feedback program. In early 2016, CMS issued final regulations to implement the changes to the Medicaid Drug Rebate Program under PPACA. These regulations became effective on April 1, 2016. Moreover, in the future, Congress could enact legislation that further increases Medicaid drug rebates or other costs and charges associated with participating in the Medicaid Drug Rebate Program. Legislative changes to the PPACA also remain possible and appear likely in the 115th U.S. Congress under the Trump administration. The issuance of regulations and coverage expansion by various governmental agencies relating to the Medicaid Drug Rebate Program has and will continue to increase our costs and the complexity of compliance, has been and will be time-consuming, and could have a material adverse effect on our results of operations.

Governments in countries where we operate have adopted or have shown significant interest in pursuing legislative initiatives to reduce costs of healthcare. We expect that the implementation of current laws and policies, the amendment of those laws and policies in the future, as well as the adoption of new laws and policies, could have a material adverse effect on our industry generally and on our ability to maintain or increase our product sales or successfully commercialize our product candidates, or could limit or eliminate our future spending on development projects. In many cases, these government initiatives, even if enacted into law, are subject to future rulemaking by regulatory agencies. Although we have evaluated these government initiatives and the impact on our business, we cannot know with certainty whether any such law, rule or regulation will adversely affect coverage and reimbursement of our product candidates, or to what extent, until such laws, rules and regulations are promulgated, implemented and enforced, which could sometimes take many years. The announcement or adoption of regulatory or legislative proposals could delay or prevent our entry into new markets, affect our reimbursement or sales in the markets where we are already selling our products and materially harm our business, financial condition and results of operations.

We may be subject to numerous and varying privacy and security laws, and our failure to comply could result in penalties and reputational damage.

We are subject to laws and regulations covering data privacy and the protection of personal information including health information. The legislative and regulatory landscape for privacy and data protection continues to evolve, and there has been an increasing focus on privacy and data protection issues which may affect our

business. In the U.S., we may be subject to state security breach notification laws, state health information privacy laws and federal and state consumer protections laws which impose requirements for the collection, use, disclosure and transmission of personal information. Each of these laws are subject to varying interpretations by courts and government agencies, creating complex compliance issues for us. If we fail to comply with applicable laws and regulations we could be subject to penalties or sanctions, including criminal penalties if we knowingly obtain individually identifiable health information from a covered entity in a manner that is not authorized or permitted by HIPAA or for aiding and abetting the violation of HIPAA.

Numerous other countries have, or are developing, laws governing the collection, use and transmission of personal information as well. EU member states and other jurisdictions have adopted data protection laws and regulations, which impose significant compliance obligations. For example, the EC adopted the EU Data Protection Directive, as implemented into national laws by the EU member states, which imposed strict obligations and restrictions on the ability to collect, analyze, and transfer personal data, including health data from clinical trials and adverse event reporting. Data protection authorities from different EU member states have interpreted the privacy laws differently, which adds to the complexity of processing personal data in the European Union, and guidance on implementation and compliance practices are often updated or otherwise revised. Any failure to comply with the rules arising from the EU Data Protection Directive and related national laws of EU member states could lead to government enforcement actions and significant penalties against us, and adversely impact our operating results.

In May 2016, the European Union formally adopted the General Data Protection Regulation, which will apply to all EU member states from May 25, 2018 and will replace the current EU Data Protection Directive on that date. The regulation introduces new data protection requirements in the European Union and substantial fines for breaches of the data protection rules. It will increase our responsibility and liability in relation to personal data that we process and we may be required to put in place additional mechanisms ensuring compliance with the new EU data protection rules.

Security breaches, cyber-attacks, or other disruptions could expose us to liability and affect our business and reputation.

We are increasingly dependent on our information technology systems and infrastructure for our business. We collect, store, and transmit sensitive information including intellectual property, proprietary business information and personal information in connection with business operations. The secure maintenance of this information is critical to our operations and business strategy. Some of this information could be an attractive target of criminal attack by third parties with a wide range of motives and expertise, including organized criminal groups, “hactivists,” patient groups, disgruntled current or former employees, and others. Cyber-attacks are of ever-increasing levels of sophistication, and despite our security measures, our information technology and infrastructure may be vulnerable to such attacks or may be breached, including due to employee error or malfeasance. We have implemented information security measures to protect patients’ personal information against the risk of inappropriate and unauthorized external use and disclosure. However, despite these measures, and due to the ever-changing information cyber-threat landscape, we may be subject to data breaches through cyber-attacks. Any such breach could compromise our networks and the information stored there could be accessed, publicly disclosed, lost or stolen. If our systems become compromised, we may not promptly discover the intrusion. Like other companies in our industry, we have experienced attacks to our data and systems, including malware and computer viruses. If our systems failed or were breached or disrupted, we could lose product sales, and suffer reputational damage and loss of customer confidence. Such incidents would result in notification obligations to affected individuals and government agencies, legal claims or proceedings, and liability under federal and state laws that protect the privacy and security of personal information. Any one of these events could cause our business to be materially harmed and our results of operations would be adversely impacted.

We expect to rely on third parties to conduct some or all aspects of our product manufacturing, protocol development, research and preclinical and clinical testing, and these third parties may not perform satisfactorily.

We do not expect to independently conduct all aspects of our product manufacturing, protocol development, research and preclinical and clinical testing. We currently rely, and expect to continue to rely, on third parties with respect to these items.

Any of these third parties may terminate their engagements with us at any time. If we need to enter into alternative arrangements, it could delay our product development activities. Our reliance on these third parties for research and development activities will reduce our control over these activities but will not relieve us of our responsibility to ensure compliance with all required regulations and study protocols. If these third parties do not successfully carry out their contractual duties, meet expected deadlines or conduct our studies in accordance with regulatory requirements or our stated study plans and protocols, we will not be able to complete, or may be delayed in completing, the preclinical studies and clinical trials required to support future NDA submissions and approval of our product candidates.

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

- the inability to negotiate manufacturing agreements with third parties under commercially reasonable terms;
- reduced control as a result of using third-party manufacturers for all aspects of manufacturing activities;
- termination or nonrenewal of manufacturing agreements with third parties in a manner or at a time that is costly or damaging to us; and
- disruptions to the operations of our third-party manufacturers or suppliers caused by conditions unrelated to our business or operations, including the bankruptcy of the manufacturer or supplier.

Any of these events could lead to clinical trial delays or failure to obtain regulatory approval, or impact our ability to successfully commercialize future products. Some of these events could be the basis for FDA action, including injunction, recall, seizure or total or partial suspension of production. Any one of these events could cause our business to be materially harmed and our results of operations would be adversely impacted.

Our future success depends on our ability to retain key employees, consultants and advisors and to attract, retain and motivate qualified personnel.

The success of our business is dependent in large part on our continued ability to attract and retain our senior management, and other highly qualified personnel in our scientific, clinical, manufacturing and commercial organizations. Intense competition exists in the biopharmaceutical industry for these types of personnel. Our business is specialized and global and we must attract and retain highly qualified individuals across many geographies. We may not be able to continue to attract and retain the highly qualified personnel necessary for developing, manufacturing and commercializing our products and product candidates. If we are unsuccessful in our recruitment and retention efforts, or if our recruitment efforts take longer than anticipated, our business may be harmed.

We are highly dependent on principal members of our senior management, including Robert Ward, our Chief Executive Officer. While we have entered into employment agreements or offer letters with each of our executive officers, any of them could leave our employment at any time, as all of our employees are “at will” employees. Recruiting and retaining other qualified employees, consultants and advisors for our business, including scientific and technical personnel, will also be critical to our success. As a result, competition for

skilled personnel is intense and the turnover rate can be high. We may not be able to attract and retain personnel on acceptable terms given the competition among numerous pharmaceutical and biotechnology companies for individuals with similar skill sets. In addition, failure to succeed in preclinical studies or clinical trials may make it more challenging to recruit and retain qualified personnel. The inability to recruit or loss of the services of any executive, key employee, consultant or advisor may impede the progress of our research, development and commercialization objectives. If we fail to attract and retain highly qualified personnel, we may not be able to successfully develop, manufacture or commercialize our products or products candidates.

Risks Related to Intellectual Property

If we fail to adequately protect or enforce our intellectual property rights or secure rights to third party patents, the value of our intellectual property rights would diminish and our business, competitive position and results of operations would suffer.

As of December 31, 2017, we had 25 pending patent applications. However, the filing of a patent application does not mean that we will be issued a patent, or that any patent eventually issued will be as broad as requested in the patent application or sufficient to protect our technology. Any modification required to a current patent application may delay the approval of such patent application which would have a material adverse effect on our business, results of operations and financial condition. In addition, there are a number of factors that could cause our patents, if granted, to become invalid or unenforceable or that could cause our patent applications to not be granted, including known or unknown prior art, deficiencies in the patent application or the lack of originality of the technology. Our competitive position and future revenues will depend in part on our ability and the ability of our licensors and collaborators to obtain and maintain patent protection for our product candidates, methods, processes and other technologies, to preserve our trade secrets, to prevent third parties from infringing on our proprietary rights and to operate without infringing the proprietary rights of third parties. We have filed U.S. and international patent applications for process patents; however, we cannot predict:

- the degree and range of protection any patents will afford us against competitors and those who infringe upon our patents, including whether third parties will find ways to invalidate or otherwise circumvent our licensed patents;
- if and when patents will issue;
- whether or not others will obtain patents claiming aspects similar to those covered by our licensed patents and patent applications; or
- whether we will need to initiate litigation or administrative proceedings, which may be costly, and whether we win or lose.

If patent rights covering our products or technologies are not sufficiently broad, they may not provide us with sufficient proprietary protection or competitive advantages against competitors with similar products and technologies. Furthermore, if the U.S. Patent and Trademark Office or foreign patent offices issue patents to us or our licensors, others may challenge the patents or circumvent the patents, or the patent office or the courts may invalidate the patents. Thus, any patents we own or license from or to third parties may not provide any protection against our competitors and those who infringe upon our patents.

Furthermore, the life of our patents is limited. The patents we hold, and the patents that may be issued in the future based on patent applications from the patent families, relating to our lead product candidate are expected to expire between 2031 and 2037 depending on any extensions of term for which we may be eligible that we may be granted.

If we cannot obtain new patents, maintain our existing patents and protect the confidentiality and proprietary nature of our trade secrets and other intellectual property, our business and competitive position will be harmed.

Our success will depend in part on our ability to obtain and maintain patent and regulatory protections for our products and investigational compounds, to preserve our trade secrets and other proprietary rights, to operate without infringing the proprietary rights of third parties, and to prevent third parties from circumventing our rights. Due to the time and expense of bringing new product candidates through development and regulatory approval to the marketplace, there is particular importance in obtaining patent and trade secret protection for significant new technologies, products and processes.

We have and may in the future obtain patents or the right to practice patents through ownership or license. Our patent applications may not result in the issue of patents in the U.S. or other countries. Our patents may not afford adequate protection for our products. Third parties may challenge our patents. If any of our patents are narrowed, invalidated or become unenforceable, competitors may develop and market products similar to ours that do not conflict with or infringe our patents rights, which could have a material adverse effect on our financial condition. We may also finance and collaborate in research conducted by government organizations, hospitals, universities or other educational or research institutions. Such research partners may be unwilling to grant us exclusive rights to technology or products developed through such collaborations. There is also a risk that disputes may arise as to the rights to technology or products developed in collaboration with other parties. Our products and product candidates are expensive and time-consuming to test and develop. Even if we obtain and maintain patents, our business may be significantly harmed if the patents are not broad enough to protect our products from copycat products.

Significant legal questions exist concerning the extent and scope of patent protection for biopharmaceutical products and processes in the U.S. and elsewhere. Accordingly, there is no certainty that patent applications owned or licensed by us will issue as patents, or that our issued patents will afford meaningful protection against competitors. Once issued, patents are subject to challenge through both administrative and judicial proceedings in the U.S. and other countries. Such proceedings include re-examinations, inter partes reviews, post-grant reviews and interference proceedings before the U.S. Patent and Trademark Office, as well as opposition proceedings before the European Patent Office and other non-U.S. patent offices. Litigation may be required to enforce, defend or obtain our patent and other intellectual property rights. Any administrative proceeding or litigation could require a significant commitment of our resources and, depending on outcome, could adversely affect the scope, validity or enforceability of certain of our patent or other proprietary rights.

In addition, our business requires using sensitive technology, techniques and proprietary compounds that we protect as trade secrets. However, we may also rely heavily on collaboration with, or discuss the potential for collaboration with, suppliers, outside scientists and other biopharmaceutical companies. Collaboration and discussion of potential collaboration present a strong risk of exposing our trade secrets. If our trade secrets were exposed, it would help our competitors and adversely affect our business prospects.

If we are found to be infringing on patents owned by others, we may be forced to pay damages to the patent owner and/or obtain a license to continue the manufacture, sale or development of our products. If we cannot obtain a license, we may be prevented from the manufacture, sale or development of our products, which would adversely affect our business.

If we infringe the rights of third parties we could be prevented from selling products, forced to pay damages and required to defend against litigation which could result in substantial costs and may have a material adverse effect on our business, results of operations and financial condition.

We have not received to date any claims of infringement by any third parties. However, as our product candidates progress into clinical trials and commercialization, if at all, our public profile and that of our product candidates may be raised and generate such claims. Defending against such claims, and occurrence of a judgment adverse to us, could result in unanticipated costs and may have a material adverse effect on our business and competitive position. If our products, methods, processes and other technologies infringe the proprietary rights of other parties, we may incur substantial costs and we may have to:

- obtain licenses, which may not be available on commercially reasonable terms, if at all;

- redesign our products or processes to avoid infringement;
- stop using the subject matter claimed in the patents held by others, which could cause us to lose the use of one or more of our product candidates;
- defend litigation or administrative proceedings that may be costly whether we win or lose, and which could result in a substantial diversion of management resources; or
- pay damages.

Any costs incurred in connection with such events or the inability to sell our products may have a material adverse effect on our business, results of operations and financial condition.

We rely on confidentiality agreements that could be breached and may be difficult to enforce which could have a material adverse effect on our business and competitive position.

Our policy is to enter agreements relating to the non-disclosure of confidential information with third parties, including our contractors, consultants, advisors and research collaborators, as well as agreements that purport to require the disclosure and assignment to us of the rights to the ideas, developments, discoveries and inventions of our employees and consultants while we employ them. However, these agreements can be difficult and costly to enforce. Moreover, to the extent that our contractors, consultants, advisors and research collaborators apply or independently develop intellectual property in connection with any of our projects, disputes may arise as to the proprietary rights to the intellectual property. If a dispute arises, a court may determine that the rights belongs to a third party, and enforcement of our rights can be costly and unpredictable. In addition, we rely on trade secrets and proprietary know-how that we seek to protect in part by confidentiality agreements with our employees, contractors, consultants, advisors and other third parties. Despite the protective measures we employ, we still face the risk that:

- these agreements may be breached;
- these agreements may not provide adequate remedies for the applicable type of breach; or
- our trade secrets or proprietary know-how will otherwise become known.

Any breach of our confidentiality agreements or our failure to effectively enforce such agreements may have a material adverse effect on our business and competitive position.

If we cannot meet requirements under our license agreement, we could lose the rights to our products, which could have a material adverse effect on our business.

We depend on the license agreement with TRDF to maintain the intellectual property rights to certain of our product candidates. Our license agreement requires us to make payments and satisfy performance obligations in order to maintain our rights under this agreement. This agreement lasts either throughout the life of the patents that are the subject of the agreement, or with respect to other licensed technology, for a number of years after the first commercial sale of the relevant product.

In addition, we are responsible for the cost of filing and prosecuting certain patent applications and maintaining certain issued patents licensed to us. If we do not meet our obligations under our license agreement in a timely manner, we could lose the rights to our proprietary technology, which could have a material adverse effect on our business, results of operations and financial condition.

Risks Related to Our Operations in Israel

Potential political, economic and military instability in the State of Israel, where our research facilities are located, may adversely affect our results of operations.

Our research offices and lab are located in the State of Israel. Accordingly, political, economic and military conditions in Israel and the surrounding region may directly affect our business. Since the establishment of the State of Israel in 1948, a number of armed conflicts have taken place between Israel and its neighboring Arab countries, the Hamas militant group and the Hezbollah. Any hostilities involving Israel or the interruption or curtailment of trade between Israel and its trading partners could adversely affect our operations and results of operations. Since October 2000, there have been increasing occurrences of terrorist violence. In 2006, a conflict between Israel and the Hezbollah in Lebanon resulted in thousands of rockets being fired from Lebanon into Israel. In 2008, Israel engaged in an armed conflict with Hamas in the Gaza Strip, which involved missile strikes against Israel and negatively affected business conditions in Israel. In 2012, Israel experienced a similar armed conflict, resulting in hundreds of rockets being fired from the Gaza Strip. In 2014, Israel yet again experienced rocket strikes against civilian targets in various parts of Israel, as part of an armed conflict commenced between Israel and Hamas. Ongoing and revived hostilities or other Israeli political or economic factors, such as, an interruption of operations at the Tel Aviv airport, could prevent or delay shipments of our components or products. If continued or resumed, these hostilities may negatively affect business conditions in Israel in general and our business in particular. In the event that hostilities disrupt the ongoing operation of our facilities or the airports and seaports on which we depend to import and export our supplies and product candidates, our operations may be materially adversely affected.

In addition, since 2010 political uprisings and conflicts in various countries in the Middle East, including Egypt and Syria, are affecting the political stability of those countries. It is not clear how this instability will develop and how it will affect the political and security situation in the Middle East. This instability has raised concerns regarding security in the region and the potential for armed conflict. In Syria, a country bordering Israel, a civil war is taking place. In addition, it is widely believed that Iran, which has previously threatened to attack Israel, has been stepping up its efforts to achieve nuclear capability. Iran is also believed to have a strong influence among extremist groups in the region, such as Hamas in Gaza and Hezbollah in Lebanon. Additionally, the Islamic State of Iraq and Levant, or ISIL, a violent jihadist group, is involved in hostilities in Iraq and Syria. Although ISIL's activities have not directly affected the political and economic conditions in Israel, ISIL's stated purpose is to take control of the Middle East, including Israel. The tension between Israel and Iran and/or these groups may escalate in the future and turn violent, which could affect the Israeli economy in general and us in particular. Any potential future conflict could also include missile strikes against parts of Israel, including our offices and facilities. Such instability may lead to deterioration in the political and trade relationships that exist between the State of Israel and certain other countries. Any armed conflicts, terrorist activities or political instability in the region could adversely affect business conditions, could harm our results of operations and could make it more difficult for us to raise capital. Parties with whom we do business may sometimes decline to travel to Israel during periods of heightened unrest or tension, forcing us to make alternative arrangements when necessary in order to meet our business partners face to face. Several countries, principally in the Middle East, still restrict doing business with Israel and Israeli companies, and additional countries may impose restrictions on doing business with Israel and Israeli companies if hostilities in Israel or political instability in the region continues or increases. Similarly, Israeli companies are limited in conducting business with entities from several countries. For instance, in 2008, the Israeli legislature passed a law forbidding any investments in entities that transact business with Iran. In addition, the political and security situation in Israel may result in parties with whom we have agreements involving performance in Israel claiming that they are not obligated to perform their commitments under those agreements pursuant to force majeure provisions in such agreements.

Our insurance does not cover losses that may occur as a result of an event associated with the security situation in the Middle East or for any resulting disruption in our operations. Although the Israeli government has in the past covered the reinstatement value of direct damages that were caused by terrorist attacks or acts of war, we cannot assure you that this government coverage will be maintained or, if maintained, will be sufficient to

compensate us fully for damages incurred and the government may cease providing such coverage or the coverage might not suffice to cover potential damages. Any losses or damages incurred by us could have a material adverse effect on our business. Any armed conflicts or political instability in the region would likely negatively affect business conditions generally and could harm our results of operations.

Furthermore, in the past, the State of Israel and Israeli companies have been subjected to economic boycotts. Several countries still restrict business with the State of Israel and with Israeli companies. These restrictive laws and policies may have an adverse impact on our operating results, financial conditions or the expansion of our business.

Our research operations may be disrupted by the obligations of our personnel to perform military service which could have a material adverse effect on our business.

Our employees and consultants in Israel may be obligated to perform one month, and in some cases longer periods, of military reserve duty until they reach the age of 40 (or older, for citizens who hold certain positions in the Israeli armed forces reserves) and, in the event of a military conflict or emergency circumstances, may be called to immediate and unlimited active duty. In the event of severe unrest or other conflict, individuals could be required to serve in the military for extended periods of time. In response to increases in terrorist activity, there have been periods of significant call-ups of military reservists. It is possible that there will be similar large-scale military reserve duty call-ups in the future. Our operations could be disrupted by the absence of a significant number of our officers, directors, employees and consultants related to military service. Such disruption could materially adversely affect our business and operations. Additionally, the absence of a significant number of the employees of our Israeli suppliers and contractors related to military service or the absence for extended periods of one or more of their key employees for military service may disrupt their operations.

Because a certain portion of our expenses are incurred in New Israeli Shekels, or NIS, our results of operations may be seriously harmed by currency fluctuations and inflation.

We report our financial statements in U.S. dollars, our functional currency. Although most of our expenses are incurred in U.S. dollars, we pay a portion of our expenses in New Israeli Shekels, or NIS, and as a result, we are exposed to risk to the extent that the inflation rate in Israel exceeds the rate of devaluation of the NIS in relation to the U.S. dollar or if the timing of these devaluations lags behind inflation in Israel. In that event, the U.S. dollar cost of our operations in Israel will increase and our U.S. dollar-measured results of operations will be adversely affected. To the extent that the value of the NIS increases against the dollar, our expenses on a dollar cost basis increase. Our operations also could be adversely affected if we are unable to guard against currency fluctuations in the future. To date, we have not engaged in hedging transactions. In the future, we may enter into currency hedging transactions to decrease the risk of financial exposure from fluctuations in the exchange rate of the U.S. dollar against the NIS. These measures, however, may not adequately protect us from material adverse effects.

We received Israeli government grants for our research and development activities and programs. The terms of such grants may require us, in the future, to pay royalties and to satisfy specific conditions if and to the extent we receive future royalties or in order to complete the sale of such grant-based technologies and programs. We may be required to pay penalties in addition to payment of the royalties.

Our research and development efforts have been financed, in part, through royalty-bearing grants from the IIA. As of December 31, 2017, we have received the aggregate amount of approximately $2.6 million from the IIA for the development of our abovementioned technologies. With respect to such grants we are committed to pay certain royalties (including accrued LIBOR interest) up to $2.7 million. We are required to comply with the requirements of the Israeli Encouragement of Research, Development and Technological Innovation in the Industry Law, 5744-1984, as amended, and related regulations, or the Research Law, with respect to these past grants. If we fail to comply with the Research Law, we may be required to refund certain grants previously received and/or to pay interest and penalties and we may become subject to criminal charges.

We have not commenced the payment obligation of the royalties and have a contingent obligation with respect to royalty-bearing participation received or accrued, to include LIBOR interest, in the amount of $2.7 million**.**

In the past, we received Israeli government grants for certain of our research and development activities. The terms of those grants may require us, in addition to payment of royalties, to satisfy specified conditions in order to manufacture products and transfer technologies outside of Israel. We may be required to pay penalties in addition to repayment of the grants.

We received Israeli government grants for certain of our research and development activities from the IIA. With respect to such grants we are obligated to pay royalties at a rate of 3% to 6% from the revenues generated from the sale of product (as well as revenue from associated services) developed using the IIA grants up to the total amount of grants received, linked to the U.S. dollar and bearing interest at an annual rate of LIBOR applicable to dollar deposits.

A recent amendment, or Amendment No. 7, to the Law for the Encouragement of Research, Development and Technological Innovation in the Industry, 1984-5744, or the R&D Law, mandated the formation of the IIA to replace the Chief Scientist. Pursuant to Amendment No. 7, the IIA may establish new guidelines and promulgate new regulations under the R&D Law. These changes in the structure of the IIA and the R&D Law may affect our existing or future IIA programs and related obligations. At this stage, we cannot predict what changes, if any, the new authority may make.

The R&D Law and the regulations promulgated thereunder provide that when a company develops know-how, technology or products using IIA grants, the terms of these grants and the R&D Law restrict the transfer of such know-how, and the transfer of manufacturing or manufacturing rights of such products, technologies or know-how outside of Israel, without the prior approval of the IIA. Therefore, if aspects of our technologies are deemed to have been developed with IIA funding according to the R&D Law, the discretionary approval of the IIA may be required for any assignment and/or transfer to third parties inside or outside of Israel of know-how or transfer outside of Israel of manufacturing or manufacturing rights related to those aspects of such technologies, and may result in payment of increased royalties (both increased royalty rates and increased royalties ceilings) and/or payment of additional amounts to the IIA. Such approvals may be subject to conditions and\or may not be received. Furthermore, according to the R&D Law, the IIA may impose certain conditions on any arrangement under which it permits us to transfer technology or development out of Israel (including for the purpose of manufacturing).

The R&D Law and the regulations promulgated thereunder provide that the transfer of IIA-supported technology or know-how outside of Israel may involve the payment of additional amounts depending upon the value of the transferred technology or know-how, the amount of IIA support, the time of completion of the IIA-supported research project and other factors up to a maximum of six times the amount of grants received. These restrictions and requirements for payment may impair our ability to sell our technology assets outside of Israel or to outsource or transfer development or manufacturing activities with respect to any product or technology outside of Israel. Furthermore, the consideration available to our stockholders in a transaction involving the transfer outside of Israel of technology or know-how developed with IIA funding (such as a merger or similar transaction) may be reduced by any amounts that we are required to pay to the IIA. Our obligations and limitations pursuant to the R&D Law are not limited in time and may not be terminated by us at will. As of the date hereof, we have not been required to pay any royalties with respect to the IIA grants.

We may become subject to claims for remuneration or royalties for assigned service invention rights by our employees, which could result in litigation and adversely affect our business.

We enter into agreements with our employees pursuant to which they agree that any inventions created in the scope of their employment or engagement are assigned to us or owned exclusively by us, depending on the jurisdiction, without the employee retaining any rights. A significant portion of our intellectual property has been

developed by our employees in the course of their employment for us. Under the Israeli Patent Law, 5727-1967 (the "Patent Law"), inventions conceived by an employee during the scope of his or her employment with a company are regarded as "service inventions," which belong to the employer, absent a specific agreement between the employee and employer giving the employee service invention rights. The Patent Law also provides that if there is no such agreement between an employer and an employee, the Israeli Compensation and Royalties Committee (the "Committee"), a body constituted under the Patent Law, shall determine whether the employee is entitled to remuneration for his or her inventions. Recent decisions by the Committee and the Israeli Supreme Court have created uncertainty in this area, as the Israeli Supreme Court held that employees may be entitled to remuneration for their service inventions despite having specifically waived any such rights. Further, the Committee has not yet determined the method for calculating this Committee-enforced remuneration. Although our employees have agreed that any rights related to their inventions are owned exclusively by us, we may face claims demanding remuneration in consideration for such acknowledgement. As a consequence of such claims, we could be required to pay additional remuneration or royalties to our current and/or former employees, or be forced to litigate such claims, which could negatively affect our business.

Risks Related to Our Common Stock

Our stock price may be volatile and purchasers of our common stock could incur substantial losses.

The trading price of our common stock has been volatile and may continue to be volatile and subject to wide fluctuations in the future. Many factors could have an impact on our stock price, including fluctuations in our or our competitors' operating results, clinical trial results or adverse events associated with our product candidates, product development by us or our competitors, changes in laws, including healthcare, tax or intellectual property laws, intellectual property developments, acquisitions or other strategic transactions, changes in financial or operational estimates or projections and the perceptions of our investors that we are not performing or meeting expectations. The trading price of the common stock of many biopharmaceutical companies, including ours, has experienced extreme price and volume fluctuations, which have at times been unrelated to the operating performance of the companies whose stocks were affected.

In addition, the securities market has from time to time experienced significant price and volume fluctuations that are not related to the operating performance of particular companies. These market fluctuations may also materially and adversely affect the market price of shares of our common stock.

Directors, executive officers, principal stockholders and affiliated entities own a significant percentage of our capital stock, and they may make decisions that an investor may not consider to be in the best interests of our stockholders.

Our directors, executive officers, principal stockholders and affiliated entities beneficially own, in the aggregate, approximately 70% of our common stock, as of December 31, 2017, giving effect to options, convertible notes and other derivative securities that are held by such persons that are exercisable within such 60 days from such date. As a result, if some or all of them acted together, they would have the ability to exert substantial influence over the election of our board of directors and the outcome of issues requiring approval by our stockholders. This concentration of ownership may have the effect of delaying or preventing a change in control of our company that may be favored by other stockholders. This could prevent the consummation of transactions favorable to other stockholders, such as a transaction in which stockholders might otherwise receive a premium for their shares over current market prices.

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

Additional capital will be needed in the future to continue our planned operations. To the extent we raise additional capital by issuing equity securities, our stockholders may experience substantial dilution. We may sell

common stock, convertible securities or other equity securities in one or more transactions at prices and in a manner, we determine from time to time. If we sell common stock, convertible securities or other equity securities in one or more transactions, existing investors may be materially diluted by subsequent sales, and new investors could gain rights superior to our existing stockholders.

Pursuant to the Share Ownership and Option Plan (2013), or the 2013 Plan, and the 2008 Equity Incentive Plan, or the 2008 Plan, our management is authorized to grant share options and other equity-based awards to our employees, directors and consultants. As of December 31, 2017, our employees and officers held share options to purchase an aggregate of 3,252,785 shares of common stock under our 2013 Plan. If our board of directors elects to increase the number of shares available for future grant by the maximum amount each year, our stockholders may experience additional dilution, which could cause our share price to fall.

ITEM 1B. UNRESOLVED STAFF COMMENTS

None.

ITEM 2. PROPERTIES

Our principal executive offices are currently located at 950 Winter Street, Waltham, Massachusetts, and consist of 3,736 square feet of office space under lease until December 2020, with an option to extend the lease period for additional 3 years. Our research headquarters is located in Park Tamar, Rehovot, Israel and consists of approximately 225 square meters of office space under a lease that expires on April 2020.

ITEM 3. LEGAL PROCEEDINGS

From time to time, we may become involved in various lawsuits and legal proceedings, which arise in the ordinary course of business. We are currently unaware of any material pending legal proceedings to which we are party or of which our property is the subject. However, we may at times in the future become involved in litigation in the ordinary course of business, which may include actions related to or based on our intellectual property and its use, customer claims, employment practices and employee complaints and other events arising out of our operations. When appropriate in management's estimation, we will record adequate reserves in our financial statements for pending litigation. Litigation is subject to inherent uncertainties, and an adverse result in any such matters could adversely impact our reputation, operations, and our financial operating results or overall financial condition. Additionally, any litigation to which we may become subject could also require significant involvement of our senior management and may divert management's attention from our business and operations.

ITEM 4. MINE SAFETY DISCLOSURES

None.

PART II

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

Market Information for Common Stock

Our common stock is traded on the OTCQB Market under the symbol "ELOX." Prior to completion of the Transaction, our common stock was traded under the symbol "SVON."

The following table sets forth, for the fiscal periods indicated, the high and low bid prices of a share of our common stock as reported by the OTCQB Market. All periods except for the quarter ending December 31, 2017 reflect the periods prior to the completion of the Transaction and do not reflect the reverse stock split effected on December 19, 2017. Such quotations reflect inter-dealer prices, without retail mark-up, mark-down or commission and may not necessarily represent actual transactions.

	HIGH	LOW
Quarters Ended		
September 30, 2015	$0.99	$0.55
December 31, 2015	$0.72	$0.32
March 31, 2016	$0.40	$0.19
June 30, 2016	$0.28	$0.15
September 30, 2016	$0.22	$0.08
December 31, 2016	$0.20	$0.11
March 31, 2017	$0.30	$0.16
June 30, 2017	$0.38	$0.16
September 30, 2017	$0.36	$0.18
December 31, 2017*	$8.80	$4.00

* Reflects reverse stock split effected on December 19, 2017.

The closing price of our common stock as reported by the OTCQB Market on March 14, 2018 was $7.15 per share. As of March 14, 2018 there were approximately 23 holders of record of our common stock. The actual number of holders of our common stock is greater than this number of record holders, and includes stockholders who are beneficial owners, but whose shares are held in street name by brokers or held by other nominees. This number of holders of record also does not include stockholders whose shares may be held in trust by other entities.

Issuer Purchases of Equity Security

There were no repurchases of our common stock during the fourth quarter of 2017.

Dividend Policy

We have not paid dividends on our common stock since inception and we do not intend to pay any dividends to our stockholders in the foreseeable future. We expect that any earnings, which we may realize, will be retained to finance the growth of our company. The declaration of dividends in the future will be at the election of our board of directors and will depend upon our earnings, capital requirements, financial position, general economic conditions, and other factors the board of directors deem relevant.

Recent Sales of Unregistered Securities

None, except as previously disclosed on our Quarterly Reports on Forms 10-Q and Current Reports on Forms 8-K.

ITEM 6. SELECTED FINANCIAL DATA

Not applicable to a "smaller reporting company", as defined in Item 10(f)(1) of SEC Regulation S-K.

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

The following information should be read in conjunction with the consolidated financial statements and related notes thereto included in this Annual Report on Form 10-K

Except for the historical information contained herein, the matters discussed in this Annual Report on Form 10-K may be deemed to be forward-looking statements that involve risks and uncertainties. We make such forward-looking statements pursuant to the safe harbor provisions of the Private Securities Litigation Reform Act of 1995 and other federal securities laws. In this Annual Report on Form 10-K, words such as "may," "expect," "anticipate," "estimate," "intend," and similar expressions (as well as other words or expressions referencing future events, conditions or circumstances) are intended to identify forward-looking statements.

Our actual results and the timing of certain events may differ materially from the results discussed, projected, anticipated, or indicated in any forward-looking statements. We caution you that forward-looking statements are not guarantees of future performance and that our actual results of operations, financial condition and liquidity, and the development of the industry in which we operate may differ materially from the forward-looking statements contained in this Annual Report. In addition, even if our results of operations, financial condition and liquidity, and the development of the industry in which we operate are consistent with the forward-looking statements contained in this Annual Report, they may not be predictive of results or developments in future periods.

The following information and any forward-looking statements should be considered in light of factors discussed elsewhere in this Annual Report on Form 10-K, including those risks identified under Item 1A. Risk Factors. In many instances, dollar amounts contained in the narrative descriptions in the following section of this Annual Report are stated in approximate values, pursuant to generally accepted rounding conventions. We caution readers not to place undue reliance on any forward-looking statements made by us, which speak only as of the date they are made. We disclaim any obligation, except as specifically required by law and the rules of the SEC, to publicly update or revise any such statements to reflect any change in our expectations or in events, conditions or circumstances on which any such statements may be based, or that may affect the likelihood that actual results will differ from those set forth in the forward-looking statements.

Reverse Merger

On December 19, 2017, Sevion Therapeutics, Inc. ("Sevion") acquired Eloxx Pharmaceuticals, Limited ("Private Eloxx" or "Eloxx Limited") pursuant to a merger between the companies (the "Transaction" or "Reverse Merger"). Upon consummation of the Transaction (the "Closing"), Sevion adopted the business plan of Private Eloxx and discontinued the pursuit of Sevion's business plan pre-Closing. In connection with the Transaction, Sevion agreed to acquire all of the outstanding capital stock of Private Eloxx in exchange for the issuance of an aggregate 20,316,656 shares of Sevion's common stock, par value $0.01 per share (the "Common Stock"), after giving effect to a 1-for-20 reverse split effected immediately prior to the Transaction. As a result of the Transaction, Private Eloxx became a wholly-owned subsidiary of Sevion. While Sevion was the legal acquirer in the transaction, Private Eloxx was deemed the accounting acquirer. Immediately after giving effect to the Transaction, on December 19, 2017, Sevion changed its name to Eloxx Pharmaceuticals, Inc. ("Eloxx" or the "Company").

The annual consolidated financial statements of the Company reflect the operations of Private Eloxx as the acquirer for accounting purposes, together with a deemed issuance of shares, equivalent to the shares held by the stockholders of the legal acquirer, Sevion, prior to the Transaction, and a recapitalization of the equity of the accounting acquirer. The annual consolidated financial statements include the accounts of the Company since the effective date of the Reverse Merger and the accounts of Private Eloxx since inception.

Upon closing of the Reverse Merger, the Company assumed the obligations under outstanding warrants previously issued by Eloxx Limited to purchase its share capital and, in connection therewith, issued warrants to purchase 346,307 shares of the Company's common stock to certain warrant holders of Eloxx Limited.

In addition, upon closing of the Reverse Merger, the Company assumed all of the outstanding obligations under the Eloxx 2013 Share Ownership and Option Plan (the "2013 Plan") and, accordingly, the Company has reserved 2,307,738 shares of the Company's common stock for issuance upon the exercise of such options. As part of the Company's assumption of the outstanding options under the 2013 Plan, the Company also assumed the 2013 Plan and accordingly reserved 189,751 shares of the Company's common stock for future grants.

Immediately prior to the closing of the Reverse Merger the Company raised gross proceeds of $13.5 million at a price per share of $0.15 from accredited investors as a private placement. The amount was raised pursuant a share purchase agreement dated May 31, 2017, as amended between Eloxx Limited and a group of accredited investors, ("Eloxx SPA"). Under the Eloxx SPA and the first joinder thereunder executed on June 29, 2017, Eloxx Limited received gross proceeds of $15.0 million from the group of accredited investors. In accordance with the terms of the Eloxx SPA, each of the investors executed a separate subscription agreement with the Company for the total investment of an additional $15.0 million in exchange for the Company's shares of common stock at a price per share of $0.15 immediately prior to the consummation of the Reverse Merger. With the consent of the parties, an amount of $1.5 million was invested by an accredited investor under the subscription agreement into Sevion.

On August 2, 2017, Eloxx Limited raised under a second joinder to the Eloxx SPA, an additional aggregate amount of $8.0 million, half of the amount was invested in Eloxx Limited on August 2, 2017 and the remainder was invested in Eloxx Limited immediately prior to the consummation of the Reverse Merger but was deemed an investment in the Company's share capital for the purpose of the exchange ratio under the Agreement.

This private placement was made solely to "accredited investors," as that term is defined in Regulation D under the Securities Act of 1933, as amended (the "Securities Act"), and was conducted in reliance on the exemption from registration afforded by Section 4(2), Rule 506 of Regulation D and Regulation S under the Securities Act, as amended, and corresponding provisions of state securities laws.

Following the Reverse Merger and reverse stock split, and commencing December 20, 2017, the Company's Common Stock symbol on OTCQB marketplace changed to "SVOND", and subsequently changed to "ELOX" on January 19, 2018.

Effective with the Reverse Merger each member of the Board of Directors of Eloxx Limited prior to the Reverse Merger was appointed to the Company's Board of Directors. In addition, each officer of Eloxx Limited was reappointed as an officer of the Company. Also effective with the Reverse Merger, the Company's Board affirmed its financial year end as December 31, 2017 to align with the fiscal year end of Eloxx Limited.

Company Overview

We are a global biopharmaceutical company focused on discovering and developing novel therapeutics for the treatment of rare and ultra-rare premature stop codon diseases. We are harnessing the science of genetic read-through to develop novel drug product candidates that interact with the ribosome to overcome these premature stop codons. Our revolutionary small molecule approach is designed to unleash the potential to restore production of full length functional proteins with the goal of enabling a return toward normal cellular function. We believe there is a broad application of this approach to the over 1800 rare and ultra-rare diseases where nonsense mutation has been implicated in the cause or pathway of human disease.

Our research and development strategy is to target rare or ultra-rare diseases where a high unmet medical need, nonsense mutation bearing, patient population has been identified. We focus on clinical indications where there is a high unmet medical need, established preclinical read-through or personalized medicine experiments that are predictive of clinical activity, and a definable path for Orphan Drug development, regulatory approval, patient access and commercialization. We believe patient advocacy to be an important element of patient focused drug development and seek opportunities to collaborate with patient advocacy groups throughout the discovery and development process. Our current clinical focus is on cystic fibrosis (or "CF") and cystinosis where we are advancing our lead drug product candidate ELX-02.

We intend to be the global leader in the application of the science of translational read through and the associated pathway of nonsense mediated messenger ribonucleic acid ("mRNA") decay. We believe that expanding our expertise across these basic science areas of mRNA regulation, ribosomal function, and protein translation forms a solid foundation to support our discovery and development activities. Our compounds modulate the activity of the ribosome, the organelle within living cells responsible for protein production, a process also known as translation. These novel small molecule compounds are designed to allow the ribosome to read-through a nonsense mutation in mRNA (which is transcribed from the DNA sequence), to restore the translation process to produce full length, functional proteins and increase the amount of mRNA that would otherwise be degraded as part of a phenomenon called nonsense mediated mRNA decay. As our compounds target the general mechanism for protein production in the cell, we believe they have the potential to treat hundreds of genetic diseases where nonsense mutations have impaired gene function. Our subcutaneously injected small molecules have the potential to be self-administered and to be active at most tissue locations across the body.

We believe that our library of related novel small molecules hold the potential to be a disease-modifying therapies that may change the course of hundreds of genetic diseases and improve the lives of patients. Our early preclinical data in animal models of nonsense mutations suggests that drug product candidates from our read through compound library may have potential beneficial effects for each of the following diseases: cystic fibrosis, cystinosis, mucopolysaccharidosis type 1, Duchenne muscular dystrophy and Rett syndrome, and have demonstrated the potential for beneficial effects in multiple organs such as the brain, kidney, muscles and others. We intend to advance one or more additional molecules from our drug product candidate library toward clinical development by initiating the required investigational new drug ("IND")-enabling studies in 2018.

Currently our lead program, ELX-02, is focused on development for cystic fibrosis and cystinosis patients with diagnosed nonsense mutations. To advance the program, we have held pre-clinical trial application (CTA) discussions with the Federal Agency for Medicines and Health Products (the "FAMHP") in Brussels Belgium and pre-IND discussions with the U.S. Food & Drug Administration (the "FDA") for cystic fibrosis and cystinosis, respectively. We are on-track for mid-2018 submission of our IND and CTA. Approval of these submissions will be required for initiation of Phase 2 studies in cystic fibrosis and cystinosis in 2018.

As part of our clinical program, we have completed a Phase 1 single ascending dose ("SAD") study in a total of 60 healthy volunteers at sites in Israel (ClinicalTrials.gov Identifier: NCT02807961) and Belgium (ClinicalTrials.gov Identifier: NCT03292302). Currently ongoing is the Phase 1 multiple ascending dose ("MAD") study in 45 healthy volunteers in Belgium (ClinicalTrials.gov Identifier: NCT03309605). We anticipate that the Phase 1 MAD study will be completed in 2018. The results from the completed Phase 1 study will be included in the planned IND and CTA submissions.

We believe there is a significant unmet medical need in the treatment of Cystic Fibrosis patients carrying nonsense mutations on one or both alleles of the Cystic Fibrosis Transmembrane Conductance Regulator ("CFTR") gene. Cystic fibrosis is the most prevalent genetic disease in the western world and there are no currently approved therapies that target the impairment associated with Class 1 CFTR mutations. We believe that nonsense mutations may impact a similar proportion of patients diagnosed with cystinosis. There are no currently approved therapeutics that target the nonsense mutation mediated impairment of cystinosin the cystine-selective

transport channel in the lysosomal membrane that is attributed as the cause for the accumulation of cystine in this disease state. Given the high proportion of pediatric patients in each of these rare orphan diseases we intend to apply for relevant Orphan Drug incentives in the US and Europe, including the Rare Pediatric Disease Priority Review Voucher.

Currently, the European Medicines Agency (the "EMA") has designated ELX-02 as an orphan medicine for the treatment of mucopolysaccharidosis type I ("MPS I"), and the FDA has granted orphan drug designation to ELX-02 for the treatment of MPS I and for the treatment of Rett Syndrome.

We hold worldwide development and commercialization rights to ELX-02 and novel compounds in our read-through library, for all indications, in all territories, under a license from the Technion Research and Development Foundation Ltd. Professor Timor Baasov, the inventor of our compounds, has served as our senior consultant since our incorporation.

As of December 31, 2017, we had cash and cash equivalents of $24.0 million. We expect that our current cash and cash equivalents will be sufficient to fund our current operations at least through the end of the first quarter of 2019.

Since our inception, we have incurred significant operating losses. Our net losses were $21.2 million and $9.8 million for each of the years ended December 31, 2017 and 2016, respectively. As of December 31, 2017, we had an accumulated deficit of $39.0 million. To date, we have financed our operations primarily through equity capital investments, and to a lesser extent from loans and grants from Israeli Innovation Authority of the Ministry of Economy and Industry, or the IIA. We have devoted substantially all of our financial resources and efforts to research and development. We expect that it will be many years, if ever, before we receive regulatory approval and have a product candidate ready for commercialization. We expect to continue to incur significant expenses and increasing operating losses for the foreseeable future. Our net losses may fluctuate significantly from quarter to quarter and year to year. We anticipate that our expenses will increase substantially if and as we:

- advance ELX-02 further into clinical trials;
- continue the preclinical development of our research programs and advance candidates into clinical trials;
- identify additional product candidates and advance them into preclinical development;
- pursue regulatory approval of product candidates;
- seek marketing approvals for our product candidates that successfully complete clinical trials;
- establish a sales, marketing and distribution infrastructure to commercialize any product candidates for which we obtain marketing approval;
- maintain, expand and protect our intellectual property portfolio;
- hire additional clinical, regulatory and scientific personnel;
- add operational, financial and management information systems and personnel, including personnel to support product development;
- acquire or in-license other product candidates and technologies; and
- operate as a public company.

Results of Operations

Comparison of the Years Ended December 31, 2017 and 2016

The following table is in thousands:

	Year Ended December 31,	
	2017	2016
Operating expenses:		
Research and development, net	$16,398	$8,986
General and administrative	3,992	854
Total operating costs	20,390	9,840
Financial and other expenses, net	824	7
Net loss	$21,214	$9,847

Research and development expenses, net.

Research and development expenses were $16.4 million for the year ended December 31, 2017 compared to $9.0 million for the year ended December 31, 2016, an increase of $7.4 million. The increase in research and development expenses was primarily related to the provision recorded related to the exit fee for Technion of $3.4 million, along with fees incurred to subcontractors, consultants and advisors in connection with research and development of our ELX-02 of $3.2 million (including a deduction of research and development grants we received from the IIA) and salaries and other personnel related costs of $0.8 million.

General and administrative expenses.

General and administrative expenses were $4.0 million for the year ended December 31, 2017 compared to $0.8 million for the year ended December 31, 2016, an increase of $3.1 million. The increase in general and administrative expenses was primarily related to salaries, stock-based compensation, and other personnel related costs of $1.0 million, professional services of $0.6 million, and Reverse Merger related costs of $1.3 million.

Financial and other expenses, net.

We recorded $0.8 million in financial and other expenses for the year ended December 31, 2017 compared to $7,000 for the year ended December 31, 2016, an increase of $0.8 million. The increase in other expenses, net was primarily due to $0.6 million of amortization and revaluation of embedded conversion feature in respect to convertible loan and $0.2 million of exchange rate differences.

Net operating loss carryforwards

As of December 31, 2017, we had U.S. federal and state NOL carryforwards of $77.2 million and $27.4 million, respectively, and federal research tax credit carryforwards of $0.7 million. Our U.S. net operating loss carryforwards will begin to expire, if not utilized, beginning in 2019 through 2037, and the research tax credits will expire beginning in 2027 through 2037. These NOL carryforwards could expire unused and be unavailable to offset future income tax liabilities. Under the newly enacted Tax Cuts and Jobs Act (“Tax Act”), federal net operating losses incurred in 2018 and in future years may be carried forward indefinitely, but the deductibility of such federal net operating losses is limited. It is uncertain if and to what extent various states will conform to the newly enacted federal tax law. See Note 12: Income Taxes.

Comparison of the Years Ended December 31, 2016 and 2015

The following table is in thousands:

	Year Ended December 31,	
	2016	2015
Operating expenses:		
Research and development, net	$8,986	$5,842
General and administrative	854	442
Total operating costs	9,840	6,284
Financial and other expenses, net	7	122
Net loss	$9,847	$6,406

Research and development expenses, net.

Research and development expenses were $9.0 million for the year ended December 31, 2016, compared to $5.8 million for the year ended December 31, 2015, an increase of $3.2 million. The increase in research and development expenses was primarily related to salaries, stock-based compensation and other personnel related costs of $0.7 million and net fees incurred to subcontractors, consultants and advisors in connection with research and development of ELX-02 of $2.5 million.

General and administrative expenses.

General and administrative expenses were $0.9 million for the year ended December 31, 2016, compared to $0.4 million for the year ended December 31, 2015, an increase of $0.5 million. The increase in general and administrative expenses during these periods is primarily related to patent fees of $0.3 million and professional service fees of $0.1 million.

Financial and other expenses, net.

We recorded $7,000 in financial and other expenses for the year ended December 31, 2016 compared to $0.1 million for the year ended December 31, 2015. The decrease was due to $0.1 million of exchange rate differences in 2015.

Liquidity and Capital Resources

General

Liquidity is the ability of a company to generate funds to support its current and future operations, satisfy its obligations, and otherwise operate on an ongoing basis. Significant factors in the management of liquidity are funds generated by operations, levels of accounts receivable and accounts payable and capital expenditures. Since our inception and through December 31, 2017 we have funded our operations primarily through equity and convertible debt financings in private placements, as described below.

As of December 31, 2017, we had cash and cash equivalents of $24.0 million. We expect that our cash and cash equivalents as of December 31, 2017 will enable us to fund our current operations at least through the end of the first quarter of 2019. Our future viability beyond that point is dependent on our ability to raise additional capital to finance our operations. Although we have been successful in raising capital in the past, there is no assurance that we will be successful in obtaining such additional financing on terms acceptable to us, if at all. If we are unable to obtain funding, we could be forced to delay, reduce or eliminate our research and development programs, product portfolio expansion or commercialization efforts, which could adversely affect our business prospects, or we may be unable to continue operations.

We reported cash of $13.5 million in our September 30, 2017 balance sheet, and our use of cash in operations in Q4 2017 was $6.3 million. Q4 2017 research and development expense totaled $8.4 million which included $3.4 million in non-cash expense related to the Technion Agreement. Q4 2017 general & administrative expense totaled $2.2 million, transaction related costs were $0.7 million, and net loss was $10.6 million. We received net proceeds of $16.8 million in Q4 2017 related to completing our Series C financing.

Principal Financing Activities

In April 2015, Eloxx Limited achieved a clinical milestone in connection with the share purchase agreement signed in 2013, pursuant to which, Eloxx Limited issued to investors 1,073,157 shares of Series A preferred stock with a par value of $0.01 for an aggregate amount of $0.9 million.

In July 2015, Eloxx Limited entered into a Share Purchase Agreement (the "2015 SPA") whereby Eloxx Limited issued to existing investors 1,002,049 shares of Series B-1 preferred stock with a par value of $0.01 and 1,503,068 warrants to purchase 1,503,068 shares of Series B-1 preferred stock with an exercise price of $3.11 for an aggregate gross amount of $3.1 million, representing a price per unit of $3.11. In connection with the 2015 SPA, Eloxx Limited paid a contractor cash consideration of $0.1 million as a finder fee and granted 30,563 warrants to purchase 30,563 shares of Series B-1 preferred stock with an exercise price of $3.11.

In July 2015, one of Eloxx Limited's employees exercised 99,829 options with an exercise price of $0.01 per share to purchase 99,829 shares of common stock.

In February 2016, Eloxx Limited entered into Shares Purchase Agreement (the "2016 SPA") whereby Eloxx Limited issued to existing investors 1,929,676 shares of Series B-1 preferred stock with a par value of $0.01 and 2,894,519 warrants to purchase 2,894,519 shares of Series B-1 preferred stock with an exercise price of $3.11 per share for an aggregate gross amount of $6.0 million.

In connection with the 2016 SPA, Eloxx Limited paid a contractor cash consideration of $0.2 million as a finder fee and granted 48,242 warrants to purchase 48,242 shares of Series B-1 preferred stock with an exercise price of $3.11 per share.

In August 2016, Technion Investment Opportunities Fund L.P (the "TIOF) and TRDF exercised 124,786 and 311,964 warrants, respectively, to purchase shares of Series A preferred stock at an exercise price of $0.80 per share, respectively, for total consideration of $0.4 million.

In September 2016, Eloxx Limited achieved a milestone in connection with the Share Purchase Agreement signed in 2014 ("2014 SPA"), pursuant to which, Eloxx Limited paid a $0.1 million milestone payment and issued to investors 1,174,138 shares of Series B-1 preferred stock with a par value of $0.01 and 587,072 warrants to purchase 587,072 shares of Series B-1 preferred stock for an aggregate amount of $3.7 million.

In connection with the 2014 SPA milestone, Eloxx Limited paid a contractor cash consideration of $0.1 million as a finder fee and granted 36,593 warrants to purchase 36,593 shares of Series B-1 preferred stock with exercise price of $3.11 per share.

On May 22, 2017, Eloxx Limited entered into a Share Purchase Agreement (the "2017 SPA") (and subsequently on joinder agreements)with certain existing and new investors, whereby, an aggregate gross amount of $21.5 million, which included the conversion of the loan as detailed in Note 7, was received by Eloxx Limited in exchange for the issuance of 7,136,289 shares of Series C preferred stock with par value of $0.01 with the initial closing, of which 39,293 were issued as a result of the anti-dilution effect of the Reverse Merger. The related issuance costs were $0.6 million.

In connection with the 2017 SPA, the Company granted 142,524 warrants to purchase 142,524 shares of Series C preferred stock to certain service providers as finder fee compensation.

Upon the closing of the Reverse Merger the Company issued 6,333,333 shares of common stock related to the closing of the 2017 SPA with a par value of $0.01 for an aggregate gross amount of $17.5 million. Additionally, Sevion raised $1.5 million prior to the Reverse Merger. The related issuance costs for these transactions was $0.5 million.

Cash Flows

The following table presents the major components of net cash flows provided by (used in) operating, investing and financing activities for the periods presented (in thousands):

	Year Ended December 31, 2017	Year Ended December 31, 2016	Year Ended December 31, 2015
Net cash used in operating activities	$ (15,935)	$ (8,844)	$ (5,735)
Net cash (used in) provided by investing activities	$ (178)	$ (50)	$ 1,486
Net cash provided by financing activities	$ 37,950	$ 9,736	$ 3,882

Operating Activities

During the year ended December 31, 2017, the net cash used in operating activities was $15.9 million, primarily driven by our net loss of $21.2 million, partially offset by non-cash charges of $3.4 million for the provision related to the Technion exit fee of $3.4 million, $1.0 million related to changes in working capital, $0.6 million related to the amortization and revaluation of the discount of our convertible loan, and $0.1 million related to stock-based compensation.

During the year ended December 31, 2016, the net cash used in operating activities was $8.8 million, primarily driven by our net loss of $9.8 million, offset by non-cash charges including $0.9 million related to changes in working capital and $0.1 million related to stock-based compensation.

During the year ended December 31, 2015, the net cash used in operating activities was $5.7 million, primarily driven by our net loss of $6.4 million, offset by non-cash charges including $0.6 million related to changes in working capital and $0.1 million related to stock-based compensation.

Investing Activities

During the year ended December 31, 2017, the net cash used in investing activities was $0.2 million, consisting of the purchase of property and equipment of $0.2 million and restricted cash deposits of $0.1 million, offset by cash acquired in the Merger of $0.1 million.

During the year ended December 31, 2016, the net cash used in investing activities was $0.1 million, primarily consisting of the purchase of property and equipment.

During the year ended December 31, 2015, the net cash provided by investing activities was $1.5 million, primarily consisting of the purchase of the maturity of a restricted bank deposit.

Financing Activities

During the year ended December 31, 2017, the net cash provided by financing activities was $38.0 million, primarily resulting from the net proceeds of $18.4 million from the sale of preferred stock and $17.0 million from the sale of common stock.

During the year ended December 31, 2016, the net cash provided by financing activities was $9.7 million, primarily resulting from the net proceeds of $9.4 million from the sale of preferred stock and warrants.

During the year ended December 31, 2015, the net cash provided by financing activities was $3.9 million, primarily resulting from the net proceeds of $3.9 million from the sale of preferred stock and warrants.

Government Grants from the Israeli Innovation Authority

Under the research and development agreements with the IIA and pursuant to applicable laws, we are required to pay royalties at the rate of 3% on sales to end customers of product candidates developed with funds provided by the IIA, up to an amount equal to 100% of the IIA research and development grants received, linked to the dollar plus interest on the unpaid amount received based on the 12-month LIBOR rate (from the year the grant was approved) applicable to dollar deposits. If we do not generate sales of product candidates developed with funds provided by the IIA, we are not obligated to pay royalties or repay the grants.

We received research and development grants from the IIA in the amounts of $0.9 million, $1.2 million, and $0.3 million for the years ended December 31, 2017, 2016 and 2015, respectively. As of December 31, 2017, we have not commenced the payment obligation of the royalties and have a contingent obligation with respect to royalty-bearing participation received or accrued, amounting to $2.7 million.

Technion Research and Development Foundation Limited Agreement

On August 29, 2013, we entered into an agreement ("Technion Agreement") with Technion Research and Development Foundation Limited ("TRDF"), with respect to certain technology relating to aminoglycosides and the redesign of aminoglycosides for the treatment of human genetic diseases caused by premature stop mutations and further results of the research of the technology, in order to develop and commercialize products based on such technology. Under the agreement, TRDF shall provide us research services for an estimated annual payment of $0.1 million, to be agreed exactly by the parties prior to the beginning of each year of the research period. During the years ended December 31, 2017, 2016 and 2015, we recorded general and administrative expenses amounting to $7,000, $185,000 and $0, respectively, in relation to the TRDF reimbursement for the preparation, filling, prosecution and maintenance of TRDF patents rights related to Eloxx Limited. In addition, during the years ended December 31, 2017, 2016 and 2015 the Company recorded research and development expenses in connection to the TRDF amounting to $3,465,000, $33,000 and $58,000, respectively. As of December 31, 2017 and 2016, amounts recorded in accrued expenses were $25,000 and $185,000, respectively.

In addition, TRDF shall grant the Company a license to use, market, sell or sub-license the rights of the product developed under the TRDF research results (the "Licensed Product"), as fully defined in the Technion Agreement, for the following considerations: (a) milestone payments, to be transferred upon meeting certain milestones as defined in the Technion Agreement, up to total consideration of $6.1 million; (b) certain royalties on a low- to mid- single-digit percentage of net sales (subject to change in the case of (x) sublicensing to a big pharmaceutical or biotechnology company, or (y) payment of royalties to third parties, or (z) commercialization by a third party of an authorized generic to a licensed product), for a period until the later of (i) the expiration of a valid claim on the Licensed Product in each country the Licensed Product is sold to, or (ii) a certain amount of years from the date of the first commercial sale of the Licensed Product in such country, and (c) a low- to mid- double-digit percentage of any non-royalty sub-license income received by the Company from a sub-licensed entity. In addition, the Company shall pay certain fee to TRDF upon an exit event as described in the Technion Agreement.

Moreover, upon the closing of an Exit Event which is not an Initial Public Offering ("IPO"), as defined in the Technion Agreement, TRDF shall be entitled to an amount equal to 3% of all non-refundable, non-contingent consideration, whether in cash or in kind, actually received by the Company and / or its shareholders. Upon the closing of an exit event which is an IPO, as defined in the Technion Agreement, TRDF shall be entitled to a number of Ordinary Shares of the Company representing 3% of the Company's outstanding shares on a fully diluted basis immediately prior to the closing of such IPO.

On August 9, 2017 the Company received a legal claims letter from TRDF regarding TRDF's alleged entitlement to an exit fee in accordance with the Technion Agreement. The parties are in discussion regarding a settlement of the legal claim, whereby the Company would issue shares to TRDF representing approximately 2.1% of the outstanding shares of the Company representing fulfillment of the "exit clause". Therefore, the

Company has recorded a $3.4 million research and development expense with an offsetting adjustment to additional paid-in capital for the year ended December 31, 2017 related to this legal claim.

Taurus Sublicense Agreement

On December 18, 2017, the Company executed a binding term sheet with Taurus Biosciences Inc. ("Taurus") pursuant to which the Company grants Taurus a worldwide exclusive, sublicensable, license to the antibody SVN-001 for the development and commercialization of a product in the field of immunology, and Taurus will pay Eloxx 2% royalties on net sales. Taurus will file and prosecute any and all patents and patent applications, and shall pay all related patent expenses, with respect to this license. The Company assumed a license agreement with The Scripps Research Institute through the Reverse Merger pursuant to which the Company is required to pay a 2% royalty of net sales.

Contractual Obligations and Commitments

The following table summarizes our contractual obligations and commitments as of December 31, 2017 and the effects such obligations are expected to have on our liquidity and cash flows in future periods (in thousands):

	Total	Less Than a Year	2 - 3 Years	4 - 5 Years	More Than Five Years
Contractual Obligations					
Operating lease obligations(1)	$676	$ 258	$232	$186	$ —
Total contractual cash obligations	$676	$ 258	$232	$186	$ —

(1) Represents operating lease costs, consisting of leases for our office space in Waltham, Massachusetts that expires in December 2020, with an option to extend the lease term for an additional three years, along with our office space in Rehovot, Israel that expires in April 2020, with an option to extend the lease term for two years and laboratory space in Rehovot, Israel that expires in March 2018, with an option to extend the lease term for one year.

Off-Balance Sheet Arrangements

As of December 31, 2017 and 2016, we do not have any off-balance sheet arrangements, as such term is defined under Item 303 of Regulation S-K, that have or are reasonably likely to have a current or future effect on our financial condition, changes in financial condition, revenues or expenses, results of operations, liquidity, capital expenditures or capital resources that is material to investors.

Recently Issued Accounting Pronouncements

For information with respect to recent accounting pronouncements, see Note 2 to the audited consolidated financial statements of Eloxx included elsewhere in this Form 10-K.

Critical Accounting Policies

The preparation of annual consolidated financial statements requires us to make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent liabilities at the date of the annual consolidated financial statements and the reported amounts of expenses during the reporting period. Our significant accounting policies, which include our management's best estimates and judgments, are included in Note 2 to the annual consolidated financial statements of Eloxx for the year ended December 31, 2017 included in this Form 10-K.

Critical Accounting Policies and Estimates

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

While our significant accounting policies are more fully described in Note 2 to our annual consolidated financial statements appearing elsewhere in this Form 10-K, we believe that the following accounting policies related to the treatment of stock-based compensation and contingencies are the most critical for fully understanding and evaluating our financial condition and results of operations.

Stock-Based Compensation Expense

We account for stock-based compensation granted to employees in accordance with ASC Topic 718, "Compensation-Stock Compensation" which requires the measurement and recognition of compensation expense for all stock-based payment awards based on fair value.

The fair value of each option award is estimated on the grant date using the Binomial Option-Pricing Model ("Binomial Model"). The stock-based compensation expense, is recognized using the straight-line method over the requisite service period of the award.

Key Assumptions

The Binomial Model requires the input of highly subjective assumptions, including the fair value of the underlying Ordinary Shares, the expected volatility of the price of our ordinary shares, the expected term of the option, risk-free interest rates and the expected dividend yield of our ordinary shares. These estimates involve inherent uncertainties and the application of management's judgment. These assumptions are estimated as follows:

- *Fair Value of our Ordinary Shares.* Because our ordinary shares have not been publicly traded, we estimated the fair value of its ordinary shares, as discussed in "ordinary shares valuations" below. Upon the completion of the Reverse Merger transaction between Eloxx and Sevion, the ordinary shares will be valued by reference to its publicly-traded price.
- *Expected Volatility.* As we do not have a trading history for its Ordinary Shares, the expected price volatility for our ordinary shares was estimated by taking the average historical price volatility for industry peers based on weekly price observations over a period equivalent to the expected term of the ordinary share option grants. Industry peers consist of several public companies that are similar in size and stage of our life cycle.
- *Expected Term.* The expected term of options granted is derived from the output of the option valuation model and represents the period of time that options granted are expected to be outstanding.
- *Suboptimal exercise factor.* The suboptimal exercise factor is estimated using historical option exercise information. The suboptimal exercise factor is the ratio by which the stock price must increase over the exercise price before employees are expected to exercise their stock options.
- *Risk-Free Rate.* The risk-free interest rate is based on the yields of U.S. Treasury securities with maturities similar to the expected term of the options for each option group.
- *Dividend Yield.* We have never declared or paid any cash dividends and do not presently plan to pay cash dividends in the foreseeable future. Consequently, we used an expected dividend yield of zero.

Stock-based compensation expense was $0.1 million for each of the years ended December 31, 2017, 2016 and 2015. See Notes 2 and 11 to our annual consolidated financial statements as of December 31, 2017 included elsewhere in this Form 10-K for information concerning specific assumptions used in applying the Binomial Model to determine the estimated fair value of employee shares options granted. We will continue to use judgment in evaluating the expected volatility and expected terms utilized for our stock-based compensation expense calculations on a prospective basis.

Ordinary Share Valuations

Since inception date and until December 31, 2017, our Board of Directors approved the grant of 3,310,621 options exercisable into its Ordinary Shares at exercise prices which are ranging from $0.002 to $8.00 per share.

Since inception date, the estimated fair value of the ordinary shares underlying our share options was determined at the grant date of each option by our board of directors with input from management and with the assistance of independent third-party valuations. The valuations of our ordinary shares for these dates were determined in accordance with the guidelines outlined in the American Institute of Certified Public Accountants Practice Aid, Valuation of Privately-Held-Company Equity Securities Issued as Compensation (the “Practice Aid”). The methodology used by the third-party valuation specialists to assist in determining the fair value of our Ordinary Shares included estimating the fair value of the equity and then allocating this value to all of the equity interests using the option pricing method. The assumptions used in the valuation model to determine the estimated fair value of our ordinary shares as of the grant date of each option are based on numerous objective and subjective factors, combined with management judgment, including the following:

- Our operating and financial performance, including our levels of available capital resources;
- The valuation of publicly-traded companies in the life sciences and biotechnology sectors, as well as recently completed mergers and acquisitions of peer companies;
- Rights and preferences of our ordinary shares compared to the rights and preferences of its other outstanding equity securities;
- Equity market conditions affecting comparable public companies, as reflected in comparable companies’ market multiples, initial public offering valuations and other metrics;
- The achievement of enterprise milestones, including our development, intellectual property and regulatory progress;
- The likelihood of achieving a liquidity event for our ordinary shares, such as an initial public offering or an acquisition of its company given prevailing market and biotechnology sector conditions;
- Sales of our preferred shares in arms-length transactions;
- The illiquidity of our securities by virtue of being a private company; and
- Business risks.

Ordinary Share Valuation Methodologies

The valuations were performed in accordance with applicable elements of the Practice Aid. The Practice Aid prescribes several valuation approaches for estimating the value of an enterprise, such as the cost, market and income approaches, and various methodologies for allocating the value of an enterprise to its ordinary shares.

The Practice Guide identifies various available methods for allocating enterprise value across classes and series of share capital to determine the estimated fair value of the ordinary shares at each valuation date. In accordance with the Practice Guide, we considered the following methods:

- *Option Pricing Method.* Under the option pricing method ("OPM"), shares are valued by creating a series of call options with exercise prices based on the liquidation preferences and conversion terms of each equity class. The estimated fair values of the Preferred and Ordinary Shares are inferred by analyzing these options.
- *Hybrid Method.* The hybrid method typically is a combination of the OPM and PWERM. It is appropriate when a company is likely to go through a transformative event (for example, an initial public offering or liquidation) in the near future. Just like the PWERM, the hybrid method is a scenario-based analysis.

Based on our pre-revenue stage of development and other relevant factors, we determined that the OPM was the most appropriate method for allocating our enterprise value to determine the estimated fair value of its ordinary shares for valuations performed since inception date and until June 30, 2017. Commencing June 30, 2017, we began using the Hybrid Method by combining the OPM and M&A scenario to determine the fair value of our ordinary shares.

Under the OPM methodology, we used the pricing data from the recent rounds of preferred financings to estimate the value of the equity. Under the Hybrid Method, we estimated the probability and timing of the M&A based on management's best estimate, taking into consideration all available information as of the valuation date, including the stage of development of our product candidates, its expected near-term and long-term funding requirements, an assessment of the current financing and life science industry environment and the economic trends, market conditions at the time of valuation and the assistance of an independent third-party valuation.

Following the closing of the Reverse Merger, the fair value of the Ordinary Shares was determined based on the closing price of our common stock on the OTCOB Market.

Contingencies

We account for our contingent liabilities in accordance with ASC Topic 450, "Contingencies". A provision is recorded when it is both probable that a liability has been incurred and the amount of the loss can be reasonably estimated.

With respect to legal matters, provisions are reviewed and adjusted to reflect the impact of negotiations, estimated settlements, legal rulings, advice of legal counsel and other information and events pertaining to a particular matter. Currently, we are not a party to any ligation that could have a material adverse effect on our business, financial position, results of operations or cash flows.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURE ABOUT MARKET RISK

Not applicable to a "smaller reporting company", as defined in Item 10(f)(1) of SEC Regulation S-K.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

The consolidated financial statements and supplementary data required by this item are included in this report immediately following Part IV and are incorporated herein by reference.

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

Effective on December 19, 2017, the Company dismissed RSM US LLP, or RSM, as its independent registered public accounting firm. Effective December 20, 2017, the Board engaged Kost Forer Gabbay & Kasierer, a member of Ernst & Young Global, or EY, as the independent registered public accounting firm to audit the Company's financial statements for the fiscal year ended December 31, 2017.

RSM audit reports on the Company's financial statements for the fiscal years ended June 30, 2017 and June 30, 2016 did not contain an adverse opinion or a disclaimer of opinion and were not qualified or modified as to uncertainty, audit scope or accounting principles, except that the reports contained an explanatory paragraph noting that there was substantial doubt as to the Company's ability to continue as a going concern. In addition, Sevion management concluded that there was a reportable event pursuant to Item 304(a)(1)(v)(A) of Regulation S-K, due to Sevion management's determination that material weaknesses existed in Sevion's internal control over financial reporting as of June 30, 2017 and June 30, 2016 and, as a result, its disclosure controls and procedures were not effective.

During the years ended June 30, 2017 and June 30, 2016 and the subsequent interim period through the date of RSM dismissal, there were no disagreements with RSM on any matter of accounting principles or practices, financial statement disclosure or auditing scope or procedure, which disagreements, if not resolved to the satisfaction of RSM would have caused it to make reference to the subject matter thereof in connection with its report.

During the years ended June 30, 2017 and June 30, 2016 and the subsequent interim period through the date of RSM's dismissal, neither the Company nor anyone acting on its behalf consulted EY regarding the application of accounting principles to a specified transaction, either completed or proposed, or the type of audit opinion that might be rendered on the Company's financial statements.

ITEM 9A. CONTROLS AND PROCEDURES

Disclosure Controls and Procedures

Our management evaluated, with the participation and under the supervision of our Chief Executive Officer and our Chief Financial Officer, the effectiveness of our disclosure controls and procedures as of the end of the period covered by this report. Based on this evaluation, our Chief Executive Officer and Chief Financial Officer concluded that our disclosure controls and procedures as of the end of the period covered by this report were effective in ensuring that information required to be disclosed by us in reports that we file or submit under the Exchange Act (i) is recorded, processed, summarized and reported within the time periods specified in the Securities and Exchange Commission's rules and forms, and (ii) is accumulated and communicated to the Company's management, including its principal executive and principal financial officers, or persons performing similar functions, as appropriate to allow timely decisions regarding required disclosure.

Management's Report on Internal Control over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting. We maintain a system of internal control that is designed to provide reasonable assurance regarding the reliability of our financial reporting and the preparation of consolidated financial statements for external purposes in accordance with generally accepted accounting principles.

Notwithstanding that we do not qualify for the relief afforded by Instruction 1 to Item 308 of Regulation S-K to newly public companies, management has not assessed nor attested to our internal control over financial reporting as is set forth in Item 308 of Regulation S-K promulgated under the Securities Exchange Act 1934, as amended, and Section 404 of the Sarbanes-Oxley Act as of December 31, 2017, the end of our last fiscal year. We will do so initially as of December 31, 2018.

We were unable to conduct the required assessment primarily due to the Transaction that closed on December 19, 2017 and the substantial change in operational focus, management and the internal control environment following the Transaction and due to the fact the internal controls of the legal acquirer were no longer existed as of the required assessment date and during that period. Therefore this annual report does not include a report of management's assessment regarding internal control over financial reporting.

Since the reverse merger concluded in December 2017, management has been performing a comprehensive post-transaction review of the adequacy of its internal controls over financial reporting. This discovery process has led to a diagnosis of various needs and has begun the process of taking targeted actions that are being implemented immediately, including the hiring of experienced accounting and finance staff, systems implementations, new policies and procedures, IT controls, and other steps planned throughout the 2018 fiscal year. In addition, the company is engaging an external consulting firm to assist in the implementation of ICFR best practices necessary to position management to report on its assessment of internal controls for 2018.

Changes in Internal Control over Financial Reporting

Other than as discussed above, there have not been any changes in our internal controls over financial reporting (as such item is defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act) during our fiscal quarter ended December 31, 2017 that have materially affected, or are reasonably likely to materially affect, our internal controls over financial reporting.

Inherent Limitations on the Effectiveness of Controls

A control system, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the controls are met. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues, if any, within a company have been detected. Accordingly, our controls and procedures are designed to provide reasonable, not absolute, assurance that the objectives of our control system are met.

ITEM 9B. OTHER INFORMATION

None.

PART III

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

The information required by this item is incorporated by reference to our definitive proxy statement to be filed pursuant to Regulation 14A within 120 days after the end of the fiscal year covered by this Annual Report on Form 10-K.

ITEM 11. EXECUTIVE AND DIRECTOR COMPENSATION

The information required by this item is incorporated by reference to our definitive proxy statement to be filed pursuant to Regulation 14A within 120 days after the end of the fiscal year covered by this Annual Report on Form 10-K.

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

The information required by this item is incorporated by reference to our definitive proxy statement to be filed pursuant to Regulation 14A within 120 days after the end of the fiscal year covered by this Annual Report on Form 10-K.

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

The information required by this item is incorporated by reference to our definitive proxy statement to be filed pursuant to Regulation 14A within 120 days after the end of the fiscal year covered by this Annual Report on Form 10-K.

ITEM 14. PRINCIPAL ACCOUNTING FEES AND SERVICES

The information required by this item is incorporated by reference to our definitive proxy statement to be filed pursuant to Regulation 14A within 120 days after the end of the fiscal year covered by this Annual Report on Form 10-K.

PART IV

ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

Item 15(a)

(1) Financial Statements

The financial statements required by this item are submitted in a separate section beginning on page F-1 of this report.

(2) Financial Statement Schedules

Schedules have been omitted because of the absence of conditions under which they are required or because the required information is included in the financial statements or notes thereto beginning on page F-1 of this report.

(3) Exhibits:

The exhibits listed in the Exhibit Index at the end of this report are filed or incorporated by reference as part of this report.

Item 15(b) Exhibits

See (a)(3) above.

Item 15(c) Financial Statement Schedules

See (a)(2) above.

ITEM 16. FORM 10-K SUMMARY

Not applicable.

EXHIBIT INDEX

Exhibit No.	Description of Exhibit
2.1	Agreement, dated as of May 31, 2017, by and among Sevion Therapeutics, Inc., Sevion Sub, Ltd. and Eloxx Pharmaceuticals Ltd. (Incorporated by reference to Exhibit 2.1 of the Company's Current Report on Form 8-K filed on June 6, 2017, SEC File No. 001-31326)
2.2	Amendment to Agreement, dated as of August 1, 2017, by and among Sevion Therapeutics, Inc., Sevion Sub, Ltd. and Eloxx Pharmaceuticals Ltd. (Incorporated by reference to Exhibit 2.3 of the Company's Annual Report on Form 10-K filed on October 13, 2017, SEC File No. 001-31326)
2.3	Second Amendment to Agreement, dated as of November 23, 2017, by and among Sevion Therapeutics, Inc., Sevion Sub, Ltd. and Eloxx Pharmaceuticals Ltd. (Incorporated by reference to Exhibit 2.1 of the Company's Current Report on Form 8-K filed on November 29, 2017, SEC File No. 001-31326)
3.1	Amended and Restated Certificate of Incorporation of Senesco Technologies, Inc. filed with the State of Delaware on January 22, 2007. (Incorporated by reference to Exhibit 3.1 of our Quarterly Report on Form 10-Q filed on February 14, 2007, SEC File No. 001-31326).
3.2	Certificate of Amendment to the Amended and Restated Certificate of Incorporation of Senesco Technologies, Inc. filed with the State of Delaware on December 13, 2007. (Incorporated by reference to Exhibit 3.1 of our Quarterly Report on Form 10-Q filed on February 14, 2008, SEC File No. 001-31326).
3.3	Certificate of Amendment to the Amended and Restated Certificate of Incorporation of Senesco Technologies, Inc. filed with the State of Delaware on September 22, 2009. (Incorporated by reference to Exhibit 3.3 of our Annual Report on Form 10-K filed on September 28, 2009, SEC File No. 001-31326).
3.4	Certificate of Amendment to the Amended and Restated Certificate of Incorporation of Senesco Technologies, Inc. filed with the State of Delaware on May 25, 2010. (Incorporated by reference to Exhibit 3.1 to our Current Report on Form 8-K filed on May 28, 2010, SEC File No. 001-31326).
3.5	Certificate of Amendment to the Amended and Restated Certificate of Incorporation of Senesco Technologies, Inc. filed with the State of Delaware on December 22, 2011. (Incorporated by reference to Exhibit 3.1 to our Quarterly Report on Form 10-Q filed on February 14, 2011, SEC File No. 001-31326).
3.6	Certificate of Amendment to the Amended and Restated Certificate of Incorporation of Senesco Technologies, Inc. filed with the State of Delaware on April 1, 2013. (Incorporated by reference to Exhibit 3.1 to our Quarterly Report on Form 10-Q filed on May 15, 2013, SEC File No. 001-31326).
3.7	Certificate of Amendment to the Company's Amended and Restated Certificate of Incorporation, as filed with the Secretary of State of the State of Delaware on October 16, 2013. (Incorporated by reference to Exhibit 3.1 of our Current Report on Form 8-K filed on October 21, 2013, SEC File No. 001-31326).
3.8	Certificate of Amendment to the Company's Amended and Restated Certificate of Incorporation, as filed with the Secretary of State of the State of Delaware on September 29, 2014. (Incorporated by reference to Exhibit 3.1 of our Current Report on Form 8-K filed on October 3, 2014, SEC File No. 001-31326).
3.9	Certificate of Amendment to the Company's Amended and Restated Certificate of Incorporation, as filed with the Secretary of State of the State of Delaware on December 19, 2017. (Incorporated by reference to Exhibit 3.1 of our Current Report on Form 8-K filed on December 22, 2017, SEC File No. 001-31326).

Exhibit No.	Description of Exhibit
3.10	Certificate of Amendment to the Company's Amended and Restated Certificate of Incorporation, as filed with the Secretary of State of the State of Delaware on December 19, 2017. (Incorporated by reference to Exhibit 3.2 of our Current Report on Form 8-K filed on December 22, 2017, SEC File No. 001-31326).
3.11	Certificate of Designations to the Company's Certificate of Incorporation. (Series A) (Incorporated by reference to Exhibit 3.1 to our Current Report on Form 8-K filed on March 29, 2010, SEC File No. 001-31326).
3.12	Certificate of Designations to the Company's Certificate of Incorporation. (0% Series C Convertible Preferred Stock) (Incorporated by reference to Exhibit 3.1 of our Current Report on Form 8-K filed on May 6, 2015, SEC File No. 001-31326).
3.13	Amended and Restated Bylaws of Eloxx Pharmaceuticals, Inc. (Incorporated by reference to Exhibit 3.2 of the Company's Current Report on Form 8-K filed on December 27, 2017., SEC File No. 001-31326)
4.1	Specimen of Common Stock Certificate.
10.1*	Research and License Agreement by and between Technion Research and Development Foundation Ltd. and Eloxx Pharmaceuticals Ltd., dated August 29, 2013.
10.2*	First Amendment to Research and License Agreement by and between Technion Research and Development Foundation Ltd. and Eloxx Pharmaceuticals Ltd., dated November 26, 2013.
10.3	Second Amendment to Research and License Agreement by and between Technion Research and Development Foundation Ltd. and Eloxx Pharmaceuticals Ltd., dated January 14, 2014.
10.4	Third Amendment to Research and License Agreement by and between Technion Research and Development Foundation Ltd. and Eloxx Pharmaceuticals Ltd., dated June 9, 2014.
10.5	First Addendum to Research and License Agreement by and between Technion Research and Development Foundation Ltd. and Eloxx Pharmaceuticals Ltd., dated August 3, 2014.
10.6	Second Addendum to Research and License Agreement by and between Technion Research and Development Foundation Ltd. and Eloxx Pharmaceuticals Ltd., dated January 21, 2015.
10.7	Third Addendum to Research and License Agreement by and between Technion Research and Development Foundation Ltd. and Eloxx Pharmaceuticals Ltd., dated February 9, 2015.
10.8	Fourth Addendum to Research and License Agreement by and between Technion Research and Development Foundation Ltd. and Eloxx Pharmaceuticals Ltd., dated April 29, 2015.
10.9	Fifth Addendum to Research and License Agreement by and between Technion Research and Development Foundation Ltd. and Eloxx Pharmaceuticals Ltd., dated June 2, 2015.
10.10	Sixth Addendum to Research and License Agreement by and between Technion Research and Development Foundation Ltd. and Eloxx Pharmaceuticals Ltd., dated January 11, 2016.
10.11	Seventh Addendum to Research and License Agreement by and between Technion Research and Development Foundation Ltd. and Eloxx Pharmaceuticals Ltd., dated March 6, 2016.
10.12	Eighth Addendum to Research and License Agreement by and between Technion Research and Development Foundation Ltd. and Eloxx Pharmaceuticals Ltd., dated July 16, 2017.
10.13	Ninth Addendum to Research and License Agreement by and between Technion Research and Development Foundation Ltd. and Eloxx Pharmaceuticals Ltd., dated July 16, 2017.

Exhibit No.	Description of Exhibit
10.14**	Consulting Agreement, dated December 1, 2014, by and between Eloxx Pharmaceuticals Ltd. and Dr. Silvia Noiman (Incorporated by reference to Exhibit 10.1 of our Current Report on Form 8-K filed on December 22, 2017, SEC File No. 001-31326).
10.15**	Memorandum of Understanding, dated March 13, 2018, by and between Eloxx Pharmaceuticals, Inc. and Dr. Silvia Noiman.
10.16**	Offer to Gregory Weaver from Eloxx Pharmaceuticals Ltd., dated September 11, 2017 (Incorporated by reference to Exhibit 10.2 of our Current Report on Form 8-K filed on December 22, 2017, SEC File No. 001-31326).
10.17**	Employment Agreement, dated as of December 26, 2017, between Eloxx Pharmaceuticals, Inc. and Robert E. Ward (Incorporated by reference to our Current Report on Form 8-K filed on December 27, 2017, SEC File No. 001-31326).
10.18**	Offer to Pedro Huertas from Eloxx Pharmaceuticals Ltd., dated April 17, 2015 (Incorporated by reference to Exhibit 10.3 of our Current Report on Form 8-K filed on December 22, 2017, SEC File No. 001-31326).
10.19**	Employment Agreement, dated as of March 12, 2018, between Eloxx Pharmaceuticals Inc. and Gregory Weaver.
10.20**	Employment Agreement, dated as of March 12, 2018, between Eloxx Pharmaceuticals Inc. and Pedro Huertas.
10.21**	Form of Indemnification Agreement (Incorporated by reference to Exhibit 10.4 of our Current Report on Form 8-K filed on December 22, 2017, SEC File No. 001-31326).
10.22**	Amended and Restated Senesco Technologies, Inc. 2008 Incentive Compensation Plan. (Incorporated by reference to Exhibit 10.3 of our quarterly report on Form 10-Q for the period ended March 31, 2014., SEC File No. 001-31326)
10.23**	Form of Stock Option Agreement under the Senesco Technologies, Inc. 2008 Stock Incentive Plan. (Incorporated by reference to Exhibit 10.5 of our quarterly report on Form 10-Q for the period ended September 30, 2009, SEC File No. 001-31326).
10.24**	Eloxx Pharmaceuticals Share Ownership and Option Plan (2013).
10.25**	Forms of Option Agreement, Stock Option Grant Notice and Notice of Exercise under the Eloxx Pharmaceuticals Share Ownership and Option Plan (2013).
10.26**	Performance Stock Option Grant Notice and Stock Option Agreement (Inducement Grant) between Eloxx Pharmaceuticals, Inc. and Robert E. Ward, dated March 5, 2018.
10.27**	Restricted Stock Unit Grant Notice and Restricted Stock Unit Agreement (Inducement Grant) between Eloxx Pharmaceuticals, Inc. and Robert E. Ward, dated March 5, 2018.
10.28**	Performance Restricted Stock Unit Grant Notice and Restricted Stock Unit Agreement (Inducement Grant) between Eloxx Pharmaceuticals, Inc. and Robert E. Ward, dated March 5, 2018.
10.29**	Stock Option Grant Notice and Stock Option Agreement (Inducement Grant) between Eloxx Pharmaceuticals, Inc. and Robert E. Ward, dated March 5, 2018
10.30**	Retention Policy. (Incorporated by reference to Exhibit 10.1 of our current report on Form 8-K filed on October 15, 2012., SEC File No. 001-31326)
10.31	Lease Agreement by and between Eloxx Pharmaceuticals, Inc. and BP Pay Colony LLC, dated October 26, 2017.

Exhibit No.	Description of Exhibit
21.1	List of Subsidiaries of the Company.
23.1	Consent of Kost Forer Gabbay & Kasierer, a member of Ernst & Young Global, Independent Registered Public Accounting Firm.
31.1	Certification of the Company's Chief Executive Officer pursuant to Rule 13a-14(a) and Rule 15d-14(a) of the Securities and Exchange Act of 1934, as amended, pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.2	Certification of the Company's Chief Financial Officer pursuant to Rule 13a-14(a) and Rule 15d-14(a) of the Securities and Exchange Act of 1934, as amended, pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32.1	Certification of the Company's Chief Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
32.2	Certification of the Company's Chief Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
101.INS	XBRL Instance Document
101.SCH	XBRL Taxonomy Extension Schema Document
101.CAL	XBRL Taxonomy Extension Calculation Document
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document
101.LAB	XBRL Taxonomy Extension Labels Linkbase Document
101.PRE	XBRL Taxonomy Extension Presentation Link Document

+ Confidential treatment was granted for portions of such exhibit.

* Confidential treatment requested under 17 C.F.R. §§200.80(b)(4) and 24b-2. The confidential portions of this exhibit have been omitted and are marked accordingly. The confidential portions have been filed separately with the Securities and Exchange Commission pursuant to the confidential treatment request.

** Indicates a management contract or compensatory plan or arrangement required to be filed pursuant to Item 15(b) of Form 10-K

SIGNATURES

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

ELOXX PHARMACEUTICALS INC.
(Registrant)

Date: March 16, 2018

/s/ Robert E. Ward
Robert E. Ward
Chairman of the Board of Directors and Chief Executive Officer
(On behalf of the Registrant and as Principal Executive Officer)

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Robert E. Ward and Gregory Weaver, and each of them, as his or her true and lawful attorneys-in-fact and agents, each with the full power of substitution, for him or her and in his or her name, place or stead, in any and all capacities, to sign any and all amendments to this report, with exhibits thereto and other documents in connection therewith, with the U.S. Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the premises, as fully to all intents and purposes as he or she might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents, or their, his substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

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

Signature	Title	Date
/s/ Robert E. Ward Robert E. Ward	Chairman of the Board of Directors and Chief Executive Officer (Principal Executive Officer)	March 16, 2018
/s/ Gregory Weaver Gregory Weaver	Chief Financial Officer (Principal Financial Officer and Principal Accounting Officer)	March 16, 2018
/s/ Tomer Kariv Tomer Kariv	Director	March 16, 2018
/s/ Ran Nussbaum Ran Nussbaum	Director	March 16, 2018
/s/ Silvia Noiman Silvia Noiman, PhD	Director	March 16, 2018
/s/ Gadi Veinrib Gadi Veinrib	Director	March 16, 2018
/s/ Zafrira Avnur Zafrira Avnur, PhD	Director	March 16, 2018
/s/ Martijn Kleijwegt Martijn Kleijwegt	Director	March 16, 2018

Signature	Title	Date
/s/ Steven D. Rubin Steven D. Rubin	Director	March 16, 2018
/s/ Jasbir Seehra Jasbir Seehra, Ph.D.	Director	March 16, 2018

ELOXX PHARMACEUTICAL INC.

CONSOLIDATED FINANCIAL STATEMENTS

AS OF DECEMBER 31, 2017

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Stockholders and Board of Directors of Eloxx Pharmaceuticals Inc.

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Eloxx Pharmaceuticals, Inc. (the "Company") as of December 31, 2017 and 2016, the related consolidated statements of operations, stockholders' equity and cash flows for each of the three years in the period ended December 31, 2017 and 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 at December 31, 2017 and 2016 and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2017, in conformity with U.S. generally accepted accounting principles.

Basis for Opinion

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

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

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

/s/ KOST FORER GABBAY & KASIERER
A Member of Ernst & Young Global

We have served as the Company‘s auditor since 2015.
Tel-Aviv, Israel
March 16, 2018

ELOXX PHARMACEUTICALS, INC.

CONSOLIDATED BALANCE SHEETS
Amounts in thousands, except share and per share data

	December 31, 2017	December 31, 2016
Assets		
Current assets:		
Cash and cash equivalents	$ 24,049	$ 2,212
Restricted bank deposit	102	38
Prepaids and other current assets	355	837
Total current assets	24,506	3,087
Property and equipment, net	278	41
Total assets	24,784	3,128
Liabilities and Stockholders' Equity		
Current liabilities		
Accounts payables	1,530	1,899
Accrued expenses	1,893	619
Total current liabilities	3,423	2,518
Commitments and contingencies (Note 9)		
Stockholders' equity:		
Series A, B-1, B-2 and C Preferred Stock, $0.01 par value 5,000,000 and 19,965,708 shares authorized as of December 31, 2017 and 2016, respectively; 0 and 7,638,263 shares issued and outstanding as of December 31, 2017 and 2016, respectively	—	76
Common stock, $0.01 par value 500,000,000 and 29,948,562 shares authorized as of December 31, 2017 and 2016, respectively; 27,527,738 and 4,205,278 shares issued and outstanding as of December 31, 2017 and 2016, respectively	274	42
Additional paid-in capital	60,047	18,238
Accumulated deficit	(38,960)	(17,746)
Total stockholders' equity	21,361	610
Total liabilities and stockholders' equity	$ 24,784	$ 3,128

See accompanying notes consolidated financial statements

ELOXX PHARMACEUTICALS, INC.

CONSOLIDATED STATEMENTS OF OPERATIONS
Amounts in thousands, except per share and per share data

	Year ended December 31,		
	2017	2016	2015
Operating expenses:			
Research and development, net	$ 16,398	$ 8,986	$ 5,842
General and administrative expenses	3,992	854	442
Total operating expenses	20,390	9,840	6,284
Loss from operations	(20,390)	(9,840)	(6,284)
Financial and other expenses, net	824	7	122
Net loss	$ 21,214	$ 9,847	$ 6,406
Basic and diluted net loss per share	$ 4.75	$ 2.60	$ 1.67
Weighted average number of Common Stock used in computing basic and diluted loss per share	4,976,377	4,205,277	4,148,389

See accompanying notes consolidated financial statements

ELOXX PHARMACEUTICALS, INC.

STATEMENTS OF CHANGES IN STOCKHOLDERS' EQUITY
Amounts in thousands, except share and per share data

	Preferred Stock		Common Stock		Additional paid-in capital	Accumulated deficit	Total Stockholders' Equity
	Number	Amount	Number	Amount			
Balance as of January 1, 2015	2,022,493	$ 20	4,105,449	$ 41	$ 4,207	$ (1,493)	$ 2,775
Issuance of Series A preferred stock	1,073,157	11	—	—	849	—	860
Issuance of Series B-1 preferred stock and warrants to purchase Series B-1 preferred stock, net of $93 issuance costs	1,002,049	10	—	—	3,012	—	3,022
Exercise of stock options	—	—	99,829	1	(1)	—	—
Receipt on account of shares	—	—	—	—	300	—	300
Stock-based compensation	—	—	—	—	92	—	92
Net loss	—	—	—	—	—	(6,406)	(6,406)
Balance as of December 31, 2015	4,097,699	41	4,205,278	42	8,459	(7,899)	643
Issuance of Series B-1 preferred stock and warrants to purchase common stock, net of $264 issuance costs	1,929,676	19	—	—	5,717	—	5,736
Exercise of warrants into Series A preferred stock	436,750	4	—	—	346	—	350
Issuance of Series B-1 preferred stock and warrants to purchase Series B-1 preferred stock	1,174,138	12	—	—	3,638	—	3,650
Stock-based compensation	—	—	—	—	78	—	78
Net loss	—	—	—	—	—	(9,847)	(9,847)
Balance as of December 31, 2016	7,638,263	76	4,205,278	42	18,238	(17,746)	610
Issuance of Series C preferred stock, net of $573 issuance costs	6,311,076	63	—	—	18,364	—	18,427
Conversion of convertible loan into Series C preferred stock of $0.01 par value	825,213	8	—	—	3,160		3,168
Exercise of stock options	—	—	16,699	—	17	—	17
Stock-based compensation	—	—	—	—	101	—	101
Issuance of common stock, net of $494 issuance costs	—	—	6,333,333	63	16,943	—	17,006
Conversion of Series A, B-1, B-2 and C preferred stock into common stock with respect to the Reverse Merger	(14,774,552)	(147)	14,774,552	147	—	—	—
Shares issued with respect to the Reverse Merger	—	—	2,197,876	22	(192)	—	(170)
Provision related to the Technion exit fee	—	—	—	—	3,416	—	3,416
Net loss	—	—	—	—	—	(21,214)	(21,214)
Balance as of December 31, 2017	—	$ —	27,527,738	$ 274	$ 60,047	$ (38,960)	$ 21,361

See accompanying notes consolidated financial statements.

ELOXX PHARMACEUTICALS, INC.

CONSOLIDATED STATEMENTS OF CASH FLOWS
Amounts in thousands

	Year ended December 31,		
	2017	2016	2015
Cash flows from operating activities:			
Net loss	$(21,214)	$(9,847)	$(6,406)
Adjustments to reconcile net loss to net cash used in operating activities:			
Stock-based compensation and restricted shares	101	78	92
Depreciation	39	8	5
Amortization and revaluation of discount in respect to convertible loan	668	—	—
Provision related to the Technion exit fee	3,416	—	—
Change in operating assets and liabilities:			
Prepaid expenses and other current assets	709	(482)	(276)
Accounts payable	(583)	1,250	529
Accrued expenses	929	149	321
Net cash used in operating activities	(15,935)	(8,844)	(5,735)
Cash flows from investing activities:			
Investment in restricted bank deposit	(64)	(14)	—
Maturity of (investment in) restricted bank deposit	—	—	1,496
Purchase of property and equipment	(237)	(36)	(10)
Cash received upon the Reverse Merger	123	—	—
Net cash (used in) provided by investing activities	(178)	(50)	1,486
Cash flows from finance activities:			
Proceeds from exercise of warrants into Series A preferred stock	—	350	—
Proceeds from exercise of options into common stock	17	—	—
Proceeds from issuance of Series B-1 preferred stock and warrants to purchase Series B-1 preferred stock, net of issuance costs	—	9,386	3,022
Proceeds from issuance of Series A preferred stock	—	—	860
Proceeds from issuance of Series C preferred stock	18,427	—	—
Proceeds from issuance of common stock	17,006	—	—
Proceeds from convertible loan and related financial derivative into Series C preferred stock	2,500	—	—
Net cash provided by financing activities	37,950	9,736	3,882
Increase (decrease) in cash and cash equivalents	21,837	842	(367)
Cash and cash equivalents at the beginning of the year	2,212	1,370	1,737
Cash and cash equivalents at the end of the year	$ 24,049	$ 2,212	$ 1,370
Supplemental disclosure of non-cash financing activities:			
Conversion of convertible loan into Series C preferred stock	$ 3,168	$ —	$ —

See accompanying notes consolidated financial statements

ELOXX PHARMACEUTICALS, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

1. Nature of the Business

We are a global biopharmaceutical company focused on discovering and developing novel therapeutics for the treatment of rare and ultra-rare premature stop codon diseases. We are harnessing the science of genetic read-through to develop novel drug product candidates that interact with the ribosome to overcome these premature stop codons. Our revolutionary small molecule approach is designed to unleash the potential to restore production of full length functional proteins with the goal of enabling a return toward normal cellular function. We believe there is a broad application of this approach to the over 1800 rare and ultra-rare diseases where nonsense mutation has been implicated in the cause or pathway of human disease.

Our research and development strategy is to target rare or ultra-rare diseases where a high unmet medical need, nonsense mutation bearing, patient population has been identified. We focus on clinical indications where there is a high unmet medical need, established preclinical read-through or personalized medicine experiments that are predictive of clinical activity, and a definable path for Orphan Drug development, regulatory approval, patient access and commercialization. We believe patient advocacy to be an important element of patient focused drug development and seek opportunities to collaborate with patient advocacy groups throughout the discovery and development process. Our current clinical focus is on cystic fibrosis and cystinosis where we are advancing our lead drug product candidate ELX-02. Eloxx is headquartered in Waltham, MA with research and development operations in Rehovot, Israel.

Eloxx Pharmaceuticals Ltd. (“Eloxx Limited”) was incorporated in Israel on September 17, 2013. The Company focuses its activity on the discovery, development and commercialization of compounds for the treatment of genetic diseases caused by nonsense mutations. In 2013, the Company entered into a license agreement (the “Technion Agreement”) with the Technion Research and Development Foundation Ltd. (“TRDF”).

Reverse Merger

On December 19, 2017, Sevion Therapeutics, Inc. (“Sevion”) acquired Eloxx Pharmaceuticals, Limited (“Private Eloxx” or “Eloxx Limited”) pursuant to a merger between the companies (the “Transaction” or “Reverse Merger”). Upon consummation of the Transaction (the “Closing”), Sevion adopted the business plan of Private Eloxx and discontinued the pursuit of Sevion’s business plan pre-Closing. In connection with the Transaction, Sevion agreed to acquire all of the outstanding capital stock of Private Eloxx in exchange for the issuance of an aggregate 20,316,656 shares of the Sevion’s common stock, par value $0.01 per share (the “Common Stock”), after giving effect to a 1-for-20 reverse split effected immediately prior to the Transaction. As a result of the Transaction, Private Eloxx became a wholly-owned subsidiary of Sevion. While Sevion was the legal acquirer in the transaction, Private Eloxx was deemed the accounting acquirer. Immediately after giving effect to the Transaction, on December 19, 2017, Sevion changed its name to Eloxx Pharmaceuticals, Inc. (“Eloxx” or the “Company”).

The annual consolidated financial statements of the Company reflect the operations of Private Eloxx as the acquirer for accounting purposes, together with a deemed issuance of shares, equivalent to the shares held by the stockholders of the legal acquirer, Sevion, prior to the Transaction, and a recapitalization of the equity of the accounting acquirer. The annual consolidated financial statements include the accounts of the Company since the effective date of the reverse merger and the accounts of Private Eloxx since inception.

Upon closing of the Reverse Merger, the Company assumed the obligations under outstanding warrants previously issued by Eloxx Limited to purchase its share capital and, in connection therewith, issued warrants to purchase 346,307 shares of the Company’s common stock to certain warrant holders of Eloxx Limited.

In addition, upon closing of the Reverse Merger, Eloxx Limited assumed all of the outstanding obligations under the Eloxx 2013 Share Ownership and Option Plan (the "2013 Plan") and, accordingly, the Company has reserved 2,307,738 shares of the Company's common stock for issuance upon the exercise of such options. As part of the Company's assumption of the outstanding options under the 2013 Plan, the Company also assumed the 2013 Plan and accordingly reserved 189,751 shares of the Company's common stock for future grants.

Immediately prior to the closing of the Reverse Merger the Company raised gross proceeds of $13.5 million at a price per share of $0.15 from accredited investors as a private placement. The amount was raised pursuant a share purchase agreement dated May 31, 2017, as amended between Eloxx Limited and a group of accredited investors, ("Eloxx SPA"). Under the Eloxx SPA and the first joinder thereunder executed on June 29, 2017, Eloxx Limited received gross proceeds of $15.0 million from the group of accredited investors. In accordance with the terms of the Eloxx SPA, each of the investors executed a separate subscription agreement with the Company for the total investment of an additional $15.0 million in exchange for the Company's shares of common stock at a price per share of $0.15 immediately prior to the consummation of the Reverse Merger. With the consent of the parties, an amount of $1.5 million was invested by an accredited investor under the subscription agreement into Sevion.

On August 2, 2017, Eloxx Limited raised under a second joinder to the Eloxx SPA, an additional aggregate amount of $8.0 million, half of the amount was invested in Eloxx Limited on August 2, 2017 and the remainder was invested in Eloxx Limited immediately prior to the consummation of the Reverse Merger but was deemed an investment in the Company's share capital for the purpose of the exchange ratio under the Agreement.

This private placement was made solely to "accredited investors," as that term is defined in Regulation D under the Securities Act of 1933, as amended (the "Securities Act"), and was conducted in reliance on the exemption from registration afforded by Section 4(2), Rule 506 of Regulation D and Regulation S under the Securities Act, as amended, and corresponding provisions of state securities laws.

Following the Reverse Merger and reverse stock split, and commencing December 20, 2017, the Company's Common Stock symbol on OTCQB marketplace changed to "SVOND", and subsequently changed to "ELOX" on January 19, 2018.

Effective with the Reverse Merger each member of the Board of Directors of Eloxx Limited prior to the Reverse Merger was appointed to the Company's Board of Directors. In addition, each officer of Eloxx Limited was reappointed as an officer of the Company. Also effective with the Reverse Merger, the Company's Board affirmed its financial year end as December 31, 2017 to align with the fiscal year end of Eloxx Limited.

Taurus Sublicense Agreement

On December 18, 2017, the Company executed a binding term sheet with Taurus Biosciences Inc. ("Taurus") pursuant to which the Company grants Taurus a worldwide exclusive, sublicensable, license to the antibody SVN-001 for the development and commercialization of a product in the Field of immunology and Taurus will pay Eloxx 2% royalties on net sales. Taurus will file and prosecute any and all patents and patent applications, and shall pay all related patent expenses, with respect to this license. The Company assumed a license agreement with The Scripps Research Institute through the Reverse Merger pursuant to which the Company is required to pay a 2% royalty of net sales.

Liquidity

As reflected in the accompanying audited consolidated financial statements, the Company has not generated revenue from the sale of any product and does not expect to generate significant revenue unless and until obtaining marketing approval and commercialization. As of December 31, 2017, the Company had cash and cash equivalents of $24.0 million. The Company expects its cash and cash equivalents will fund operations at least through the end of the first quarter of 2019 based on its current operating plans. The Company incurred a loss for the year ended December 31, 2017 of $21.2 million and had a negative cash flow from operating activities of $15.9 million during the year ended December 31, 2017. The accumulated deficit as of December 31, 2017 was $39.0 million.

If we are unable to obtain funding, we could be forced to delay, reduce or eliminate our research and development programs, product portfolio expansion or commercialization efforts, which could adversely affect our business prospects, or we may be unable to continue operations.

The Company reported cash of $13.5 million in its September 30, 2017 balance sheet, and its use of cash in operations in Q4 2017 was $6.3 million. Q4 2017 research and development expense totaled $8.4 million which included $3.4 million in non-cash expense related to the Technion Agreement. Q4 2017 general & administrative expense totaled $2.2 million, transaction related costs were $0.7 million, and net loss was $10.6 million. The Company received net proceeds of $16.8 million in Q4 2017 related to completing its Series C financing.

2. Summary of Significant Accounting Policies

Basis of Presentation

The consolidated financial statements have been prepared in accordance with generally accepted accounting principles in the United States of America (“U.S. GAAP”).

Principles of Consolidation

The consolidated financial statements include the accounts of the Company and its subsidiaries. Intercompany balances and transactions have been eliminated upon consolidation.

Use of Estimates

The preparation of the financial statements in conformity with U.S. GAAP requires management to make estimates, judgments and assumptions. The Company’s management believes that the estimates, judgments and assumptions used are reasonable based upon information available at the time they are made. These estimates, judgments and assumptions can affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the dates of the financial statements, and the reported amounts of expenses during the reporting period. The Company evaluates estimates on an ongoing basis. Actual results could differ from those estimates.

Foreign Currency Translation

The functional currency of the Company is the U.S. dollar.

Accordingly, monetary accounts maintained in currencies other than the dollar are re-measured into U.S. dollars in accordance with Accounting Standards Codification (“ASC”) Topic 830, “Foreign Currency Matters”. All transaction gains and losses of the re-measurement of monetary balance sheet items are reflected in the statements of operation as other income or expenses, as appropriate.

Cash and Cash Equivalents

Cash equivalents are short-term highly liquid investments that are readily convertible to cash with original maturities of three months or less at the date of purchase to be cash equivalents.

Restricted bank deposits

At December 31, 2017, and 2016, restricted bank deposits consisted of guarantees related to the Company’s credit card and corporate facilities leases.

Concentrations of credit risk

Financial instruments that subject us to significant concentrations of credit risk consist primarily of cash. Substantially all of the Company's cash is held at financial institutions that management believes to be of high-credit quality. Deposits with these financial institutions may exceed the amount of insurance provided on such deposits; however, these deposits may be redeemed upon demand and, therefore, bear minimal risk.

The Company has no off-balance-sheet concentration of credit risk such as foreign exchange contracts, option contracts or other foreign hedging arrangements.

Property and Equipment

Property and equipment are recorded at cost, less accumulated depreciation. Costs associated with maintenance and repairs are expensed as incurred. Depreciation expense is recognized using the straight-line method over the estimated useful lives:

	Useful Life (Years)
Computers and software	3 years
Office furniture and equipment	5 – 12 years
Laboratory equipment	5 years
Leasehold improvement	Over the shorter of the expected lease term or estimated useful life

Impairment of long-lived assets

Property and equipment subject to amortization are reviewed for impairment in accordance with ASC Topic 360, "Accounting for the Impairment or Disposal of Long-Lived Assets," whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. Recoverability of assets to be held and used is measured by a comparison of the carrying amount of an asset to the future undiscounted cash flows expected to be generated by the assets. If such assets are considered to be impaired, the impairment to be recognized is measured by the amount by which the carrying amount of the assets exceeds the fair value of the assets. The Company has not recorded any impairment losses to date.

Legal and Other Contingencies

The Company accounts for its contingent liabilities in accordance with ASC Topic 450 "Contingencies". A provision is recorded when it is both probable that a liability has been incurred and the amount of the loss can be reasonably estimated. With respect to legal matters, provisions are reviewed and adjusted to reflect the impact of negotiations, estimated settlements, legal rulings, advice of legal counsel and other information and events pertaining to a particular matter. For the years ended December 31, 2017 and 2016, the Company was not a party to any litigation that could have a material adverse effect on the Company's business, financial position, results of operations or cash flows (see also Note 9). Legal costs incurred in connection with loss contingencies are expensed as incurred.

Severance Pay

Eloxx Limited's liability for severance pay is pursuant to Section 14 of the Severance Compensation Act, 1963 ("Section 14") under Israeli law, pursuant to which all Eloxx Limited's employees are included under Section 14, and are entitled only to monthly deposits, at a rate of 8.33% of their monthly salary, made in the employee's name with insurance companies. Under Israeli employment law, payments in accordance with Section 14 release Eloxx Limited from any future severance payments in respect of those employees. The fund is made available to the employee at the time the employer-employee relationship is terminated, regardless of cause of termination. The severance pay liabilities and deposits under Section 14 are not reflected in the consolidated balance sheets as the severance pay risks have been irrevocably transferred to the severance funds. Severance expenses for the years ended December 31, 2017, 2016 and 2015 amounted to $64,000, $44,000 and $35,000, respectively.

Research and Development Costs

Research and development costs are expensed as incurred except royalty-bearing participation from the Israeli Innovation Authority (previously known as Office of the Chief Scientist) of the Ministry of Economy ("IIA"), as described in "Government Grants". Research and development expenses are comprised of costs incurred in performing research and development activities, including salaries, stock-based compensation and benefits, facilities costs, depreciation, third-party license fees, and external costs of outside vendors engaged to conduct preclinical development activities and clinical trials. Research and development expenses include the Company's costs of performing services in connection with its collaboration agreements and research grants.

Nonrefundable prepayments for goods or services that will be used or rendered for future research and development activities are deferred and capitalized. Such amounts are recognized as an expense as the goods are delivered or the related services are performed, or until it is no longer expected that the goods will be delivered, or the services rendered.

Government Grants

The Company receives royalty-bearing grants, which represents participation of IIA in approved programs for research and development. These amounts are recognized on the accrual basis as a reduction of research and development expenses as such expenses are incurred.

Fair value of financial instruments:

ASC Topic 820, "Fair Value Measurements and Disclosures" ("ASC 820"), defines fair value as the price that would be received to sell an asset or paid to transfer a liability (i.e., the "exit price") in an orderly transaction between market participants at the measurement date.

In determining fair value, the Company uses various valuation approaches. ASC 820 establishes a hierarchy for inputs used in measuring fair value that maximizes the use of observable inputs and minimizes the use of unobservable inputs by requiring that the most observable inputs be used when available. Observable inputs are inputs that market participants would use in pricing the asset or liability developed based on market data obtained from sources independent of the Company. Unobservable inputs are inputs that reflect the Company's assumptions about the assumptions market participants would use in pricing the asset or liability developed based on the best information available in the circumstances. The hierarchy is broken down into three levels based on the inputs as follows:

Level 1 —	Valuations based on quoted prices in active markets for identical assets that the Company has the ability to access.
Level 2 —	Valuations based on one or more quoted prices in markets that are not active or for which all significant inputs are observable, either directly or indirectly.
Level 3 —	Valuations based on inputs that are unobservable and significant to the overall fair value measurement.

The fair value hierarchy also requires an entity to maximize the use of observable inputs and minimize the use of unobservable inputs when measuring fair value.

The carrying amounts of cash and cash equivalents, restricted bank deposits, prepaids and other assets, trade payables and accrued expenses approximate their fair value due to the short-term maturities of such instruments.

Stock-Based Compensation

The Company accounts for stock-based compensation in accordance with ASC Topic 718, "Compensation-Stock Compensation", ("ASC 718"), which requires companies to estimate the fair value of equity-based payment awards on the date of grant using an option-pricing model. The Company recognizes compensation expenses for the value of its awards granted based on the straight-line method over the requisite service period of each of the awards or over the implicit service period when a performance condition affects the vesting, and it is considered probable that the performance condition will be achieved.

The Company estimates the fair value of stock options granted using the Binomial Option-Pricing Model ("Binomial Model") which requires a number of assumptions, of which the most significant are the fair market value of the underlying Ordinary Shares, expected stock price volatility, suboptimal exercise factor and the expected option term. Expected volatility was calculated based upon historical volatilities of similar entities in the related sector index. The expected option term represents the period that the Company's stock options are expected to be outstanding and is determined based on the simplified method until sufficient historical exercise data will support using expected life assumptions. The suboptimal exercise factor is estimated using historical option exercise information. The suboptimal exercise factor is the ratio by which the stock price must increase over the exercise price before employees are expected to exercise their stock options. The risk-free interest rate is based on the yield from U.S. treasury bonds with an equivalent term. The Company has historically not paid dividends and has no foreseeable plans to pay dividends.

The fair value of ordinary shares underlying the options was determined by the Company's Board of Directors with the assistance of an independent valuation firm. Because there has been no public market for the ordinary shares, the Board of Directors has determined fair value of the ordinary shares at the time of grant by considering a number of objective and subjective factors including data from other comparable companies, sales of series preferred shares to unrelated third parties, operating and financial performance, the lack of liquidity of capital stock and general and industry specific economic outlook, amongst other factors. The fair value of the underlying ordinary shares shall be determined by management until such time as the ordinary shares are listed on an established stock exchange, national market system or other quotation system. The Company determined that the Option Pricing Method ("OPM") was the most appropriate method for allocating its enterprise value to determine the estimated fair value of its ordinary shares for valuations performed since its inception date and until June 30, 2017. Commencing June 30, 2017 and until the Closing of the Reverse Merger, the Company began using the Hybrid Method by combining the OPM and M&A scenario to determine the fair value of its ordinary shares.

Following the closing of the Reverse Merger, the fair value of the Company's common stock is determined based on the closing price on the OTCQB.

Income taxes

The Company account for income taxes in accordance with ASC Topic 740, "Income Taxes" ("ASC 740") which prescribes the use of the liability method whereby deferred tax assets and liability account balances are determined based on differences between financial reporting and tax bases of assets and liabilities and are measured using the enacted tax rates and laws that will be in effect when the differences are expected to reverse. The Company provides a valuation allowance, if necessary, to reduce deferred tax assets to their estimated realizable value if it is more likely than not that a portion or all of the deferred tax assets will be realized.

Based on ASC 740, a two-step approach is used to recognize and measure uncertain tax positions. The first step is to evaluate the tax position taken or expected to be taken in a tax return by determining if the weight of available evidence indicates that it is more likely than not that, on an evaluation of the technical merits, the tax position will be sustained on audit, including resolution of any related appeals or litigation processes. The second step is to measure the tax benefit as the largest amount that is more than 50% likely to be realized upon ultimate settlement. As of December 31, 2017, and 2016, no liability for unrecognized tax positions has been recorded. Accordingly, no interest or penalties related to uncertain tax positions are recorded, either. It is the Company's policy that any interest or penalties associated with unrecognized tax positions would be reflected in income tax expense.

Net Loss per Share

The Company applies the two-class method as required by ASC Topic 260-10, "Earnings Per Share" ("ASC 260-10"), which requires the income or loss per share for each class of shares (ordinary and preferred shares) to be calculated assuming 100% of the Company's earnings are distributed as dividends to each class of shares based on their contractual rights.

No dividends were declared or paid during the reported periods. According to the provisions of ASC 260-10, the Company's preferred shares are not participating securities in losses and, therefore, are not included in the computation of net loss per share.

Basic loss per share is computed by dividing the loss for the period applicable to ordinary shareholders by the weighted average number of ordinary shares outstanding during the period. In computing diluted income per share, basic earnings per share are adjusted to reflect the potential dilution that could occur upon the exercise of share options granted to grantees and upon conversion of shares and warrants issued to investors and service providers using the "treasury stock method".

For the years ended December 31, 2017, 2016 and 2015, all outstanding preferred stock, stock options, stock warrants and restricted stock have been excluded from the calculation of the diluted net loss per share as all such securities are anti-dilutive for all years presented (see Note 13).

Recent Accounting Pronouncements adopted

On March 30, 2016, the FASB issued ASU 2016-09, "Compensation—Stock Compensation", which effects all entities that issue share-based payment awards to their employees. The amendments in this update cover such areas as the recognition of excess tax benefits and deficiencies, the classification of those excess tax benefits on the statement of cash flows, an accounting policy election for forfeitures, the amount an employer can withhold to cover income taxes and still qualify for equity classification and the classification of those taxes paid on the statement of cash flows. This update is effective for annual and interim periods beginning after December 15, 2016. This guidance can be applied either prospectively, retrospectively or using a modified retrospective transition method. The Company adopted the new guidance prospectively. This new guidance does not have a material impact on the Company's consolidated financial statements.

Recent Accounting Pronouncements not adopted yet

In February 2016, the FASB issued ASU No. 2016-02, *Leases.* This guidance will require that lease arrangements longer than 12 months result in an entity recognizing an asset and liability equal to the present value of the lease payments in the statement of financial position. This guidance is effective for annual periods beginning after December 15, 2018, and interim periods therein. This standard requires a modified retrospective transition approach for all leases existing at, or entered into after, the date of initial application, with an option to use certain transition relief. Early adoption is permitted. The Company is currently evaluating the impact that the adoption of ASU 2016-02 will have on its financial statements and related disclosures.

In November 2016, the FASB issued ASU 2016-18, Statement of Cash Flows (Topic 230): "Restricted Cash" (ASU 2016-18), which requires companies to include amounts generally described as restricted cash and restricted cash equivalents in cash and cash equivalents when reconciling beginning-of-period and end-of-period total amounts shown on the statement of cash flows. The amendments in this update are effective for public business entities for fiscal years beginning after December 15, 2017, and interim periods within those fiscal years. Early adoption is permitted, including adoption in an interim period. This new guidance does not have a material impact on the Company's consolidated financial statements.

In January 2017, the FASB issued ASU 2017-01 Business Combinations (Topic 805): "Clarifying the Definition of a Business". ASU 2017-01 provides amendments to clarify the definition of a business and affect all companies and other reporting organizations that must determine whether they have acquired or sold a business. The amendments are intended to help companies and other organizations evaluate whether transactions should be accounted for as acquisitions (or disposals) of assets or businesses. The guidance is effective for public business entities for fiscal years beginning after December 15, 2017, and interim periods within those fiscal years and should be applied prospectively as of the beginning of the period of adoption. Early adoption is permitted under certain circumstances. The Company adopted ASU 2017-01 on January 1, 2018 and it did not have an impact on its accounting and disclosures.

In July 2017, the FASB issued ASU 2017-11, which allows companies to exclude a down round feature when determining whether a financial instrument is considered indexed to the entity's own stock. As a result, financial instruments with down round features may no longer be required to be classified as liabilities. A company will recognize the value of a down round feature only when it is triggered, and the strike price has been adjusted downward. For equity-classified freestanding financial instruments, such as warrants, an entity will treat the value of the effect of the down round, when triggered, as a dividend and a reduction of income available to common shareholders in computing basic earnings per share. The guidance in ASU 2017-11 is effective for fiscal years beginning after December 15, 2018, and interim periods within those fiscal years. Early adoption is permitted, and the guidance is to be applied using a full or modified retrospective approach. The Company is evaluating the impact of the revised guidance.

3. Reverse Merger

As described in Note 1: "Nature of the Business", the Reverse Merger was accounted for as a reverse recapitalization which is outside the scope of ASC Topic 805, "Business Combinations" ("ASC 805"). Under reverse capitalization accounting, Eloxx Limited is considered the acquirer for accounting and financial reporting purposes and acquired the assets and assumed the liabilities of the Company. The assets acquired and liabilities assumed are reported at their historical amounts. The annual consolidated financial statements of the Company reflect the operations of the acquirer for accounting purposes together with a deemed issuance of shares, equivalent to the shares held by the former stockholders of the legal acquirer and a recapitalization of the equity of the accounting acquirer. The annual consolidated financial statements include the accounts of the Company since the effective date of the reverse capitalization and the accounts of Eloxx Limited since inception.

The following summarizes the estimated fair value of the assets and liabilities assumed at the date of the Reverse Merger (in thousands):

	December 19, 2017
Cash and cash equivalents	$ 123
Prepaid expenses and other current assets	220
Property, plant and equipment, net	39
Restricted bank deposits	6
Total assets acquired	388
Accounts payable	(215)
Accrued expenses	(343)
Total liabilities acquired	(558)
Total net liabilities acquired	$ (170)

Additionally, the Company incurred approximately $1.3 million in professional fees related to the Reverse Merger.

4. Prepaids and other current assets

Prepaids and other current assets consisted of the following (in thousands):

	December 31	
	2017	2016
Government grants from IIA	—	605
Other governmental agencies	88	221
Prepaid expenses	267	11
	$355	$837

5. Property and Equipment, net

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

	December 31	
	2017	2016
Cost:		
Computers and software	$124	$ 54
Office furniture and equipment	118	2
Laboratory equipment	37	—
Leasehold improvement	53	—
	332	56
Accumulated depreciation	54	15
	54	15
Property and equipment, net	$278	$ 41

Depreciation expense was $39,000, $8,000 and $5,000 for the years ended December 31, 2017, 2016 and 2015, respectively.

6. Accrued Expenses

Accrued expenses consisted of the following (in thousands):

	December 31,	
	2017	2016
Accrued payroll and related expenses	$ 402	$393
Accrued research and development expenses	704	119
Accrued professional services	787	107
	$1,893	$619

7. Convertible Loan

On January 26, 2017 (the “Closing Date”), the Company entered into a Convertible Loan Agreement (the “Agreement”) with five of its shareholders (the “Lenders”), pursuant to which the Company raised an aggregate amount of $2.5 million (the “Convertible Loan”). The Convertible Loan shall bear a 5% annual interest rate. According to the Agreement, the outstanding portion of the Convertible Loan (without accrued interest) should be automatically converted upon the consummation of equity investment by a third party of an aggregate amount of at least $5.0 million (the “Qualified Equity Investment”), prior to the lapse of two years from the Closing Date (the “Maturity Date”), into equity securities of the same class issued by the Company in such Qualified Equity Investment, in a conversion price which was equal to 80% of the price per share paid by the third party in such Qualified Equity Investment (the “Automatic Conversion”). In addition, upon the earlier of (i) Maturity Date or (ii) Event of Default as defined in the Agreement, the outstanding portion of the Convertible Loan (including accrued interest) should be converted into an equity investment of the then existing most senior class, at a conversion price per share which was equal to 65% of the original issue price per share applicable to such class. At the end of May 2017, the Lenders signed a waiver agreement pursuant to which they waived the potential discount as described above.

In accordance with ASC Topic 815 “Derivatives and Hedging”, features related to convertible loans qualify as embedded derivative instruments at the date of issuance, since these are considered as stock settled debt. In determining fair value, the Company uses various valuation approaches. ASC 820 establishes a hierarchy for

inputs used in measuring fair value. The embedded conversion feature is classified under level 3 in the hierarchy. The fair value assigned to the embedded conversion feature on the issuance dates amounted to $0.3 million. The embedded instruments are marked to market in each reporting period and changes are recorded in financial expenses. The discount is amortized using the effective interest over the loan period.

On May 31, 2017, the Convertible Loan (without accrued interest) was converted into 825,213 Series C preferred stock, according to the price per share that was paid in the 2017 Share Purchase Agreement (see Note 10). During the year ended December 31, 2017, the Company recorded $0.7 million as financial and other expenses, net, as a result of changes in the embedded instruments. In connection with the conversion, the embedded instrument together with all accrued interest in the amount of $0.7 million and was classified to additional paid in capital.

The following table presents reconciliations for the Company's liabilities measured and recorded at fair value on a recurring basis, using significant unobservable inputs (in thousands):

	Significant Unobservable Inputs (Level 3)
Balance at January 26, 2017	$ (308)
Amortization and revaluation embedded conversion feature	(317)
Conversion of convertible loan into Series C preferred stock	625
Balance at December 31, 2017	$ —

8. Related Parties

On August 29, 2013, the Company entered into an agreement ("Technion Agreement") with TRDF, with respect to certain technology relating to aminoglycosides and the redesign of aminoglycosides for the treatment of human genetic diseases caused by premature stop mutations and further results of the research of the technology, in order to develop and commercialize products based on such technology. Under the agreement, TRDF shall provide the Company research services for an estimated annual payment of $0.1 million, to be agreed exactly by the parties prior to the beginning of each year of the research period. During the years ended December 31, 2017, 2016 and 2015, the Company recorded general and administrative expenses amounting to $7,000, $185,000 and $0, respectively, in relation to the TRDF reimbursement for the preparation, filling, prosecution and maintenance of TRDF patents rights related to Eloxx Limited. In addition, during the years ended December 31, 2017, 2016 and 2015 the Company recorded research and development expenses in relation to the TRDF amounting to $3,465,000, $33,000 and $58,000, respectively. As of December 31, 2017 and 2016, amounts recorded in accrued expenses were $25,000 and $185,000, respectively.

In addition, TRDF shall grant the Company a license to use, market, sell or sub-license the rights of the product developed under the TRDF research results (the "Licensed Product"), as fully defined in the Technion Agreement, for the following considerations: (a) milestone payments, to be transferred upon meeting certain milestones as defined in the Technion Agreement, up to total consideration of $6.1 million; (b) certain royalties on a low- to mid- single-digit percentage of net sales (subject to change in the case of (x) sublicensing to a big pharmaceutical or biotechnology company, or (y) payment of royalties to third parties, or (z) commercialization by a third party of an authorized generic to a licensed product), for a period until the later of (i) the expiration of a valid claim on the Licensed Product in each country the Licensed Product is sold to, or (ii) a certain amount of years from the date of the first commercial sale of the Licensed Product in such country, and (c) a low- to mid- double-digit percentage of any non-royalty sub-license income received by the Company from a sub-licensed entity. In addition, the Company shall pay certain fee to TRDF upon an exit event as described in the Technion Agreement.

Moreover, upon the closing of an Exit Event which is not an Initial Public Offering ("IPO"), as defined in the Technion Agreement, TRDF shall be entitled to an amount equal to 3% of all non-refundable, non-contingent consideration, whether in cash or in kind, actually received by the Company and / or its shareholders. Upon the closing of an exit event which is an IPO, as defined in the Technion Agreement, TRDF shall be entitled to a number of Ordinary Shares of the Company representing 3% of the Company's outstanding shares on a fully diluted basis immediately prior to the closing of such IPO.

On August 9, 2017 the Company received a legal claims letter from TRDF regarding TRDF's alleged entitlement to an exit fee in accordance with the Technion Agreement. The parties are in discussion regarding a settlement of the legal claim, whereby the Company would issue shares to TRDF representing approximately 2.1% of the outstanding shares of the Company representing fulfillment of the "exit clause." Therefore, the Company has recorded a $3.4 million research and development expense with an offsetting adjustment to additional paid-in capital for the year ended December 31, 2017 related to this legal claim.

9. Commitments and Contingencies

Operating Leases

The Company entered into a lease agreement for office space in Rehovot, Israel for a period of three years commencing March 8, 2017 and until April 30, 2020 with annual lease payments in the amount of $0.1 million. The Company has an option to extend the lease for a term of two years.

The Company entered into a lease agreement for laboratory space in Rehovot, Israel for a period of one year commencing March 8, 2017 and until March 8, 2018 with annual lease payments in the amount of $48,000. The Company has an option to extend the lease for a term of one year.

The Company entered into a lease agreement for office space in Waltham, MA for a period of 37 months commencing November 15, 2017 and until December 17, 2020 with annual lease payments in the amount of $0.2 million. The Company has an option to extend the lease for a term of three years.

Future minimum lease commitments as of December 31, 2017 were as follows:

As of December 31, 2017	Total
2018	$258
2019	232
2020	186
	$676

The Company recorded lease expenses in the amounts of $0.2 million for the year ended December 31, 2017 and $0.1 million for the each of the years ended December 31, 2016 and 2015.

Royalty Commitments to the IIA

Under the research and development agreements with the IIA and pursuant to applicable laws, the Company is required to pay royalties at the rate of 3% on sales to end customers of products developed with funds provided by the IIA, up to an amount equal to 100% of the IIA research and development grants received, linked to the dollar plus interest on the unpaid amount received based on the 12-month LIBOR rate (from the year the grant was approved) applicable to dollar deposits. If the Company does not generate sales of products developed with funds provided by the IIA, the Company is not obligated to pay royalties or repay the grants.

The Company received research and development grants from the IIA in the amounts of $0.9 million, $1.2 million, and $0.3 million for the years ended December 31, 2017, 2016 and 2015, respectively. As of December 31, 2017, the Company has not commenced the payment obligation of the royalties and has a contingent obligation with respect to royalty-bearing participation received or accrued, amounting to $2.7 million.

Commitments to Scripps

The Company assumed a license agreement with Scripps Research Institute through the Reverse Merger pursuant to which the Company is required to pay a 2% royalty of net sales.

Commitments to TRDF

Since August 29, 2013, the Company has had an ongoing agreement with TRDF. Refer to Note 8: Related Parties for further information.

10. Stockholders' Equity

For accounting purposes, all common stock, preferred stock, warrants, options to purchase common stock and loss per share amounts have been adjusted to give retroactive effect to the exchange ratio and reverse stock split for all periods presented in these consolidated financial statements.

Preferred and Common Stock

In April 2015, Eloxx Limited achieved a clinical milestone in connection with the share purchase agreement signed in 2013, pursuant to which, Eloxx Limited issued to investors 1,073,157 shares of Series A preferred stock with a par value of $0.01 for an aggregate amount of $0.9 million.

In July 2015, Eloxx Limited entered into a Share Purchase Agreement (the "2015 SPA") whereby Eloxx Limited issued to existing investors 1,002,049 shares of Series B-1 preferred stock with a par value of $0.01 and 1,503,068 warrants to purchase 1,503,068 shares of Series B-1 preferred stock with an exercise price of $3.11 for an aggregate gross amount of $3.1 million, representing a price per unit of $3.11 per share. In connection with the 2015 SPA, Eloxx Limited paid a contractor cash consideration of $0.1 million as a finder fee and granted 30,563 warrants to purchase 30,563 shares of Series B-1 preferred stock with an exercise price of $3.11 per share.

In July 2015, one of Eloxx Limited's employees exercised their 99,829 options with an exercise price of $0.01 per share to purchase 99,829 shares of common stock.

In February 2016, Eloxx Limited entered into Shares Purchase Agreement (the "2016 SPA") whereby Eloxx Limited issued to existing investors 1,929,676 shares of Series B-1 preferred stock with a par value of $0.01 and 2,894,519 warrants to purchase 2,894,519 shares of Series B-1 preferred stock with an exercise price of $3.11 per share for an aggregate gross amount of $6.0 million.

In connection with the 2016 SPA, Eloxx Limited paid a contractor cash consideration of $0.2 million as finder fee and granted 48,242 warrants to purchase 48,242 shares of Series B-1 preferred stock with an exercise price of $3.11 per share.

In August 2016, Technion Investment Opportunities Fund L.P (the "TIOF) and TRDF exercised 124,786 and 311,964 warrants, respectively, to purchase shares of Series A preferred stock at an exercise price of $0.80 per share, respectively, for total consideration of $0.4 million.

In September 2016, Eloxx Limited achieved a milestone in connection with the Share Purchase Agreement signed in 2014 (“2014 SPA”), pursuant to which, Eloxx Limited paid a $0.1 million milestone payment and issued to investors 1,174,138 shares of Series B-1 preferred stock with a par value of $0.01 and 587,072 warrants to purchase 587,072 shares of Series B-1 preferred stock for an aggregate amount of $3.7 million.

In connection with the 2014 SPA milestone, Eloxx Limited paid a contractor cash consideration of $0.1 million as a finder fee and granted 36,593 warrants to purchase 36,593 shares of Series B-1 preferred stock with exercise price of $3.11 per share.

On May 22, 2017, Eloxx Limited entered into a Share Purchase Agreement (the “2017 SPA”) (and subsequently on joinder agreements) with certain existing and new investors, whereby, an aggregate gross amount of $21.5 million, which included the conversion of the loan (as detailed in Note 7), was received by Eloxx Limited in exchange for the issuance of 7,136,289 shares of Series C preferred stock with a par value of $0.01 with the initial closing, of which 39,293 were issued as a result of the anti-dilution effect of the Reverse Merger. The related issuance costs were $0.6 million.

In connection with the 2017 SPA, the Company granted 142,524 warrants to purchase 142,524 shares of Series C preferred stock to certain service providers of as finder fee compensation.

Upon the closing of the Reverse Merger the Company issued 6,333,333 shares of common stock related to the closing of the 2017 SPA with a par value of $0.01 for an aggregate gross amount of $17.5. Additionally, Sevion raised $1.5 million prior to the Reverse Merger. The related issuance costs for these transactions was $0.5 million.

Warrants

As of December 31, 2017, the Company had 480,049 outstanding warrants to purchase 480,049 shares of the Company’s common stock.

The table below summarizes the outstanding warrants as of December 31, 2017:

Amount	Weighted average exercise price	Expiration Date
64,374	0.800	12/19/2022
59,415	3.030	12/19/2022
60,832	3.000	12/19/2022
22,282	3.029	12/19/2022
151,984	3.109	12/19/2022
48,252	4.664	12/19/2022
68,434	8.000	1/27/2018
4,474	40.000	5/16/2019
2	520.000	11/17/2020
480,049		

11. Stock-Based Compensation

The Company has two equity compensation plans; the Company has a 2008 Plan and Eloxx Limited has a 2013 plan, both are explained in detail below.

In December 2008, the Company adopted the 2008 Incentive Compensation Plan (the “2008 Plan”), which provides for the grant of stock options, stock grants and stock purchase rights to certain designated employees and certain other persons performing services for the Company, as designated by the Company’s Board of

Directors. Pursuant to the 2008 Plan, an aggregate of 245,884 shares of common stock has been reserved for issuance. On January 1 of each calendar year beginning with the calendar year 2015, the share reserve will automatically increase by 5% of the fully-diluted equity outstanding on the immediately preceding December 31, up to an annual maximum of 75,000 shares of common stock, provided that the aggregate number of shares subject to outstanding awards will not exceed 25% of the fully-diluted equity outstanding. Consequently, the pool of options was increased by additional 126,051 shares of common stock. The terms and vesting schedules for share-based awards vary by type of grant and the employment status of the grantee. Generally, the awards vest based upon time-based conditions or achievement of specified goals and milestones. As of December 31, 2017, 116,466 Common Stock are available for future grant under the 2008 Plan.

In December 2013, Eloxx Limited's Board of Directors adopted the 2013 Share Ownership and Option Plan in accordance with section 102 and 3(i) of the Israeli Income Tax Ordinance (the "2013 Plan"). Under the 2013 Plan, options to purchase ordinary shares of Eloxx Limited or ordinary shares of Eloxx Limited may be granted to employees, officers, directors, service providers and consultants of Eloxx Limited Each option granted can be exercised for one ordinary share of Eloxx Limited. Options granted generally become fully exercisable after a two to four-year vesting period and expire no later than ten years from the date of grant. Any option forfeited or cancelled before expiration becomes available for future grants under the 2013 Plan until the tenth anniversary of the 2013 Plan, after which no further grants under the 2013 Plan are permissible. On April 21, 2015, Eloxx Limited's Board of Directors adopted the US Share Ownership and Option Appendix under 2013 Plan pursuant to which Eloxx Limited may grant options to purchase its ordinary shares to U.S. grantees of Eloxx Limited or any of its parent or subsidiary companies. Upon the closing of the Reverse Merger, the Company assumed the 2013 Plan and all outstanding options thereunder and thereafter the 2013 Plan and any options or shares previously granted thereunder were replaced with options to purchase or shares of our common stock. As of December 31, 2017, the of the 2013 Plan amounted to 2,473,255 shares of common stock and 119,762 shares of Common Stock were available for future grant under the 2013 Plan.

Transactions related to the grant of options to employees and directors under the 2008 Plan during the year ended December 31, 2017, were as follows:

	Amount	Weighted average exercise price	Weighted average remaining contractual life	Aggregate intrinsic value
Options outstanding at the closing of the Reverse Merger	215,723	$ 28.93	7.80	$ 61,358
Options outstanding at end of year	215,723	$ 28.93	7.80	$338,056
Options exercisable at end of year	215,723	$ 28.93	7.80	$338,056

Transactions related to the grant of options to employees and directors under the 2013 Plan during the year ended December 31, 2017, were as follows:

	Amount	Weighted average exercise price	Weighted average remaining contractual life	Aggregate intrinsic value
Options outstanding at beginning of year	1,948,154	$ 0.47	7.93	$ 1,571,406
Granted	582,961	5.40		
Exercised	(16,669)	0.96		
Forfeited	(177,720)	0.98		
Options outstanding at end of year	2,336,726	$ 1.82	7.12	$14,835,970
Options exercisable at end of year	1,624,407	$ 0.36	6.04	$12,408,281

The aggregate intrinsic value represents the total intrinsic value (the difference between the deemed fair value of the Company's Common Stock on the last day of fiscal year 2017 and the exercise price, multiplied by the number of in-the-money options) that would have been received by the option holders had all option holders exercised their options on December 31, 2017. This amount is impacted by the changes in the fair value of the Company's shares.

The weighted average grant date fair value of the options granted during the years ended December 31, 2017, 2016 and 2015 were $3.68, $0.14 and $0.17, respectively.

The following table presents the assumptions used to estimate the fair values of the options granted in the period presented:

	December 31,		
	2017	2016	2015
Dividend yield	0%	0%	0%
Volatility	87.17%-116.69%	64.46%-105.57%	73.70%-88.72%
Risk free interest	1.22%-2.5%	0.47%-2.35%	0.25%-1.87%
Contractual term (years)	10	10	10
Forfeiture rate post-vesting	10%	10%	10%
Suboptimal exercise	2.3	2.3	2.3

As of December 31, 2017, there was $2.1 million of total unrecognized compensation cost related to non-vested stock options granted under the 2013 Plan. This cost is expected to be recognized over a weighted-average period of 2.09 years.

The total equity-based compensation expense related to all of the Company's equity-based awards were recognized as follows:

	Year ended December 31,		
	2017	2016	2015
Research and development	$ 39	$61	$68
General and administrative(1)	62	17	24
Total stock-based compensation expenses	$101	$78	$92

(1) Including expenses of $19,000 in connection with restricted shares that were granted during the year ended December 31, 2017.

The Company issued an inducement award outside of the 2008 Plan and 2013 Plan to the Company's Chief Executive Officer in the form of an option to purchase 22,427 shares of the Company's common stock with an exercise price per share equal to $8.00, and an award of restricted stock units for 22,427 shares of the Company's common stock (collectively the "Performance Option Awards"). Subject to continued service through the vesting date, the Performance Option Awards will vest and become immediately exercisable upon the date that marks the first successful completion of a Phase-2B study with respect to any indication.

In addition, the Company issued an inducement award outside of the 2008 Plan and 2013 Plan to the Company's Chief Executive Officer in the form of an option to purchase 640,785 shares of the Company's common stock with an exercise price per share equal to $8.00, and an award of restricted stock units for 640,785 shares of the Company's common stock (collectively the "Time-Vesting Awards"). Subject to continued service through the vesting date, 1/3 of the Time-Vesting Awards will vest and become immediately exercisable on the first anniversary of the effective date, with an additional 1/12 of the Time-Vesting Awards vesting on each quarterly anniversary of the effective date, provided that vesting of the Time-Vesting Awards shall be subject to acceleration following the achievement of certain milestones.

12. Income Taxes

The Company is subject to income taxes in the United States and Israel. In general, the U.S. federal and state income tax returns remain open to examination by taxing authorities for tax years beginning in June 30, 2014 to present. The Israeli income tax returns remain open to examination beginning in 2013 to present. However, if and when the Company claims net operating loss ("NOL") carryforwards from any prior years against future taxable income, those losses may be examined by the taxing authorities.

The United States enacted the Tax Cuts and Jobs Act ("Tax Act") on December 22, 2017, most provisions of which will take effect starting in years beginning after December 31, 2017. The Tax Act makes substantial changes to U.S. taxation of corporations, including lowering the U.S. federal corporate income tax rate from 34% to 21%. The effect on deferred tax assets and liabilities of a change in law or tax rates is recognized in income in the period that includes the enactment date. The Tax Act also includes a provision designed to currently tax global intangible low-taxed income ("GILTI"). The Company will record the U.S. income tax effect of future GILTI inclusions in the period in which they arise, if ever.

After the enactment of the Tax Act, the SEC issued Staff Accounting Bulletin No. 118 ("SAB 118") to address the application of U.S. GAAP in situations when a registrant does not have the necessary information available, prepared, or analyzed (including computations) in reasonable detail to complete the accounting for certain income tax effects of the Tax Act. We have calculated an estimate of the impact of the Tax Act in our year-end income tax provision in accordance with our understanding of the Tax Act and guidance available as of the date of this filing. The provisional amount related to the remeasurement of our net U.S. deferred tax asset, based on the rate at which they are now expected to reverse in the future, was deferred tax expense of $10.2 million, but which was fully and equally offset by a corresponding reduction in our valuation allowance. The effect of the change in federal corporate tax rate from 34% to 21% is subject to change based on resolution of estimates used in determining the amounts of deferred tax assets and liabilities that were remeasured. The Company will reflect any adjustments to the provisional amounts in the period the accounting is completed and expects to complete this analysis within the one-year measurement period provided by SAB 118.

Deferred income taxes reflect the net tax effects of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes. A deferred tax liability or asset shall be recognized for all of the Company's estimated future tax effects attributable to temporary differences and carryforwards, unless an exception applies. A common exception for businesses that operate in multiple jurisdictions is a temporary difference that is essentially permanent in duration related to the excess of the amount for financial reporting over the tax basis of an investment attributable to unremitted earnings in a foreign subsidiary. However, there are no or trivial unremitted earnings in foreign jurisdictions, so no provision for deferred taxes thereupon is required for the Company.

Significant components of the Company's deferred tax assets are as follows (in thousands):

	December 31,	
	2017	2016
Deferred tax assets:		
Net operation loss carryforward	$ 23,689	$ 2,811
Stock-based compensation	1,125	—
Reserves and allowances	11	17
U.S. tax credits and other	714	—
Research and development	2,604	1,195
Net deferred tax asset before valuation allowance	28,143	4,023
Valuation allowance	(28,143)	(4,023)
Net deferred tax asset	$ —	$ —

In assessing the realization of deferred tax assets, management considers whether it is more likely than not that all or some portion of the deferred tax assets will not be realized. The ultimate realization of the deferred tax assets is dependent upon the generation of future taxable income during the periods in which temporary differences are deductible and net operating losses are utilized. Based on consideration of these factors, the Company recorded a full valuation allowance at December 31, 2017 and 2016. As of December 31, 2017 and 2016, we have provided a valuation allowance of approximately $28.1 million and $4.0 million, respectively, on U.S. federal and state and Israeli tax jurisdiction deferred tax assets to reduce the amount of these assets to zero. The net change in our valuation allowance was an increase of $24.1 million for the year ended December 31, 2017 of which $30.2 million was related to the Reverse Merger of Sevion on December 19, 2017, that was partially offset by a $10.2 million decrease related to the reduction in the U.S. federal corporate tax rate on December 22, 2017. The remaining $4.1 million increase was primarily related to losses generated in the current period.

As of December 31, 2017, we had U.S. federal and state NOL carryforwards of $77.2 million and $27.4 million, respectively, and federal research tax credit carryforwards of $0.7 million. Our U.S. net operating loss carryforwards will begin to expire, if not utilized, beginning in 2019 through 2037, and the research tax credits will expire beginning in 2027 through 2037. These NOL carryforwards could expire unused and be unavailable to offset future income tax liabilities. Under the newly enacted Tax Act, federal net operating losses incurred in 2018 and in future years may be carried forward indefinitely, but the deductibility of such federal net operating losses is limited. It is uncertain if and to what extent various states will conform to the newly enacted federal tax law.

In addition, under Section 382 of the Code and corresponding provisions of state law, if a corporation undergoes an “ownership change,” which is generally defined as a greater than 50 percent change, by value, in its equity ownership over a three-year period, the corporation’s ability to use its pre-change NOL carryforwards and other pre-change tax attributes to offset its post-change income or taxes may be limited. We may have experienced ownership changes in the past, including the Reverse Merger of Sevion Therapeutics, Inc. on December 19, 2017 at which time our pre-change U.S. federal NOL carryforward was $77.1 million and research tax credit was $0.7 million. We may experience additional ownership changes in the future as a result of subsequent shifts in our stock ownership, some of which may be outside of our control. Although we have not completed our analysis, it is reasonably possible that our federal NOLs available to offset future taxable income could materially decrease. This reduction will be offset by an adjustment to the existing valuation allowance for an equal and offsetting amount. Additionally, our state NOLs available to offset future state income could similarly decrease which would also be offset by an equal and offsetting adjustment to the existing valuation allowance. Given the offsetting adjustments to the existing valuation allowance, any ownership change is not expected to have an adverse material effect on our Consolidated Financial Statements. Finally, as of December 31, 2017, we had Israeli NOL carryforwards of $24.9 million, which carryforward indefinitely.

The components of income (loss) before taxes on income are as follows (in thousands):

	Year ended December 31,		
	2017	2016	2015
U.S.	$ (21)	$ 44	$ 16
Israel	(21,145)	(9,883)	(6,418)
Income (loss) before taxes on income	$(21,166)	$(9,839)	$(6,402)

Taxes on income during the years ended December 31, 2017 and 2016 are comprised from taxes incurred as a result of the implementation of the cost-plus method between the Company and its subsidiary were immaterial.

The main reconciling item between the statutory tax rate of the Company and the effective tax rate is the recognition of valuation allowances in respect to deferred taxes relating to accumulated net operating losses carried forward and temporary differences due to the uncertainty of the realization of such deferred taxes.

13. Net Loss Per Share

The loss and the weighted average number of shares used in computing basic and diluted net loss per share for the years ended December 31, 2017, 2016 and 2015, is as follows (amounts in thousands, except share numbers):

	Year ended December 31,		
	2017	2016	2015
Numerator:			
Net loss	$ 21,214	$ 9,847	$ 6,406
Dividends accumulated for the period(1)	2,404	1,100	516
Net loss available to stockholders of Common Stock	$ 23,618	$ 10,947	$ 6,922
Denominator:			
Shares used in computing net loss per share of Common Stock, basic and diluted	4,976,377	4,205,277	4,148,389
Net loss per share of Common Stock, basic and diluted	$ 4.75	$ 2.60	$ 1.67

(1) The net loss used for the computation of basic and diluted net loss per share include 8% per share per annum compounded annually which was related to distributions for preferred stockholders of Eloxx Limited. On December 19, 2017 in conjunction with the Reverse Merger all preferred shares were converted to common shares.

The total weighted average numbers of shares related to outstanding preferred stock, stock options under the 2008 Plan and 2013 Plan, stock warrants and restricted shares that have been excluded from the calculation of the diluted net loss per share due to their anti-dilutive effect was 19,027,306, 12,746,823 and 6,778,980 for the years ended December 31, 2017, 2016 and 2015, respectively.

14. Financial and Other Expenses, net

Financial and other expenses consisted of the following (in thousands):

	Year ended December 31,		
	2017	2016	2015
Exchange rate differences	156	7	122
Amortization and revaluation of embedded conversion feature in respect to convertible loan	625	—	—
Interest expenses in respect to convertible loan	43	—	—
Total financial and other expense, net	824	7	122

15. Segment and Geographic Information

Operating segments are defined as components of an enterprise (business activity from which it earns revenue and incurs expenses) about which discrete financial information is available and regularly reviewed by the chief operating decision maker in deciding how to allocate resources and in assessing performance. The Company's chief operating decision maker is the Chief Executive Officer. The chief operating decision maker reviews consolidated operating results to make decisions about allocating resources and assessing performance for the entire company. The Company views its operations and manages its business as one operating segment; however, it operates in two geographic regions: United States (Waltham, MA) and Israel (Rehovot).

16. Subsequent Events

On January 10, 2018, the Company filed a Registration Statement on Form S-8 for the purpose of registering (i) 2,353,493 shares common stock of the Company, $0.01 par value per share (the “Common Stock”) issuable pursuant to outstanding but unexercised option awards previously issued under 2013 Plan, (ii) 119,762 shares of common stock issuable upon the exercise of stock options reserved for issuance pursuant to future awards under the 2013 Plan, and (iii) 663,212 restricted stock units and 663,212 options to purchase common stock granted to Robert E. Ward on December 26, 2017, as Chief Executive Officer and Chairman of the Board of Directors of the Company.

Exhibit 4.1

Certificate No.	Class	No. of Shares
	Common Stock, Par Value $0.01 per Share	

See Legend on Reverse Side

Eloxx Pharmaceuticals, Inc.

Incorporated Under the Laws of the State of Delaware

THIS IS TO CERTIFY THAT:

_____

is the Registered Holder of fully paid and non-assessable shares of the Common Stock, par value $0.01 per share, of the above-named Corporation transferrable on the books of the Corporation by the holder hereof in person or by a duly authorized Attorney upon surrender of this Certificate properly endorsed.

This certificate and the shares represented hereby are subject to the laws of the State of Delaware and to the Certificate of Incorporation and the By-laws of the corporation, in each case as from time to time amended.

IN WITNESS WHEREOF, **ELOXX PHARMACEUTICALS, INC.** has caused this certificate to be signed by its duly authorized officers as of this day of , .

/s/ Robert Ward
Robert Ward, Chief Executive Officer

/s/ Gregory Weaver
Gregory Weaver, Secretary

COUNTERSIGNED AND REGISTERED:
AMERICAN STOCK TRANSFER & TRUST COMPANY, LLC
(New York, N.Y.) TRANSFER AGENT AND REGISTRAR
By: AUTHORIZED SIGNATURE

Restrictions on Transfer

THE ISSUANCE AND SALE OF THE SECURITIES REPRESENTED BY THIS CERTIFICATE HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR APPLICABLE STATE SECURITIES LAWS. THE SECURITIES MAY NOT BE OFFERED FOR SALE, SOLD, TRANSFERRED OR ASSIGNED (I) IN THE ABSENCE OF (A) AN EFFECTIVE REGISTRATION STATEMENT FOR THE SECURITIES UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR (B) AN OPINION OF COUNSEL TO THE HOLDER (IF REQUESTED BY THE COMPANY), IN A FORM REASONABLY ACCEPTABLE TO THE COMPANY, THAT REGISTRATION IS NOT REQUIRED UNDER SAID ACT OR (II) UNLESS SOLD OR ELIGIBLE TO BE SOLD PURSUANT TO RULE 144 OR RULE 144A UNDER SAID ACT. NOTWITHSTANDING THE FOREGOING, THE SECURITIES MAY BE PLEDGED IN CONNECTION WITH A BONA FIDE MARGIN ACCOUNT OR OTHER LOAN OR FINANCING ARRANGEMENT SECURED BY THE SECURITIES.

Assignment

For value received, the undersigned hereby sells, assigns and transfers to shares of the common stock represented by this certificate, and hereby irrevocably constitutes and appoints attorney to transfer such stock on the books of the corporation with full power of substitution in the premises.

Dated , 20

Signature of registered owner corresponding exactly to the name of such owner as written on the face of this certificate

Witness

Exhibit 10.1
*****Text Omitted and Filed Separately**
With Securities and Exchange Commission
Confidential Treatment Requested
Under 17 C.F.R. Sections 200.80(b)(4) and 240.24b-2 of the
Securities Exchange Act of 1934, as amended.

RESEARCH AND LICENSE AGREEMENT

This Research and License Agreement is entered into as of this 29th day of August 2013 (the "**Effective Date**"), by and among Technion Research and Development Foundation Ltd., a company formed under the laws of Israel, having a place of business at the Technion City, Haifa 32000, Israel ("**TRDF**") and Eloxx Pharma Ltd., a company formed under the laws of Israel, having a place of business at 14 Shenkar St. Herzelia, Israel ("**Licensee**").

WHEREAS, TRDF is the wholly-owned subsidiary of the Technion – Israel Institute of Technology (the "Technion") and serves as its technology licensing arm;

WHEREAS, Professor Timor Baasov of the Technion and member of his laboratory at the Technion have developed certain technology relating to aminoglycosides and the redesign of aminoglycosides for the treatment of human genetic diseases caused by premature stop mutations;

WHEREAS, Licensee wishes to fund further research in Professor Baasov's laboratory relating to such technology;

WHEREAS, Licensee wishes to obtain a license with respect to such technology and with respect to the results of such research in order to develop and commercialize products based thereon;

WHEREAS, TRDF desires to have products based on such technology and results developed and commercialized to benefit the public; and

WHEREAS, Licensee has represented to TRDF, in order to induce TRDF to enter into this Agreement, that Licensee shall commit itself to diligent efforts to develop and commercialize such products.

NOW, THEREFORE, the parties hereto, intending to be legally bound, hereby agree as follows:

1. Definitions.

Whenever used in this Agreement with an initial capital letter, the terms defined in this Article 1, whether used in the singular or the plural, shall have the meanings specified below.

1.1. "Affiliate" means, with respect to an entity, any person, organization or entity controlling, controlled by or under common control with, such party. For purposes of this definition only, "control" of another person, organization or entity shall mean the possession, directly or indirectly, of the power to direct or cause the direction of the activities, management or policies of such person, organization or entity, whether through the ownership of voting securities, by contract or otherwise. Without limiting the foregoing, control shall be presumed to exist when a person, organization or entity (a) owns or directly controls fifty percent (50%) or

more of the outstanding voting stock or other ownership interest of the other organization or entity or (b) possesses, directly or indirectly, the power to elect or appoint fifty percent (50%) or more of the members of the governing body of the organization or other entity. The parties acknowledge that in the case of certain entities organized under the laws of certain countries, the maximum percentage ownership permitted by law for a foreign investor may be less than fifty percent (50%), and that in such cases such lower percentage shall be substituted in the preceding sentence.

1.2. "Background Patent Rights" means: (a) the patents and patent applications listed in Exhibit A; (b) any patent or patent application that claims priority to and is divisional, continuation, reissue, renewal, reexamination, substitution or extension of any patent application identified in (a); (c) any patents issuing on any patent application identified in (a) or (b), including any reissues, renewals, reexaminations, substitutions or extensions thereof; (d) any claim of a continuation-in-part application or patent (including any reissues, renewals, reexaminations, substitutions or extensions thereof) that is entitled to the priority date of, and is directed specifically to subject matter specifically described in, at least one of the patents or patent applications identified in (a), (b) or (c); (e) any foreign counterpart (including PCTs) of any patent or patent application identified in (a), (b) or (c) or of the claims identified in (d); and (f) any supplementary protection certificates, any other patent term extensions and exclusivity periods and the like of any patents and patent applications identified in (a) through (e);

1.3. "Calendar Quarter" means each of the periods of three (3) consecutive calendar months ending on March 31, June 30, September 30 and December 31, for so long as this Agreement is in effect.

1.4. "Consulting Results" means any and all data, materials, compositions, methods, processes, analyses, formulae and information generated, conceived or created by the Principal Investigator (during his employment with the Technion or within one year thereafter) in the performance of services for Licensee.

1.5. "Covered Compound" means any compound: (a) the making, using or selling of which falls within the scope of a Valid Claim; and/or (b) that is/was identified, developed and/or made, at any stage of development or manufacture, with or through the use of, or that incorporates, TRDF Results, and/or Technology Transfer Material; and/or (c) that is/was developed by or on behalf of a Related Party through the use or modifications of a Covered Compound described in (a) or (b).

1.6. "Development Milestones" means the development and commercialization milestones set forth in Exhibit B.

1.7. "Development Plan" means the plan for the development and commercialization of Licensed Products attached hereto as Exhibit C, as such plan may be adjusted from time to time pursuant to Section 5.2.

1.8. "Field" means the prevention, diagnosis or treatment of any human disease or condition.

1.9. "First Commercial Sale" means the date of the first sale by Licensee, its Affiliate or a Sublicensee of a Licensed Product to a third party for end use or consumption of such Licensed Product following receipt of any required Marketing Authorization in the country in which such Licensed Product is sold. For clarity, sales or other distribution for (a) use in clinical trials, compassionate use, use in named patient or expanded access programs or use in similar instances in which products may be provided to patients prior to approval of an NDA or BLA or (b) provision of samples for test marketing or similar purposes shall not be deemed "First Commercial Sale".

1.10. "Invention" means any patentable invention or discovery (a) that is conceived and reduced to practice in the performance of the Research during the Research Period ("Research Invention") and/or (b) conceived and/or reduced to practice by the Principal Investigator (during his employment with the Technion or within one year thereafter) in the performance of services for Licensee ("Consulting Invention").

1.11. "Joint Invention" means any Invention for which:

(a) one or more inventors is a member of the TRDF Team; and

(b) one or more inventors is an employee, consultant or contractor of Licensee (other than members of the TRDF Team and any other person subject to the Technion's intellectual property policy).

Inventorship of Inventions shall be determined in accordance with Section 3.2 below.

1.12. "Joint Patent Rights" means, in each case solely to the extent the claims are directed to the subject matter of such Joint Invention: (a) any patents and patent applications that claim any Joint Invention; (b) any patent or patent application that claims priority to and is a divisional, continuation, reissue, renewal, reexamination, substitution or extension of any patent application identified in (a); (c) any patents issuing on any patent application identified in (a) or (b), including any reissues, renewals, reexaminations, substitutions or extensions thereof; (d) any claim of a continuation-in-part application or patent (including any reissues, renewals, reexaminations, substitutions or extensions thereof) that is entitled to the priority date of, and is directed specifically to subject matter specifically described in, at least one of the patents or patent applications identified in (a), (b) or (c); (e) any foreign counterpart (including PCTs) of any patent or patent application identified in (a), (b) or (c) or of the claims identified in (d); and (f) any supplementary protection certificates, any other patent term extensions and exclusivity periods and the like of any patents and patent applications described in (a) through (e).

1.13. "Licensed Product" means any product for use in the Field that incorporates a Covered Compound, in any and all forms, presentations, formulations and dosage forms.

1.14. "Licensee Consulting Results" means Consulting Results (other than Inventions) generated jointly by the Principal Investigator and one or more employee(s), consultant(s) or contractor(s) of Licensee (other than members of the TRDF Team and any other person subject to the Technion's intellectual property policy).

1.15. "Major Country" any of the following: the United States; Germany; the United Kingdom; France; Italy; Spain; and Japan.

1.16. "Marketing Authorization" means all approvals from the relevant Regulatory Authority necessary to market and sell a Licensed Product in a country.

1.17. "Net Sales" means the gross amount billed or invoiced by or on behalf of a Related Party on sales, leases or other transfers of Licensed Products, less the following to the extent applicable on such sales, leases or other transfers, or and not previously deducted from the gross invoice price: (a) customary trade, quantity or cash discounts to the extent actually allowed and taken; (b) amounts actually repaid or credited by reason of rejection or return of any previously sold, leased or otherwise transferred Licensed Products; (c) customer freight charges that are paid by or on behalf of the Related Party; (d) to the extent separately stated on purchase orders, invoices or other documents of sale, any sales, value added or similar taxes, custom duties or other similar governmental charges levied directly on the production, sale, transportation, delivery or use of a Licensed Product that are paid by or on behalf of the Related Party, but not including any tax levied with respect to income; provided that:

1.17.1. in any transfers, or provision, of Licensed Products between a Related Party and another Related Party not for the purpose of resale by such other Related Party, Net Sales shall be equal to the fair market value of the Licensed Products so transferred or provided, assuming an arm's length transaction made in the ordinary course of business, and

1.17.2. in the event that a Related Party receives non-cash consideration for any Licensed Products or in the case of transactions not at arm's length with a non-Affiliate of the Related Party, Net Sales shall be calculated based on the fair market value of such consideration or transaction, assuming an arm's length transaction made in the ordinary course of business.

Sales of Licensed Products by a Related Party to another Related Party for resale by such Related Party shall not be deemed Net Sales. Instead, Net Sales shall be determined based on the gross amount billed or invoiced by such Related Party on resale of such Licensed Products to a third party purchaser.

1.18. "Non-Royalty Sublicense Income" means any payments or other consideration that Licensee or any of its Affiliates receives in connection with a Sublicense, other than: (i) royalties based on Net Sales; (ii) amounts received to cover actual, documented, direct costs incurred by Licensee during defined periods in the performance of research or development activities under a Sublicense agreement in connection with a Licensed Product, as indicated by inclusion as specific line items in a written agreement between Licensee and such Sublicensee (to the extent such costs are not actually incurred by Licensee during the defined periods in

accordance with such Sublicense agreement, such amounts shall be deemed Sublicense Income). In the event that Licensee or an Affiliate of Licensee receives, in connection with a Sublicense, either (i) non-cash consideration or (ii) consideration not at arm's length, Non-Royalty Sublicense Income shall be calculated based on the fair market value of such consideration or transaction, at the time of the transaction, assuming an arm's length transaction made in the ordinary course of business.

1.19. "Patent Rights" means any TRDF Patent Rights and any Joint Patent Rights.

1.20. "Phase II Clinical Trial" means a human clinical trial in any country conducted to evaluate the effectiveness of a therapeutic product, for a particular indication or indications in patients with the disease or condition under study and, possibly, to determine the common short-term side effects and risks associated with the therapeutic product. In the United States, "Phase II Clinical Trial" means a human clinical trial that satisfies the requirements of 21 C.F.R. § 312.21 (b).

1.21. "Pivotal Study" means a human clinical study, including any Phase III or Phase II/III Clinical Trial(but excluding, for the avoidance of doubt, any clinical study the successful completion of which does not, by itself, provide the data necessary to support Marketing Authorization for a Licensed Product, e.g. Phase II Clinical Trials), the results of which, if the study endpoints are met, would provide the last data necessary to support Marketing Authorization for a Licensed Product in a Major Country. A Pivotal Study shall be deemed to have commenced when the first patient has been dosed in such study or, in the case of a study determined by the Regulatory Authority to meet the criteria of a Pivotal Study as set forth above after the first patient has been dosed, when such study is determined to meet such criteria.

1.22. "Principal Investigators" means Professor Timor Baasov or such other principal investigator(s) who may replace either of them pursuant to Section 2.1.2.

1.23. "Regulatory Authority" means any applicable government regulatory authority involved in granting approvals for the manufacturing and marketing of a Licensed Product, including, in the United States, the FDA.

1.24. "Related Party" means Licensee, Affiliates of Licensee, Sublicensees and Affiliates of Sublicensees.

1.25. "Research" means the research conducted during the Research Period by the TRDF Team under the terms of this Agreement in accordance with the Research Plan.

1.26. "Research Period" means a period (a) commencing on and (b) ending 12 months thereafter, which period may be subsequently extended on a yearly basis by mutual consent of the parties in writing, subject to the approval of the Board of Directors of Licensee, Licensee's then current work plans and needs and agreement by the parties on an expansion to the Research Plan and appropriate funding.

1.27. "Research Plan" means the research plan attached hereto as Exhibit D, as may be amended from time to time by the mutual written agreement of the parties, which sets forth the research to be undertaken by the TRDF Team under the direction of the Principal Investigator during the Research Period.

1.28. "Research Results" means any and all data, materials, compositions, methods, processes, analyses, formulae and information generated, conceived or created by members of the TRDF Team (alone or together with others) in the performance of the Research.

1.29. "Sublicense" means: (a) any right granted, license given or agreement entered into by Licensee to or with any other person or entity, under or with respect to or permitting any use of any of the Patent Rights or Technology Transfer Material or otherwise permitting the development, manufacture, marketing, distribution, use and/or sale of Licensed Products; (b) any option or other right granted by Licensee to any other person or entity to negotiate for or receive any of the rights described under clause (a); or (c) any standstill or similar obligation undertaken by Licensee toward any other person or entity not to grant any of the rights described in clause (a) or (b) to any third party; in each case regardless of whether such grant of rights, license given, agreement entered into or obligations undertaken is referred to or is described as a sublicense. It is hereby acknowledged that Licensee may enter into one or more agreements with F. Hoffmann-La Roche Ltd. or any of its Affiliates (together "Roche") pursuant to which Roche may fund research and development activities relating to Licensed Products, which agreement(s) do(es) not grant any license, nor other right nor an option to obtain a license or other right, under or with respect to or permitting any use of any of the Patent Rights or Technology Transfer Material or otherwise permitting the development, manufacture, marketing, distribution, use and/or sale of Licensed Products, and that such agreements which do not grant any such rights shall not be regarded as a Sublicense for the purpose hereof.

1.30. "Sublicensee" means any person or entity granted a Sublicense.

1.31. "Sublicensee Net Sales" means Net Sales generated by a Sublicensee or an Affiliate of a Sublicensee.

1.32. "TRDF Consulting Results" means Consulting Results for which each creator is a member of the TRDF Team.

1.33. "TRDF Invention" means any Invention for which each inventor is a member of the TRDF Team.

1.34. "TRDF New Patent Rights" means, in each case to the extent the claims are directed to the subject matter of such TRDF Invention: (a) any patents and patent applications that claim any TRDF Invention, in each case solely; (b) any patent or patent application that claims priority to and is a divisional, continuation, reissue, renewal, reexamination, substitution or extension of any patent application identified in (a); (c) any patents issuing on any patent application identified in (a) or (b), including any reissues, renewals, reexaminations, substitutions or extensions thereof; (d) any claim of a continuation-in-part application or patent

(including any reissues, renewals, reexaminations, substitutions or extensions thereof) that is entitled to the priority date of, and is directed specifically to subject matter specifically described in, at least one of the patents or patent applications identified in (a), (b) or (c); (e) any foreign counterpart (including PCTs) of any patent or patent application identified in (a), (b) or (c) or of the claims identified in (d); and (f) any supplementary protection certificates, any other patent term extensions and exclusivity periods and the like of any patents and patent applications described in (a) through (e).

1.35. "TRDF Patent Rights" means the Background Patent Rights and the TRDF New Patent Rights.

1.36. "TRDF Results" means all Research Results and all TRDF Consulting Results.

1.37. "TRDF Team" means the Principal Investigator and those faculty members, research fellows, students, technicians, scientists and/or other individuals working at or on behalf of the Technion or TRDF on the Research.

1.38. "Technology Transfer Material" means (a) the protocols, methods, data and other materials described in Exhibit E and (b) the TRDF Results.

1.39. "Valid Claim" means: (a) a claim of an issued and unexpired patent within the TRDF Patent Rights or Joint Patent Rights that has not been (i) held permanently revoked, unenforceable, unpatentable or invalid by a decision of a court or governmental body of competent jurisdiction; unappealable or unappealed within the time allowed for appeal, (ii) rendered unenforceable through disclaimer or otherwise, (iii) abandoned or (iv) lost through an interference proceeding; and (b) a pending claim of a pending patent application within the TRDF Patent Rights or Joint Patent Rights that (i) has been asserted and continues to be prosecuted in good faith and (ii) has not been abandoned or finally rejected without the possibility of appeal or refilling.

2. Research

2.1. Performance of Research.

2.1.1 TRDF shall cause the Technion to perform the Research in accordance with the Research Plan; however, TRDF and the Technion make no warranties or representations regarding the achievement of any particular results.

2.1.2 The Research will be directed and supervised by the Principal Investigator, who shall have primary responsibility for the performance of the Research. If the Principal Investigator ceases supervising the Research for any reason, TRDF will notify Licensee promptly, and TRDF shall endeavor to find a Technion scientist or scientists acceptable to Licensee, in Licensee's sole discretion, to continue the supervision of the Research in place of such Principal Investigator. If TRDF is unable to find a replacement scientist or scientists acceptable to Licensee within thirty (30) days after the Principal Investigator ceases to supervise the Research, Licensee shall have the right to terminate the funding of the Research. Licensee

shall promptly advise TRDF in writing if Licensee so elects. Such termination of funding shall terminate TRDF's and the Technion's obligations pursuant to Section 2.1.1 above, but shall not terminate this Agreement or any of the other rights or obligations of the parties under this Agreement. Nothing contained in this Section 2.1.2, shall be deemed to impose an obligation on TRDF or Technion to successfully find a replacement for the Principal Investigator. Upon such termination, any amounts actually paid by the Licensee on account of tasks which have not been performed, less any obligations taken by TRDF or the Technion that cannot be canceled, shall be refunded to the Licensee.

2.2 Funding.

2.2.1 Licensee shall fund the Research in the total amount of at least Fifty Thousand US Dollars ($50,000) per year during the Research Period. The exact amount of research funding per year of the Research Period will be agreed upon by the parties in good faith prior to the beginning of each year of the Research Period, based on Licensee's research and development needs and the approval of Licensee's Chief Executive Officer and Board of Directors.

2.2.2. With respect to each year of the Research Period, the agreed upon funding for such year will be paid in two equal installments, the first of which will be paid prior to the commencement of such year and the second of which will be paid within six months thereafter.

2.2.3. TRDF and the Technion shall not be obligated to incur costs or expend funds to conduct the Research in excess of the total amount paid by Licensee under Sections 2.2.1 and 2.2.2.

2.2.4. Nothing in this Agreement shall be interpreted to prohibit TRDF, the Technion or the Principal Investigator from seeking and receiving funding from non-commercial sources, including government agencies and foundations, or from commercial entities for non-commercial purposes, to further support the Research; provided that such funding shall not be on terms that give such entity(ies) any rights to any Results or Inventions in the Field, unless agreed to in advance by Licensee. TRDF shall notify Licensee upon such application for and receiving any such funding, which notice shall include a copy of any notices awarding such funding. Licensee acknowledges that it is aware that the Principal Investigator has on-going research programs involving Covered Compounds that is being funded by the National Institute of Health (US) (the "NIH"), under sub-wards from the University of Alabama and the University of Michigan (copies of which have been provided to Licensee) and that it is possible that such research programs will overlap with the Research. Licensee understands that in the case of any such overlap, the work product of such research will be subject to the terms and conditions of such sub-awards, including certain obligations under 35 U.S.C. §§ 200-212 in the case of any TRDF Inventions that are also "subject invention" as defined in 35 U.S.C. §201.

2.3 Reports. Within thirty (30) days after the end of every six (6) month period during the Research Period, the Principal Investigator shall provide Licensee with a written report summarizing Research Results obtained during the preceding six (6) month period, which

report shall include all raw data and logs collected and generated in the course of the performance of the Research. In addition, Licensee's representatives (including any authorized subcontractors) shall have the right, upon reasonable notice and prior coordination with the Principal Investigator, to visit Principal Investigator's lab at the Technion, in order to observe the conduct of the Research, review records and conduct of the Research, and discuss the progress of the Research with the Principal Investigator or any member of the TRDF Team.

2.4 Publications.

2.4.1 TRDF and Licensee recognize the traditional freedom of all scientists to publish and present promptly the results of their research. TRDF and Licensee also recognize that obtaining patent rights can be jeopardized by public disclosure prior to the filing of suitable patent applications. Therefore, TRDF shall ensure that no publications in writing, in scientific journals or orally at scientific conventions disclosing Results are published by it or its researchers, without first complying with procedure set forth below.

2.4.2 TRDF will ensure that each proposed manuscript containing Results shall be submitted to Licensee at least thirty (30) days prior to initial submission for publication, and abstracts will be submitted to Licensee at least fourteen (14) days prior to proposed publication, for the purpose of enabling Licensee's review for Inventions with respect to which Licensee wishes TRDF to file patent applications.

2.4.3 If Licensee has reason to believe that any such manuscript or abstract reveals an Invention, Licensee may so notify TRDF in writing prior to expiration of the thirty (30) day period or fourteen (14) days period, as applicable, specified in Section 2.5.2. If Licensee so notifies TRDF, TRDF shall cause the Principal Investigator to delay publication for the purpose of enabling TRDF to file a patent application until the earliest to occur of: (a) a patent application has been filed with respect to such potentially patentable Invention; (b) TRDF and Licensee have determined that the relevant Invention is not patentable; or (c) sixty (60) days have elapsed from the date of Licensee's notification under this Section 2.4.3.

3. Rights and Title.

3.1 Title.

3.1.1 The entire right, title and interest in and to all Technology Transfer Material, all TRDF Inventions and all TRDF Patent Rights shall be owned solely and exclusively by the TRDF.

3.1.2 The entire right, title and interest in and to all Licensee Consulting Results shall be owned solely and exclusively by the Licensee.

3.1.3 The entire right, title and interest in and to all Joint Inventions and Joint Patent Rights shall be owned jointly by Licensee and TRDF.

3.1.4 The parties acknowledge and agree that the current funding rules of the Office of the Chief Scientist ("OCS") stipulate that certain intellectual property financed with OCS funding, to the extent applicable, shall be owned by the Licensee. Accordingly, notwithstanding the foregoing provisions, in consideration for the royalties to be paid by the Licensee pursuant to this Agreement and, if and to the extent required by such rules and such rules do not contradict rules of other Israeli governmental agencies or Israeli laws or regulations, TRDF hereby agrees to assign to the Licensee its respective rights, title and interest in and to Consulting Inventions that are developed by the Principal Investigator in the performance of services for Licensee and that would otherwise vest in TRDF in accordance with the relevant regulations of the Technion. Notwithstanding the foregoing, should the relevant rules and regulations of the OCS change or should the Licensee cease operations, any Consulting Invention developed by the Principal Investigator, shall be owned by the relevant parties in accordance with Sections 3.1.1, 3.1.2 and 3.1.3 above, and subject to the license granted hereby, and shall revert, as far as legally possible, to TRDF, subject to approval of the OCS, to the extent required. For clarity, this Section 3.1.4 does not apply to any Research Inventions, to any Research Results nor to any Patent Rights claiming Research Inventions or Research Results.

3.2. Inventorship. All determinations of inventorship under this Agreement shall be made in accordance with United States patent law. In case of dispute over inventorship, a mutually acceptable outside patent counsel shall make the determination of the inventor(s) by applying the standards contained in United States patent law.

3.3. Disclosure.

3.3.1 TRDF shall disclose to Licensee in a confidential writing the conception and reduction to practice of any Invention of which it becomes aware, promptly after the receipt of an invention disclosure form the relevant member(s) of the TRDF Team.

3.3.2 The Principal Investigator shall disclose to Licensee and TRDF in a confidential writing the development, making, conception or reduction to practice of any Consulting Invention, promptly after he becomes aware thereof.

3.3.3 Licensee shall disclose to TRDF in a confidential writing the development, making, conception or reduction to practice of any Consulting Invention promptly after it becomes aware thereof.

3.4 The Principal Investigator may enter into a consulting agreement with Licensee, in a form to be agreed to in advance by TRDF (the "PI Consulting Agreement"). Such PI Consulting Agreement shall be consistent with and subordinate to the provisions of this Section 3, and shall require the Principal Investigator to assign his rights in Consulting Inventions and Results in a manner consistent with the provisions of this Section 3 and shall allow the Principal Investigator to make the disclosures contemplated by Section 3.3. In the case of any discrepancy between any provisions of Section 3 and the PI Consulting Agreement, the terms of this Agreement shall prevail. So long as the Principal Investigator remains a faculty member of the Technion, any amendment to the PI Consulting Agreement and any new agreement between the

Principal Investigator and Licensee pursuant to which the Principal Investigator provides services and/or serves on the scientific advisory board of Licensee shall require the prior written approval of TRDF. The above does not limit, in any way, rights TRDF may have with respect to any intellectual property conceived, reduced to practice or otherwise developed or generated by the Principal Investigator that are neither Invention nor Results.

3.5 The parties shall cooperate in order to ensure the orderly transfer of copies of the Technology Transfer Materials to the Licensee's personnel to be completed within six (6) months from the Effective Date (the "**Tech Transfer Period**"). During the Tech Transfer Period, Licensee's representatives will be granted access to Principal Investigator's lab, in coordination with TRDF and subject to each such representative signing TRDF's standard confidentiality agreement, in order to gain first hand knowledge of the licensed technology under guidance of Principal Investigator or his staff. Other than as provided herein, TRDF shall not be obliged to provide any technical support to the Licensee, its Affiliates or its Sublicensees.

3.6 TRDF hereby undertakes that, unless it is prevented from doing so by any obligations to commercial entities, it will promptly provide Licensee with written notice of any patent applications filed by TRDF covering an invention with respect to the redesign of aminoglycosides for the treatment of diseases caused by premature stop mutations which is conceived and reduced to practice by the Principal Investigator, including jointly with others, and is disclosed to TRDF through an invention disclosure during the Research Period or during the two years following the end of the Research Period ("**Additional Researcher IP**"). If, at any time during the two year period following such disclosure, TRDF wishes to grant a third party rights in Additional Researcher IP, unless it is prevented from doing so by any obligations to third parties, it shall provide notice in writing to the Licensee of such decision (the "**Transaction Notice**"). Within 14 calendar days following receipt of the Transaction Notice, Licensee shall notify TRDF in writing if Licensee has an interest in obtaining a license with respect to such Additional Researcher IP. If Licensee so notifies TRDF in writing within such 14 day period ("Negotiation Notice"), the parties shall negotiate in good faith for 90 calendar days a definitive agreement with respect to the commercialization of such Additional Researcher IP. If the parties are not able to agree upon a definitive agreement within. such 90 day negotiation period, then TRDF shall have no further obligations under this Section 3.6, and Licensee shall have no rights, with respect to such Additional Researcher IP. For clarity, nothing herein shall be deemed to limit, in any way, TRDF's right to negotiate with third parties regarding a license to the Additional Research IP, provided that TRDF complies with its obligation to negotiate in good faith with Licensee as set forth above if it receives a Negotiation Notice.

4. License Grants.

4.1 License to Licensee.

4.1.1 License Grants.

4.1.1.1 Subject to the terms and conditions set forth in this Agreement, TRDF hereby grants to Licensee an exclusive, worldwide, non-transferrable, royalty-bearing

license under the TRDF Inventions, TRDF Patent Rights and under TRDF's interest in the Joint Inventions and Joint Patent Rights solely to develop, make, have made, market, distribute, offer for sale, sell, have sold and import Licensed Products; provided, however, that (a) TRDF reserves the right, for itself, the Technion and other not-for-profit research organizations to practice the TRDF Patent Rights and Joint Patent Rights solely for research, teaching and other educational purposes and (b) in the case of any TRDF Inventions that are also "subject inventions" (as described in Section 2.2.4), if any, the United States federal government will retain certain rights in the TRDF Patent Rights covering such TRDF Inventions pursuant to 35 U.S.C. §§ 200-212 and 37 C.F.R. § 401 et seq., and any right granted in this Agreement greater than that permitted under 35 U.S.C. §§ 200-212 or 37 C.F.R. § 401 et seq. will be subject to modification as may be required to conform to the provisions of those statutes and regulations.

4.1.1.2 Subject to the terms and conditions set forth in this Agreement, TRDF hereby grants to Licensee an exclusive, worldwide, non-transferrable, royalty-bearing license to use the Technology Transfer Materials solely to develop, make and have made compounds falling within the scope of a claim of the TRDF Patent Rights, solely to develop, make, have made market, distribute, offer for sale, sell, have sold and import Licensed Products; provided, however, that TRDF reserves the right, for itself, the Technion and other not-for-profit research organizations to Technology Transfer Material to develop, make and use such compounds solely for research, teaching and other educational purposes.

4.1.2 Affiliates and Contractors. The license granted to Licensee under Section 4.1.1 includes the right to have some or all of Licensee's rights under Section 4.1.1 exercised or performed by one or more of Licensee's Affiliates and/or contractors on Licensee's behalf and for Licensee's benefit without such right being deemed a Sublicense; provided, however, that:

4.1.2.1 no such Affiliate or contractor shall be entitled to grant, directly or indirectly, to any third party any right of whatever nature under, or with respect to, or permitting any use or exploitation of, any of the Patent Rights or Technology Transfer Material, including any right to develop, manufacture, market, sell or provide Licensed Products; and

4.1.2.2 any act or omission taken or made by an Affiliate or contractor of Licensee under this Agreement will be deemed an act or omission by Licensee under this Agreement.

4.1.3 Sublicenses.

4.1.3.1 Sublicense Grant. Licensee shall be entitled to grant Sublicenses under the license granted pursuant to Section 4.1.1 subject to the terms of this Section 4.1.3. Any such Sublicense shall be on terms and conditions in compliance with and not inconsistent with the terms of this Agreement. Such Sublicenses shall be made only for consideration and in bona-fide arm's length transactions.

4.1.3.2 Sublicense Agreements. Sublicenses shall be granted only pursuant to written agreements, which shall be subject and subordinate to the terms and conditions of this Agreement. Such Sublicense agreements shall contain, among other things, provisions to the following effect:

(a) all provisions necessary to ensure Licensee's ability to perform its obligations under this Agreement;

(b) a section substantially the same as Section 11 (Indemnification), which also shall state that the Indemnitees (as defined in Section 11.1) are intended third-party beneficiaries of such Sublicense agreement for the purpose of enforcing such indemnification;

(c) in the event of termination of the license set forth in Section 4.1.1 above (in whole or in part (e.g., termination in a particular country)), any existing Sublicense shall terminate to the extent of such terminated license; provided, however, that, for each Sublicensee, upon termination of a Sublicense agreement, if the Sublicense, is not then in breach of the Sublicense agreement such that Licensee would have the right to terminate such Sublicense agreement, such Sublicensee shall have the right to seek a license from TRDF. TRDF agrees to negotiate such licenses in good faith under reasonable terms and conditions, which shall not impose any representations, warranties, obligations or liabilities on TRDF that are not included in this Agreement;

(d) the Sublicensee shall not be entitled to sublicense its rights under such Sublicense agreement; and

(e) the Sublicensee shall not be entitled to assign the Sublicense agreement without the prior written consent of TRDF, except that Sublicensee may assign the Sublicense agreement to a successor in connection with the merger, consolidation or sale of all or substantially all of its assets or that portion of its business to which the Sublicense agreement relates; provided, however, that any permitted assignee agrees in writing in a manner reasonably satisfactory to TRDF to be bound by the terms of such Sublicense agreement.

4.1.3.3 Delivery of Sublicense Agreement. Licensee shall furnish TRDF with a fully executed copy of any such Sublicense agreement, promptly after its execution. TRDF shall keep any such copies of Sublicense agreements in its confidential files and shall use them solely for the purpose of monitoring Licensee's and Sublicensees' compliance with their obligations hereunder and enforcing TRDF's rights under this Agreement.

4.1.3.4 Breach by Sublicensee. In the case of any act or omission by any Sublicensee that would have constituted a material breach of this Agreement, Licensee will notify TRDF of such act or omission promptly after Licensee is informed thereof and Licensee shall (a) use its best efforts to cause such Sublicensee to cure any such breach by Sublicensee of the Sublicense agreement; or (b) enforce its rights by terminating such Sublicense Agreement. Any Sublicense agreement between Licensee and a Sublicensee will include Licensee's right to terminate the Sublicense agreement in case of such a breach by the Sublicensee.

4.2 No Other Grant of Rights. Except for the licenses expressly granted in this Agreement, nothing in this Agreement shall be construed to confer any ownership interest, license or other rights upon Licensee by implication, estoppel or otherwise as to any technology, intellectual property rights, products or materials of TRDF, the Technion, or any other entity, regardless of whether such technology, intellectual property rights, products or biological materials are dominant, subordinate or otherwise related to any TRDF Patent Rights, Joint Patent Rights, Technology Transfer Material or Joint Inventions.

5. Development and Commercialization.

5.1 Diligence. Licensee, alone and/or through its Affiliates and/or Sublicensees, shall use commercially reasonable efforts, including funding consistent therewith: (a) to develop Licensed Products in accordance with the Development Plan; (b) to introduce Licensed Products into the commercial market; and (c) to market Licensed Products following such introduction into the market. In addition and without limiting the foregoing, Licensee, by itself and/or through its Affiliates and/or Sublicensees, shall achieve each of the Development Milestones within the time periods specified in Exhibit A.

5.2 Adjustments of Development Plan. Licensee will be entitled, from time to time, to make such adjustments to the then applicable Development Plan as Licensee believes, in its good faith judgment, are needed in order to improve Licensee's ability to meet the Development Milestones.

5.3 Reporting. Within sixty (60) days after the end of each calendar year, Licensee shall furnish TRDF with a written report summarizing its, its Affiliates' and its Sublicensees' efforts during the prior year to develop and commercialize Licensed Products, including without limitation: (a) research and development activities; (b) commercialization efforts; and (c) marketing efforts. Each report shall contain a sufficient level of detail for TRDF to assess whether Licensee is in compliance with its obligations under Section 5.1 and a discussion of intended efforts for the then current year. Together with each report, Licensee shall provide TRDF with a copy of the then current Development Plan.

5.4 Failure to Meet Development Milestone; Opportunity to Cure. If Licensee believes that it will not achieve a Development Milestone, it may notify TRDF in writing in advance of the relevant deadline. Licensee shall include with such notice (a) a reasonable explanation of the reasons for such failure (and lack of finances shall not constitute reasonable basis for such failure) ("Explanation") and (b) a reasonable, detailed, written plan for promptly achieving a reasonable extended and/or amended milestone ("Plan"). If Licensee so notifies TRDF, but fails to provide TRDF with both an Explanation and Plan, then the provisions of Section 12.2.3.1 shall apply if Licensee in fact fails to meet the Development Milestone. If Licensee so notifies TRDF and provides TRDF with an Explanation and Plan, both of which are acceptable to TRDF in its reasonable discretion, then Exhibit A shall be amended automatically

to incorporate the extended and/or amended milestone set forth in the Plan. If Licensee so notifies TRDF and provides TRDF with an Explanation and Plan, but the Explanation is not reasonable to TRDF in its reasonable discretion (e.g. Licensee asserts lack of finances or development preference for a non-Licensed Product), then the deadline for the relevant milestone shall remain unchanged and the provisions of Section 12.2.3.1 shall apply if Licensee in fact fails to meet such milestone. If Licensee so notifies TRDF and provides TRDF with an Explanation and Plan, but the Plan is not acceptable to TRDF in its reasonable discretion, then TRDF shall explain to Licensee why the Plan is not acceptable and provide Licensee with suggestions for an acceptable Plan. Licensee shall have one opportunity to provide TRDF with a reasonable Plan within ninety (90) days, during which time TRDF agrees to work with Licensee in its effort to develop a reasonable Plan. If, within such ninety (90) days, Licensee provides TRDF with a reasonable Plan, then Exhibit A shall be amended automatically to incorporate the extended and/or amended milestone set forth in the Plan. If, within such ninety (90) days, Licensee fails to provide a reasonable Plan, then Licensee shall have an additional thirty (30) days or until the original deadline of the relevant Development Milestone, whichever is later, to meet such milestone. Licensee's failure to do so shall constitute a material breach of this Agreement and TRDF shall have the right to terminate this Agreement forthwith.

6. Consideration for Grant of License

6.1. Milestone Payments. Licensee shall pay TRDF the following milestone payments with respect to each Licensed Product to reach such milestone, regardless of whether such milestone is achieved by or on behalf of Licensee or a Sublicensee:

6.1.1 One Hundred Thousand US Dollars ($100,000) upon the first dosing of a patient in a Phase II Clinical Study with respect to such Licensed Product;

6.1.2 One Million US Dollars ($1,000,000) upon the first dosing of a patient in a Pivotal Study with respect to such Licensed Product; and

6.1.3 Five Million US Dollars ($5,000,000) upon the first filing of an NDA (New Drug Application) with respect to such Licensed Product.

Licensee shall notify TRDF in writing within thirty (30) days following the achievement of each milestone described in this Section 6.1, and shall make the appropriate milestone payment within thirty (30) days after the achievement of such milestone.

The milestones set forth in Section 6.1 are intended to be successive. In the event that a Licensed Product is not required to undergo the testing associated with a particular milestone ("Skipped Milestone"), such Skipped Milestone shall be deemed to have been achieved upon the achievement by such Licensed Product of the next successive milestone ("Achieved Milestone"). Payment for any Skipped Milestone that is owed in accordance with the provisions of this paragraph shall be due within thirty (30) days after the achievement of the Achieved Milestone.

The Licensee shall be entitled to offset the development milestone payments actually paid to TRDF pursuant to this Section 6.1 against any amounts that the Licensee is required to pay to TRDF pursuant to Section 6.3 on account of Non-Royalty Sublicense Income that are paid to the Licensee or its Affiliates for achievement of the same development milestone for the same Licensed Product.

6.2. Royalties on Net Sales.

6.2.1 Royalty Rates.

6.2.1.1 Subject to Section 6.2.1.2, Licensee shall pay TRDF an amount equal to [...***...]% of all Net Sales.

6.2.1.2 Notwithstanding Section 6.2.1.1, If Licensee grants a Sublicense to a pharmaceutical or biotechnology company, which at the time of the grant of such Sublicense, has annual sales of therapeutic products of at least [...***...] US Dollars ([...***...]) and a market cap of at least [...***...], the royalty rate with respect to Sublicensee Net Sales generated under such Sublicense agreement will be [...***...]%. If and to the extent a Sublicense agreement entered into by Licensee ("Follow-Up Sublicense") covers subject matter covered by another Sublicense previously entered into by Licensee with the same Sublicensee, or an Affiliate or predecessor (e.g. by acquisition or acquisition of assets) of such Sublicensee (the "Original Sublicense"), the effective date of such Follow-Up Sublicense for purposes of determining the annual sales and market cap of the Sublicensee will be deemed to be the effective date of the Original Sublicense.

6.2.1.3 If Licensee pays Third Party Royalties with respect to sales of Licensed Products in any country, and Licensee provides TRDF with reasonably satisfactory evidence of such Third Party Royalties payment, then Licensee will be entitled to deduct from all royalty payments due to TRDF with respect to such sales in such country an amount equal to [...***...] percent ([...***...]%) of such Third Party Royalties actually paid to such third party, provided that in no event shall such deductions reduce the royalties to be paid to TRDF with respect to such sales to less than [...***...]% of Net Sales. "Third Party Royalties" shall mean royalties calculated on any amount invoiced by the Licensee, an Affiliate of Licensee or a Sublicensee for the sale of a Licensed Product and actually paid by the Licensee, an Affiliate of Licensee or a Sublicensee to a third party, who is neither an Affiliate of the Licensee nor a Sublicensee, nor an Affiliate of a Sublicensee, for a license under an issued patent of such third party, that would be infringed by the development, manufacture and/or sale such Licensed Product in such country, provided that the duty to pay the royalty to such third party has been established at arm's-length and in good faith, and is set out in a written agreement, a copy of which has been provided to TRDF.

6.2.1.4 On a country-by-country basis, in the event a third party commercializes an authorized generic (i.e. that has received Marketing Authorization in the relevant country) to a Licensed Product, the applicable royalty rate with respect to sales of such Licensed Product in such country will be reduced by a percentage equal to [...***...], but in no event shall the royalty payable to TRDF with respect to sales of such Licensed Product in such country (including on account of any set offs under Section 6.2.1.3) be less than [...***...]% of Net Sales. A competing product's market share will be based on the share of the total market for products acting through the same mechanism as a Licensed Product based on data provided by IMS International or such other data mutually agreed by the Licensee and TRDF.

6.2.2 Royalty Term. With respect to each such Licensed Product, the royalties set forth above will be due on a country-by-country basis until the later of: (a) so long as the making, using or selling of the Licensed Product is covered by a Valid Claim in the country in which such product is made, used or sold or is covered by any other statutory right giving or extending exclusivity in the country of sale, including but not limited to data exclusivity rights, supplementary protection certificates, pediatric drug exclusivity periods and orphan drug exclusivity periods; and (b) until [...***...] ([...***...]) years have passed from the date of the First Commercial Sale of such Licensed Product in such country.

6.2.3 Patent Challenge. If Licensee, its Affiliate, a Sublicensee or an Affiliate of a Sublicensee commences an action in which it challenges the validity, enforceability or scope of any of any of the TRDF Patent Rights (a "Challenge Proceeding"), the royalty rates specified in Section 6.6.1 will be doubled with respect to Net Sales of Licensed Products that are covered by the Patent Rights that are the subject of the such Challenge Proceeding that are sold during the pendency of such Challenge Proceeding. If the outcome of such Challenge Proceeding is a determination in favor of TRDF, (a) the royalty rate specified in Section 6.6.1 with respect to Net Sales of Licensed Products that are covered by the Patent Rights that are the subject of such Challenge Proceeding shall remain at such doubled rate and (b) Licensee shall reimburse TRDF for all expenses incurred by TRDF (including reasonable attorneys' fees) in connection with such Challenge Proceeding.

6.3 Non-Royalty Sublicense Income. As partial consideration for the license granted hereunder, Licensee shall pay TRDF and amount equal to twenty percent ([...***...]%) of all Non-Royalty Sublicense Income.

6.4 Success Fee.

6.4.1. "Exit Event" means: (a) a bona fide merger or acquisition transaction in which the Licensee's shareholders of record as constituted immediately prior to the merger or acquisition transaction, together with their affiliates, do not hold, immediately following such event, more than fifty percent (50%) of the shares or of the general voting power of the surviving entity or acquiring corporation; (b) any transaction or series of related transactions in which a person or entity who was not a shareholder, or Affiliate of a shareholder, of Licensee prior to the transaction or series of transactions acquires all or substantially all of the shares or voting power of Licensee, other than by investment in Licensee; (c) any sale, transfer or other disposition of all or substantially all of the assets of Licensee; or (d) the initial underwritten public offering of Licensee's shares on a recognized exchange ("**IPO**").

6.4.2. Upon the closing of the first Exit Event, TRDF shall be entitled to the following:

6.4.2.1 in the case of an Exit Event described in Section 6.4.1 (a), (b) or (c), to an amount equal to three percent (3%) ("Exit Fee") of all non-refundable, non-contingent consideration, whether in cash or in kind (e.g. equity), actually received by Licensee and/or its shareholders (for clarity, in the case of any refundable or non-contingent consideration, such consideration will be considered part of the Exit Fee if and when such consideration: (i) becomes non-refundable and non-contingent, and (ii) is actually received, and will be paid to TRDF at such time); and

6.4.2.2 in the case of an Exit Event that is an IPO, instead of the Exit Fee, a number of Ordinary Shares of Licensee representing three percent (3%) of Licensee's outstanding shares on a Fully Diluted Basis (as defined below) immediately prior to the closing of such IPO (i.e. excluding any securities issuable at such IPO). "Fully Diluted Basis" means, as of a specified date, the number of ordinary shares of Licensee then outstanding (assuming conversion of all outstanding shares other than ordinary shares into ordinary shares) plus the number of ordinary shares of Licensee issuable upon exercise or conversion of then outstanding convertible securities, options, rights or warrants of Licensee (excluding only such options or convertible securities which expire upon consummation of the IPO without being converted into shares or other securities).

Notwithstanding any provision in this Agreement to the contrary, if all or a portion of the consideration at an Exit Event consists of contingent payments or option payments to be made at time of exercise of the option, then that portion of the applicable fee attributable thereto shall be payable only upon actual realization of such contingent payments or option payments.

6.4.3 Dividends. If, at any time prior to the closing of the first Exit Event, Licensee distributes any dividends to any of its shareholders, in cash or in kind (other than in the form of bonus shares), Licensee shall pay TRDF an amount equal to the dividend amount that would be due to TRDF had TRDF (at the time of distribution) held a number of shares (of the class with respect to which dividends are being distributed) constituting three percent (3%) of the outstanding shares of the Company. In the event of any such distribution of dividends prior to the first Exit Event, Licensee shall inform TRDF in advance and in writing of any such intended distribution and shall make the relevant payment to TRDF simultaneously with the distribution to Licensee's shareholders.

6.5 Preemptive Rights. During the term of this Agreement and prior to the first Exit Event, in any investment round of Licensee in which shareholders of the Licensee are offered to participate, TRDF will have the right to invest an amount equal to up to 5% of the amount contemplated to be raised at such investment round on the same terms as the other investors in such round. Licensee will notify TRDF that such an investment is contemplated in accordance with the applicable preemptive provisions set forth in Licensee's Articles of Association, and shall provide TRDF with the same period provided to the other eligible shareholders, to determine whether it is interested in investing in such round. If TRDF notifies Licensee in writing, in accordance with the timeframe set forth in the Articles of Association, TRDF may invest in such round on the same terms as the other investors.

6.6 Right to Appoint Observer. The parties agree that During the term of this Agreement and until the closing of the first Exit Event by Licensee, TRDF will be entitled to designate an observer to attend all meetings of Licensee's Board of Directors, or any committees thereof, in a nonvoting observer capacity. Such observer shall be given copies of all notices, minutes, and consents of Licensee's Board of Directors meetings, and other materials that are provided to the members of the Board of Directors of Licensee in connection with Board of Directors meetings provided, however, that such appointment of the observer is conditional upon the observer entering into a confidentiality agreement with the Licensee in a form acceptable to Licensee. If the Board of Directors determines, in good faith, that the attendance of the person appointed as the observer in a specific meeting (or part of the specific meeting) (i) constitutes a conflict of interests between such person (or his designator) and the Licensee, (ii) would adversely impact the attorney/client privilege, or (iii) would result in disclosure of trade secrets, or if such person is affiliated with a direct competitor of the Licensee, then the Board of Directors may exclude such person from attending such specific meeting (or relevant part thereof), accordingly, any related materials may as well be excluded from the such person. Licensee undertakes promptly (but in any event within sixty (60) days of the Effective Date) to take all corporate actions necessary, including amending its Articles of Association, to implement the understandings set forth in this Section 6.6.

6.7 Terms for Convenience. The parties acknowledge that the consideration terms and structure set forth in this Section 6 were agreed upon for convenience purposes with the intent of compensating TRDF for the rights granted under this Agreement, including with respect to know-how and other valuable intellectual property transferred to Licensee, and represent the fair market value of such rights as determined and agreed upon by the parties.

7. Reports; Payments; Records.

7.1 Reports and Payments.

7.1.1 Reports. Within thirty (30) days after the conclusion of each Calendar Quarter commencing with the first Calendar Quarter in which Net Sales are generated or Sublicense Income is received, Licensee shall deliver to TRDF a report containing the following information (in each instance, with a Licensed Product-by-Licensed Product and country-by-country breakdown):

7.1.1.1 the number of units of Licensed Products sold, leased or otherwise transferred by Related Parties for the applicable Calendar Quarter;

7.1.1.2 the gross amount billed or invoiced fur Licensed Products sold, leased or otherwise transferred or provided by Related Parties during the applicable Calendar Quarter;

7.1.1.3 a calculation of Net Sales for the applicable Calendar Quarter, including an itemized listing of applicable deductions;

7.1.1.4 a detailed accounting of all Non-Royalty Sublicense Income received during the applicable Calendar Quarter; and

7.1.1.5 the total amount payable to TRDF in U.S. Dollars on Net Sales and Non-Royalty Sublicense Income for the applicable Calendar Quarter, together with the exchange rates used for conversion.

Each such report shall be certified on behalf of Licensee as true, correct and complete in all material respects. If no amounts are due to TRDF for a particular Calendar Quarter, the report shall so state.

7.1.2 Payment. Within sixty (60) days after the end of each Calendar Quarter, Licensee shall pay TRDF all amounts due with respect to Net Sales and Non-Royalty Sublicense Income for the applicable Calendar Quarter.

7.2 Payment Currency. All payments due under this Agreement will be paid in U.S. Dollars. Conversion of foreign currency to U.S. Dollars will be made at the conversion rate existing in the United States (as reported in the *Wall Street Journal)* on the last working day of the applicable Calendar Quarter. Such payments will be without deduction of exchange, collection or other charges.

7.3 Records. Licensee shall maintain, and shall cause its Affiliates and Sublicensees to maintain, complete and accurate records of Licensed Products that are made, used, sold, leased or otherwise transferred, or (in the case of services) provided, under this Agreement, any amounts payable to TRDF in relation to such Licensed Products, and all Non-Royalty Sublicense Income received by Licensee, which records shall include a country-by-country breakdown and shall contain sufficient information to permit TRDF to confirm the accuracy of any reports or notifications delivered to TRDF under Section 7.1. Licensee, its Affiliates and/or its Sublicensees, as applicable, shall retain such records relating to a given Calendar Quarter for at least five (5) years after the conclusion of that Calendar Quarter, during which time TRDF shall have the right, at its expense, to cause an independent, certified public accountant (or, in the event of a non-financial audit, other appropriate auditor) to inspect such records during normal business hours for the purposes of verifying the accuracy of any reports and payments delivered under this Agreement and Licensee's compliance with the terms hereof. Such accountant or other auditor, as applicable, shall not disclose to TRDF any information other than information relating to the accuracy of reports and payments delivered under this Agreement. The parties shall reconcile any underpayment or overpayment within thirty (30) days after the accountant delivers the results of the audit. In the event that any audit performed under this Section 7.3 reveals an underpayment in excess of five percent (5%) in any calendar year, Licensee shall reimburse TRDF for the full cost of such audit. TRDF may exercise its rights under this Section 7.3 only once every year per audited entity and only with reasonable prior notice to the audited entity.

7.4 Late Payments. Any payments by Licensee that are not paid on or before the date such payments are due under this Agreement shall bear interest at the lower of (a) one and one half percent (1.5%) per month and (b) the maximum rate allowed by law. Interest shall accrue

beginning on the first day following the due date for payment and shall be compounded quarterly. Payment of such interest by Licensee shall not limit, in any way, TRDF's right to exercise any other remedies TRDF may have as a consequence of the lateness of any payment.

7.5 Payment Method. Each payment due to TRDF under this Agreement shall be paid by check or wire transfer of funds to TRDF's account in accordance with written instructions provided by TRDF. If made by wire transfer, such payments shall be marked so as to refer to this Agreement.

7.6 Value Added Tax; Withholding and Similar Taxes. All amounts to be paid to TRDF pursuant to this Agreement are exclusive of Value Added Tax; Licensee shall add value added tax, as required by law, to all such amounts. Should any payment required to be made to TRDF in accordance with the provisions of this Agreement be subject to withholding of any taxes assessable upon TRDF, the Licensee shall inform TRDF of such withholding requirement sufficiently in advance of the first payment to be made by the Licensee to TRDF hereunder, so as to allow TRDF to obtain and provide the Licensee with an appropriate certificate of exemption, if available. No withholding shall be made if an exemption is obtained for as long as it is valid. If Licensee is nevertheless required to withhold any amounts payable hereunder to TRDF due to the applicable laws of any country, such amount will be deducted from the payment to be made by Licensee and remitted to the appropriate taxing authority for the benefit of TRDF. Licensee will withhold only such amounts as are required to be withheld by applicable law in the country from which payment is being made. Licensee shall submit to TRDF originals of the remittance voucher and the official receipt evidencing the payment of the corresponding taxes with the applicable royalty report. Licensee will cooperate with TRDF to provide such information and records as TRDF may require in connection with any application by TRDF to the tax authorities in any country, including attempt to obtain an exemption or a credit for any withholding tax paid in any country.

8. Patent Filing, Prosecution and Maintenance.

8.1 Control.

8.1.1 TRDF Patent Rights. TRDF shall be responsible for the preparation, filing, prosecution, protection and maintenance of all TRDF Patent Rights, using independent patent counsel reasonably acceptable to Licensee. TRDF shall: (a) instruct such patent counsel to furnish the Licensee with copies of all correspondence relating to the TRDF Patent Rights from the United States Patent and Trademark Office (USPTO) and any other patent office, as well as copies of all proposed responses to such correspondence in time for Licensee to review and comment on each such response; (b) give Licensee an opportunity to review the text of each patent application before filing; (c) consult with Licensee with respect thereto; (d) supply Licensee with a copy of the application as filed, together with notice of its filing date and serial number; and (e) keep Licensee advised of the status of actual and prospective patent filings. TRDF shall give Licensee the opportunity to provide comments on and it make requests of TRDF concerning the preparation, filing, prosecution, protection and maintenance of the TRDF Patent Rights, and shall consider such comments and requests in good faith; however, final decision-making authority shall vest in TRDF.

8.1.2 Joint Patent Rights. TRDF and Licensee shall consult each other regarding the preparation, filing, prosecution and maintenance of Joint Patent Rights. All Joined Patent Rights shall be filed, prosecuted and maintained by the parties through independent patent counsel mutually agreed upon by TRDF and Licensee. Such counsel shall be charged with the duty to act in the best interests of each of TRDF and Licensee, taking into account the parties' intention to prepare, file, prosecute, obtain and maintain the Joint Patent Rights in a manner that will provide the maximum economic advantage and return to the parties. Such counsel shall confer with each of TRDF and Licensee and attempt to achieve a consensus in all decisions made relative to the content of applications, the prosecution of the Joint Patent Rights and the content of communications with the relevant patent agencies, prior to any communications with such agencies.

8.2 Expenses.

8.2.1 Ongoing Expenses. Subject to Section 8.3 below, Licensee shall reimburse TRDF for all documented, out-of-pocket expenses incurred by TRDF with respect to the activities described in Section 8.1 after the Effective Date, in each case within thirty (30) days after the date of each invoice form TRDF for such expenses.

8.2.2 Past Expenses. In addition, upon the earlier of (a) within thirty (30) days of the closing of an equity investment in the Licensee of an aggregate amount of at least $2,000,000 and (b) the third anniversary of the Effective Date, Licensee shall reimburse TRDF for all documented, out-of-pocket expenses incurred by TRDF prior to the Effective Date of the Agreement with respect to the preparation, filing, prosecution, protection and maintenance of Background Patent Rights. Such expenses are estimated to be approximately NIS 640,000 as of the Effective Date.

8.3 Abandonment of Patent Rights.

8.3.1 Abandonment. If Licensee decides that it does not wish to pay for the preparation, filing, prosecution, protection or maintenance of any Patent Rights in a particular country ("Abandoned Patent Rights"), Licensee shall provide TRDF with prompt written notice of such election, but in any event at least sixty (60) days prior to the applicable deadline for the filing of an application or responding to an office action in such country. Upon receipt of such notice by TRDF, Licensee shall be released from its obligation to reimburse TRDF for the expenses incurred thereafter as to such Abandoned Patent Rights; provided, however, that expenses authorized prior to the receipt by TRDF of such notice shall be deemed incurred prior to the notice. In such event, TRDF, in its sole discretion, may choose to terminate any license granted by TRDF to Licensee hereunder with respect to such Abandoned Patent Rights (and any subsequently-filed patent application or patent that claims priority thereto in such abandoned territory).

8.3.1 Effect of Abandonment of TRDF Patent Rights. If such Abandoned Patent Rights are TRDF Patent Rights ("Abandoned TRDF Patent Rights"), TRDF, in its sole discretion, may choose to terminate any license granted by TRDF to License. hereunder with respect to such Abandoned TRDF Patent Rights (and any subsequently-filed patent application or patent that claims priority thereto). If TRDF so chooses, any license granted by TRDF to Licensee hereunder with respect to such Abandoned TRDF Patent Right (and any subsequently-filed patent application or patent that claims priority to it in such abandoned territory) will terminate, and Licensee will have no rights whatsoever to exploit such Abandoned TRDF Patent Right. TRDF shall then be free, without further notice or obligation to Licensee, to grant rights in and to such Abandoned TRDF Patent Right to third parties.

8.3.2. Effect of Abandonment of Joint Patent Rights. If such Abandoned Patent Rights are Joint Patent Rights ("Abandoned Joint Patent Rights"), TRDF, in its sole discretion, may choose to terminate any license granted by TRDF to Licensee hereunder with respect to such Abandoned Joint Patent Rights (and any subsequently-filed patent application or patent that claims priority thereto in such abandoned territory). If TRDF exercises its right to terminate the license with respect to such Abandoned Joint Patent Rights and continues to pay for the preparation, filing, prosecution, protection and maintenance of such Abandoned Joint Patent Rights, TRDF thereafter shall have the right to practice and exploit the inventions claimed in such Abandoned Joint Patent Rights without any duty to account to Licensee or any obligation to obtain any consent or approval of Licensee for such use and exploitation, and Licensee shall have the right to practice the subject matter of such Abandoned Joint Patent Rights for internal research purposes only. In such case, TRDF also shall be free, without further notice or obligation to Licensee, and Licensee hereby grants TRDF an exclusive license, to grant rights in and to such Abandoned Joint Patent Rights (and any subsequently-filed patent application or patent that claims priority thereto in such abandoned territory) to third parties, subject to Licensee's right to practice the subject matter of such Abandoned Joint Patent Rights for internal research purposes only.

8.4 Marking. Licensee shall, and shall cause its Affiliates and Sublicensees to, mark all License Products sold, provided or otherwise disposed of in such a manner as to conform with the patent laws and practice of the country to which such products are shipped or in which such products are sold for purposes of ensuring maximum enforceability of TRDF Patent Rights and Joint Patent Rights in such country.

9. Enforcement of Patent Rights.

9.1 Notice. In the event either party becomes aware of any possible or actual infringement of any claim within the TRDF Patent Rights or Joint Patent Rights with respect to Licensed Products (an "Infringement"), that party shall promptly notify the other party and provide it with details regarding such Infringement.

9.2 Licensed Product Infringement.

9.2.1 Suit by Licensee. Licensee shall have the first right, but not the obligation, to take action in the prosecution, prevention, or termination of any Infringement. Before Licensee commences an action with respect to any Infringement, Licensee shall consider in good faith the views of TRDF and potential effects on the public interest in making its decision whether to sue. Should Licensee elect to bring suit against an infringer, Licensee shall keep TRDF reasonably informed of the progress of the action and shall give TRDF a reasonable opportunity in advance to consult with Licensee and offer its views about major decisions affecting the litigation. Licensee shall give careful consideration to those views, shall have the right to control the action; provided, however, that if Licensee fails to defend in good faith the validity and/or enforceability of the TRDF Patent Rights or Joint Patent Rights in the action, or if Licensee's license to a Valid Claim in the suit terminates, TRDF may elect to take control of the action pursuant to Section 9.2.2. Should Licensee elect to bring suit against an infringer and TRDF is joined as party plaintiff in any such suit, TRDF shall have the right to approve the counsel selected by Licensee to represent Licensee and TRDF, such approval not to be unreasonably withheld. The expenses of such suit or suits that Licensee elects to bring, including any expenses of TRDF reasonably incurred in conjunction with the prosecution of such suits or the settlement thereof by Licensee, shall be paid for entirely by Licensee and Licensee shall hold TRDF free, clear and harmless from and against any and all costs of such litigation, including attorney's fees. Licensee shall not compromise or settle such litigation without the prior written consent of TRDF, which consent shall not be unreasonably withheld or delayed. In the event Licensee exercises its right to sue pursuant to this Section 9.2.1, it shall first reimburse itself out of any sums recovered in such suit or in settlement thereof for all costs and expenses of every kind and character, including reasonable attorney's fees, necessarily incurred in the prosecution of any such suit. If, after such reimbursement, any funds shall remain from said recovery, then TRDF shall receive an amount equal to twenty percent (20%) of such funds and the remaining eighty percent (80%) of such funds shall be retained by Licensee.

9.2.2 Suit by TRDF. If Licensee does not take action in the prosecution, prevention, or termination of any Infringement pursuant to Section 9.2.1 above, and has not commenced negotiations with the infringer for the discontinuance of said Infringement, within ninety (90) days after receipt of notice to Licensee by TRDF of the existence of an Infringement, TRDF may elect to do so. Should TRDF elect to bring suit against an infringer and Licensee is joined as party plaintiff in any such suit, Licensee shall have the right to approve the counsel selected by TRDF to represent TRDF and Licensee, such approval not to be unreasonably withheld. The expenses of such suit or suits that TRDF elects to bring, including any expenses of Licensee reasonably incurred in conjunction with the prosecution of such suits or the settlement thereof by TRDF, shall be paid for entirely by TRDF and TRDF shall hold Licensee free, clear and harmless from and against any and all costs of such litigation, including attorney's fees. TRDF shall not compromise or settle such litigation without the prior written consent of Licensee, which consent shall not be unreasonably withheld or delayed. In the event TRDF exercises its right to sue pursuant to this Section 9.2.2, it shall first reimburse itself out of any sums recovered in such suit or in settlement thereof for all costs and expenses of every kind and character, including reasonable attorney's fees, necessarily incurred in the prosecution of any

such suit. If, after such reimbursement, any funds shall remain from said recovery, then Licensee shall receive an amount equal to twenty percent (20%) of such funds and the remaining eighty percent (80%) of such funds shall be retained by TRDF.

9.3 Own Counsel. Each party shall always have the right to be represented by counsel of its own selection and at its own expense in any suit instituted under this Section 9 by the other party for Infringement.

9.4 Cooperation. Each party agrees to cooperate fully in any action under this Section 9 that is controlled by the other party, provided that the controlling party reimburses the cooperating party promptly for any costs and expenses incurred by the cooperating party in connection with providing such assistance.

9.5 Declaratory Judgment. If a declaratory judgment action is brought naming Licensee and/or any of its Affiliates or Sublicensees as a defendant and alleging invalidity or unenforceability of any claims within the Patent Rights, Licensee shall promptly notify TRDF in writing and TRDF may elect, upon written notice to Licensee within thirty (30) days after TRDF receives notice of the commencement of such action, to take over the sole defense of the invalidity and/or unenforceability aspect of the action at its own expense.

10. Warranties; Limitation of Liability.

10.1 Compliance with Law. Licensee represents, warrants and covenants that it will comply, and will ensure that its Affiliates and Sublicensees comply, with all local, state, and international laws and regulations relating to the development, manufacture, use, sale and importation of Licensed Products. Without limiting the foregoing, Licensee represents and warrants that it will comply, and will ensure that its Affiliates and Sublicensees comply, with all applicable export control laws and regulations with respect to Licensed Products.

10.2 TRDF represents and warrants as follows:

10.2.1 To TRDF’s knowledge, based on the notice of invention filed by the Principal Investigator with TRDF, the Background Patent Rights list all inventors of the inventions disclosed in the Background Patent Rights. As between the parties, TRDF is solely responsible to compensate (in accordance with the Technion’s intellectual property policy) all persons subject to the Technion’s intellectual property policy who are entitled, in accordance with such policy, to a share of the consideration received by TRDF under this Agreement in connection with the licenses granted by TRDF to Licensee under this Agreement;

10.2.2 All inventors listed in the Background Patent Rights have assigned there rights in and to the inventions disclosed in the Background Patent Rights to TRDF;

10.2.3 TRDF has not granted any rights to any third party that conflict with the rights granted in this Agreement.

10.2.4 TRDF has no knowledge of any letter of demand, legal suit or proceeding issued or initiated by a third party against it contesting the ownership of the Background Patents Rights and Technology Transfer Materials or the validity of the Background Patents Rights, or claiming that the practice of the inventions claimed in the Background Patents Rights or the use of the Technology Transfer Materials would infringe the rights of such third party.

10.3 Disclaimer of Other Warranties.

10.3.1 NOTHING CONTAINED HEREIN SHALL BE DEEMED TO BE A WARRANTY BY TRDF THAT IT CAN OR WILL BE ABLE TO OBTAIN PATENTS ON PATENT APPLICATIONS INCLUDED IN THE TRDF PATENT RIGHTS OR JOINT PATENT RIGHTS, OR THAT ANY OF THE TRDF PATENT RIGHTS OR JOINT PATENT RIGHTS WILL AFFORD ADEQUATE OR COMMERCIALLY WORTHWHILE PROTECTION.

10.3.2 TRDF AND THE TECHNION MAKE NO WARRANTIES WHATSOEVER AS TO THE COMMERCIAL OR SCIENTIFIC VALUE OF THE RESEARCH, RESULTS, TRDF PATENT RIGHTS, JOINT PATENT RIGHTS, TECHNOLOGY TRANSFER MATERIALS. TRDF AND THE TECHNION MAKE NO REPRESENTATION THAT THE PRACTICE OF THE TRDF PATENT RIGHTS OR JOINT PATENT RIGHTS, OR USE OF THE TECHNOLOGY TRANSFER MATERIALS, OR THE DEVELOPMENT, MANUFACTURE, USE, SALE OR IMPORTATION OF ANY LICENSED PRODUCT, OR ANY ELEMENT THEREOF, WILL NOT INFRINGE THE PATENT OR PROPRIETARY RIGHTS OF ANY THIRD PARTY.

10.3.3 EXCEPT AS OTHERWISE EXPRESSLY PROVIDED IN THIS AGREEMENT, NEITHER PARTY MAKES ANY WARRANTY WITH RESPECT TO ANY TECHNOLOGY, RESEARCH, RESULTS, PATENTS, GOODS, SERVICES, RIGHTS OR OTHER SUBJECT MATTER OF THIS AGREEMENT AND HEREBY DISCLAIMS WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT WITH RESPECT TO ANY AND ALL OF THE FOREGOING.

10.4 Limitation of Liability.

10.4.1 Except with respect to matters for which Licensee is obligated to indemnify TRDF under Section 11, neither party will be liable to the other with respect to any subject matter of this Agreement under any contract, negligence, strict liability or other legal or equitable theory for (a) any indirect, incidental, consequential or punitive damages or lost profits or (b) cost of procurement of substitute goods, technology or services.

10.4.2 TRDF’s aggregate liability for all damages of any kind arising out of or relating to this Agreement or its subject matter shall not exceed the amounts paid to TRDF under this Agreement.

11. Indemnification.

11.1 Indemnity. Licensee shall indemnify, defend and hold harmless TRDF and Technion and their respective current and former directors, governing board members, trustees, officers, faculty, professional staff, employees, students, and agents and their respective successors, heirs and assigns (collectively, the "Indemnitees") from and against any claim, liability, cost, expense, damage, deficiency, loss or obligation or any kind or nature (including, without limitation, reasonable attorney's fees and other costs and expenses of litigation) (collectively, "Claims"), based upon or arising out of its acts or omissions or which derive from the use, practice, research, development, manufacture, marketing, sale or sublicensing of any Licensed Product, or of any technology or intellectual property rights, licensed hereunder, including without limitation any cause of action relating to product liability concerning any product, process, or service made, used or sold pursuant to any right or license granted under this Agreement.

11.2 Procedures. If any Indemnitee receives notice of any Claim, such Indemnitee shall, as promptly as is reasonably possible, give Licensee notice of such Claim; provided, however, that failure to give such notice promptly shall only relieve Licensee of any indemnification obligation it may have hereunder to the extent such failure diminishes the ability of Licensee to respond to or to defend the Indemnitee against such Claim. TRDF and Licensee shall consult and cooperate with each other regarding the response to and the defense of any such Claim and Licensee shall, upon its acknowledgment in writing of its obligation to indemnify the Indemnitee, be entitled to and shall assume the defense or represent the interests of the Indemnitee in respect of such Claim, that shall include the right to select and direct legal counsel and other consultants to appear in proceedings on behalf of the Indemnitee and to propose, accept or reject offers of settlement, all at its sole cost; provided, however, that no such settlement shall be made without the written consent of the Indemnitee, such consent not to be unreasonably withheld, provided however that the Indemnitee's consent shall not be required if the settlement includes a complete release of Indemnitee, does not contain any admission of wrong-doing by Indemnitee, and does not impose any financial liability on, or would otherwise adversely affect, Indemnitee. Nothing herein shall prevent the Indemnitee from retaining its own counsel and participating in its own defense at its own cost and expense.

11.3 Insurance. Beginning at the time any Licensed Product is being commercially distributed, sold or (in the case of services) provided by or on behalf of Licensee, an Affiliate of Licensee or a Sublicensee, Licensee shall, at its sole cost and expense, procure and maintain insurance that is reasonably adequate to fulfill any potential obligation to the Indemnitees under this Section 11, taking into consideration, among other things, the nature of the products commercialized. Without limiting the foregoing, beginning at the time any Licensed Product is being sold, leased, otherwise transferred or provided, such insurance shall include commercial liability insurance in amounts standard in the industry. Such insurance shall be obtained from a reputable insurance company. TRDF shall be added as co-insured parties under such insurance policy. Licensee hereby undertakes to comply punctually with all obligations imposed upon it under such policy(ies), including without limitation the obligation to pay in full and punctually all premiums and other payments due under such policy(ies). Licensee shall provide TRDF, upon

request, with written evidence of such insurance. Licensee shall continue to maintain such insurance after the expiration or termination of this Agreement during any period in which Licensee or Sublicensee continues to make, use, or sell Licensed Products, and thereafter for a period of seven (7) years.

12. Term and Termination.

12.1 Term. The term of this Agreement shall commence on the Effective Date and, unless earlier terminated as provided in this Article 11, shall continue in full force and effect on a Licensed Product-by-Licensed Product and country-by-country basis until the expiration of all payment obligations pursuant to Section 6 for such Licensed Product. Following the expiration pursuant to this Section 12.1 (and provided the Agreement has not been earlier terminated pursuant to Section 12.2, in which case the provisions of Section 12.3 will apply), Licensee shall have a fully-paid up, worldwide non-exclusive, perpetual, irrevocable license (with the right to grant sublicenses) to use the Technology Transfer Material, solely to do or have done further research on, develop, have developed, make, have made, use, sell, offer for sale and import Licensed Products.

12.2 Termination.

12.2.1 Termination Without Cause. Licensee may terminate this Agreement upon sixty (60) days prior written notice to TRDF; provided, however, that Licensee's obligations under Section 2.2 to fund the Research shall survive such termination until the end of the relevant year of the Research Period. The foregoing shall not apply to remaining amounts which have not been expended and are not needed to cover obligations taken by TRDF or the Technion in connection with the Research that cannot be canceled (e.g. annual engagement of personnel), if any, which remaining amounts will be refunded to the extent paid by Licensee.

12.2.2 Termination for Patent Challenge. TRDF may terminate this Agreement immediately upon written notice to Licensee if Licensee or an Affiliate of Licensee commences an action in which it challenges the validity, enforceability or scope of any of the Patent Rights. In addition, if a Sublicensee or an Affiliate of Sublicensee commences an action in which it challenges the validity, enforceability or scope of any of the Patent Rights, TRDF may send a written demand to Licensee to terminate such sublicense with respect to the Patent Rights being challenged by such Sublicensee or Sublicensee Affiliate. If Licensee fails to so terminate such sublicense within thirty (30) days after TRDF's demand, TRDF may immediately terminate the license granted hereunder with respect to the Patent Rights being challenged by such Sublicensee or Sublicensee Affiliate.

12.2.3 Termination for Default.

12.2.3.1 In the event that either party commits a material breach of its obligations under this Agreement and such party fails to cure such breach within thirty (30) days after receiving written notice thereof, the other party may terminate this Agreement immediately upon written notice to the party in breach.

12.2.3.2. if Licensee defaults in its obligations under Section 11.3 to procure and maintain insurance, then TRDF may terminate this Agreement immediately without notice or additional waiting period.

12.2.2.3. TRDF shall be entitled to terminate this Agreement in accordance with the provisions of Section 5.4.

12.2.4 Bankruptcy. TRDF may terminate this Agreement upon notice to Licensee if Licensee (a) suffers bankruptcy proceedings under any law which is not dismissed or stayed within ninety (90) days; (b) is adjudicated insolvent or bankrupt, which adjudication is not dismissed within one hundred and twenty (120) days; (c) admits in writing its inability to pay a significant portion of its debts; (d) voluntarily has a custodian, receiver or trustee appointed for it or substantially all of its assets; or (e) involuntarily has a custodian, receiver or trustee appointed for it or substantially all of its assets, which custodian, receiver or trustee is not discharged within ninety (90) days.

12.3 Effect of Termination.

12.3.1 Termination of Rights. Upon termination of this Agreement by either party pursuant to any of the provisions of Section 12.2: (a) the rights and licenses granted to Licensee under Section 4 shall terminate; and (b) any existing agreements that contain a Sublicense shall terminate to the extent of such Sublicense; provided, however, that, for each Sublicensee, upon termination of the Sublicense agreement with such Sublicensee, if the Sublicensee is not then in breach of its Sublicense agreement with Licensee such that Licensee would have the right to terminate such Sublicense, such Sublicensee shall have the right to seek a license from TRDF. TRDF agrees to negotiate such licenses in good faith under reasonable terms and conditions, which shall not is pose any representations, warranties, obligations or liabilities on TRDF that are not included in this Agreement.

12.3.2 Accruing Obligations. Termination or expiration of this Agreement shall not relieve the parties of obligations accruing prior to such termination or expiration, including obligations to pay amounts accruing hereunder up to the date of termination or expiration. After the date of termination or expiration (except in the case of termination by TRDF pursuant to Section 12.2.2 and 12.2.3), Licensee, its Affiliates and Sublicensees (a) may sell Licensed Products then in stock and (b) may complete the production of Licensed Products then in the process of production and sell the same; provided that, in the case of both (a) and (b), Licensee shall pay the applicable royalties and payments to TRDF in accordance with Article 6, provide reports and audit rights to TRDF pursuant to Article 7 and maintain insurance in accordance with the requirements of Section 11.3.

12.3.3 Transfer of Regulatory Filings and Know How. If Licensee terminates this Agreement pursuant to Section 12.2.1 or TRDF terminates this Agreement pursuant to any of the provisions of Section 12.2, Licensee shall promptly deliver and assign to Licensee, and hereby shall be deemed to have so assigned: (a) all of Licensee’s rights, title and interest in and to Joint Inventions and Joint Patent Rights; (b) all documents and other materials filed by or on

behalf of Licensee and its Affiliates with regulatory agencies in furtherance of applications for regulatory approval in the relevant country with respect to Licensed Products; and (c) all intellectual property, inventions, conceptions, compositions, materials, methods, processes, data, information, records, results, studies and analyses, discovered or acquired by, or on behalf of Licensee and its Affiliates which relate directly to actual or potential Licensed Products. TRDF shall be entitled to freely use and to grant others the right to use all such materials, documents and know-how delivered pursuant to this 12.3.3, *subject, however,* to any conditions preventing or governing such transfer and assignment set out in the applicable laws and regulations governing grants received by the Licensee and used in generation of the documents or intellectual property referred to above ("**Grant Transfer Conditions**"), in which case the Licensee will not be required to transfer and assign such documents or intellectual property as contemplated above *unless and until* TRDF, either (i) agrees in writing to assume all obligations required by the Grant Transfer Conditions, or (ii) reach another arrangement with the grantors of the grants which absolves the Licensee of any liability to such grantors with respect to the transfer or assignment of such documents or intellectual property. The Licensee shall fully cooperate with TRDF, if applicable, to effect such transfer and assignment and shall execute any document and perform any acts required to do so. In the event that TRDF commercializes any of the intellectual property referred to in sub-section (c) above, assigned and transferred in accordance with this Section 12.3.3, through a license or otherwise, TRDF shall pay the Licensee a royalty equal to 15% of Net Licensor Receipts as defined below. Such royalty shall be paid by TRDF on a quarterly basis, within thirty (30) days of the end of the calendar quarter in which the Net Licensor Receipts were received. The Licensee shall have the rights granted to TRDF pursuant to Section 7, *mutatis mutandis,* in respect of the Net Licensor Receipts.

For purposes hereof, the following terms shall have the following meanings:

"Net Licensor Receipts" shall mean Licensor Receipts less Licensor Expenses;

"Licensor Receipts" shall mean all amounts in cash and other consideration actual received by TRDF from the grant of a license under the assigned intellectual property referred to in sub-section (c) above; and

"Licensor Expenses" shall mean (a) payments actually incurred by TRDF in accordance with detailed budgets and research work plans included in sponsored research or research and license agreements relating to the assigned intellectual property referred to in sub-section (c) above; and (b) any out-of-pocket expenses paid by TRDF in connection with enabling the receipt of such Licensor Receipts.

12.4 Survival. The parties' respective rights, obligations and duties under Sections 3.1, 3.2, 3.3, 6.4, 7.1 (with respect to the Calendar Quarter in which termination took place), 7.2 through 7.6, 8.3.2, 10.4, 11, 12.3, 12.4, 13, 14.1 and 14.4, as well as any rights, obligations and duties which by their nature extend beyond the expiration or termination of this Agreement, shall survive any expiration or termination of this Agreement.

13. Confidential Information.

13.1 Licensee agrees that, without the prior written consent of TRDF for a period of seven (7) years from date of disclosure, it will keep confidential, and not disclose or use Confidential Information (as defined below) other than for the purposes of this Agreement. Licensee shall treat such Confidential Information with the same degree of confidentiality as it keeps its own confidential information, but in all events no less than a reasonable degree of confidentiality. Licensee may disclose Confidential Information only to employees, consultants and contractors of Licensee or of its Affiliates or Sublicensees who have a "need to know" such information in order to enable Licensee to exercise its rights or fulfill its obligations under this Agreement and are legally bound by agreements which impose confidentiality and non-use obligations comparable to those set forth in this Agreement. For purposes of this Agreement, "Confidential Information" means the Development Milestones, the Development Plan, invention disclosures provided by Licensee in accordance with Section 3.3, Sublicense Agreements delivered in accordance with Section 4.1.3.4, diligence reports provided pursuant to Section 5.3, Plans and Explanations provided pursuant to Section 5.4, notification of the attainment of milestones pursuant to Section 6.1 and reports provided pursuant to Section 7.1, except to the extent such information: (i) is at the time of disclosure or later becomes publicly known under circumstances involving no breach of this Agreement; (iii) is lawfully and in good faith made available to Licensee by a third party who is not subject to obligations of confidentiality to TRDF or the Technion with respect to such information; or (iv) is independently developed by Licensee without the use of or reference to Confidential Information, as demonstrated by documentary evidence.

13.2 TRDF agrees that, without the prior written consent of Licensee for a period of seven (7) years from date of disclosure, it will keep confidential, and not disclose or use Licensee Confidential Information (as defined below) other than for the purposes of this Agreement. TRDF shall treat such Licensee Confidential Information with the same degree of confidentiality as it keeps its own confidential information, but in all events no less than a reasonable degree of confidentiality. TRDF may disclose Licensee Confidential Information only to employees, consultants and contractors of TRDF or of its Affiliates who have a "need to know" such information in order to enable TRDF or the TRDF Team to exercise their rights or fulfill their obligations under this Agreement, and are legally bound by agreements which impose confidentiality and non-use obligations comparable to those set forth in this Agreement. For purposes of this Agreement, "Licensee Confidential Information" means any unpublished Licensee Patent Rights or any information relating to the Licensee's technology, business, products and product plans, designated as confidential or which otherwise should reasonably be construed under the circumstances as being confidential disclosed to TRDF, in each case except to the extent such information: (i) is at the time of disclosure or later becomes publicly known under circumstances involving no breach of this Agreement; (iii) is lawfully and in good faith made available to TRDF by a third party who is not subject to obligations of confidentiality to Licensee with respect to such information; or (iv) is independently developed by TRDF without the use of or reference to Licensee Confidential Information, as demonstrated by documentary evidence.

For the avoidance of doubt, the provisions of this Section 13 shall in no event prevent the Licensee, its Affiliates and Sublicensees from disclosing any information to regulatory authorities or other governmental agencies in support of any application for regulatory approvals or any amendments thereof for Licensed Products and whenever required under any applicable law, nor will they prevent the Licensee from disclosing the terms hereof in the course of due diligence inquiries by potential investors, subject to execution of standard confidentiality undertakings. A disclosure by the receiving party of confidential information in response to a valid order by a court or other governmental body, or as otherwise required by law, and to such extent necessary, shall not be considered to be a breach of this Agreement, provided, however, that the receiving party shall provide the disclosing party with prompt prior written notice thereof.

14. Miscellaneous.

14.1 Use of Name. Licensee shall not, and shall ensure that its Affiliates and Sublicensees shall not, use the name or insignia of the Technion or TRDF or the name of any of the Technion's or TRDF's officers, faculty, employees, other researchers or students, or any adaptation of such names, in any advertising, promotional or sales literature, including without limitation any press release or any document employed to obtain funds, without the prior written approval of TRDF, which shall not be unreasonably withheld, and except that the mere statement of the fact that the Licensee's technology has been obtained from the Technion shall not require such approval.

14.2 Entire Agreement. This Agreement is the sole agreement with respect to the subject matter hereof and except as expressly set forth herein, supersedes all other agreements and understandings between the parties with respect to the same.

14.3 Notices. Unless otherwise specifically provided, all notices required or permitted by this Agreement shall be in writing and may be delivered personally, or may be sent by facsimile, overnight delivery or certified mail, return receipt requested, to the following addresses, unless the parties are subsequently notified of any change of address in accordance with this Section 14.3:

If to Licensee:

Eloxx Pharma Ltd.
14 Shenkar St. Herzelia, Israel
c/o Pontifax

If to TRDF: Technion Research and Development Foundation Ltd.
Technology Transfer Office
Technion City
Haifa 32000, Israel

Attn: General Manager

Any notice shall be deemed to have been received as follows: (a) by personal delivery, upon receipt; (b) by facsimile or overnight delivery, one business day after transmission or dispatch; (c) by certified mail, as evidenced by the return receipt. If notice is sent by facsimile, a confirming copy of the same shall be sent by mail to the same address.

14.4 Governing Law and Jurisdiction. This Agreement will be governed by, and construed in accordance with, the laws Israel, without giving effect to any choice or conflict of law provision, except that questions affecting the construction and effect of any patent shall be determined by the law of the country in which the patent shall have been granted. The parties hereby agree that the competent court in Tel Aviv Israel shall have sole jurisdiction over any and all matters arising from this Agreement, except that TRDF may bring suit against Licensee in any other jurisdiction outside Israel to the extent required in order to enforce its rights hereunder with respect to TRDF Patent Rights and/or to obtain injunctive or similar relief in such territory.

14.5 Binding Effect. This Agreement shall be binding upon and inure to the benefit of the parties and their respective legal representatives, successors and permitted assigns.

14.6 Headings. Section and subsection headings are inserted for convenience of reference only and do not form a part of this Agreement.

14.7 Counterparts. The parties may execute this Agreement in two or more counterparts, each of which shall be deemed an original.

14.8 Amendment; Waiver. This Agreement may be amended, modified, superseded or canceled, and any of the terms may be waived, only by a written instrument executed by each party or, in the case of waiver, by the party waiving compliance. The delay or failure of either party at any time or times to require performance of any provisions hereof shall in no manner affect the rights at a later time to enforce the same. No waiver by either party of any condition or of the breach of any term contained in this Agreement, whether by conduct, or otherwise, in any one or more instances, shall be deemed to be, or considered as, a further or continuing waiver of any such condition or of the breach of such term or any other term of this Agreement.

14.9 No Agency or Partnership. Nothing contained in this Agreement shall give either party the right to bind the other, or be deemed to constitute either party as agent for or partner of the other or any third party.

14.10 Assignment and Successors. This Agreement may not be assigned by either party without the consent of the other, which consent shall not be unreasonably withheld, except that each party may, without such consent, assign this Agreement and the rights, obligations and interests of such party to any purchaser of all or substantially all of its assets or research to which the subject matter of this Agreement relates, or to any successor corporation resulting from any merger or consolidation of such party with or into such corporation; provided, in each case, that the assignee agrees in writing to be bound by the terms of this Agreement. Any assignment purported or attempted to be made in violation of the terms of this Section 14.10 shall be null and void and of no legal effect.

14.11 Force Majeure. Neither party will be responsible for delays resulting from causes beyond the reasonable control of such party, including, without limitation, fire, explosion, flood, war, strike, or riot, provided that the nonperforming party uses commercially reasonable efforts to avoid or remove such causes of nonperformance and continues performance under this Agreement with reasonable dispatch whenever such causes are removed.

14.12 Interpretation. Each party hereto acknowledges and agrees that: (a) it and/or its counsel reviewed and negotiated the terms and provisions of this Agreement and has contributed to its revision; (b) the rule of construction to the effect that any ambiguities are resolved against the drafting party shall not be employed in the interpretation of this Agreement; and (c) the terms and provisions of this Agreement shall be construed fairly as to both parties hereto and not in favor of or against either party, regardless of which party was generally responsible for the preparation of this Agreement.

14.3 Severability. If any provision of this Agreement is or becomes invalid or is ruled invalid by any court of competent jurisdiction or is deemed unenforceable, it is the intention of the parties that the remainder of this Agreement shall not be affected.

IN WITNESS WHEREOF, the parties have caused this Agreement to be executed by their duly authorized representatives as of the date first written above.

Technion Research and Development Foundation Ltd.

By: /s/ Oded Shmueli
Name: Oded Shmueli
Title: Authorized Signatories

Eloxx Pharma Ltd.

By: /s/ Silvia Noimain
Name: Silvia Noimain
Title:

I, the undersigned, hereby confirm that I have read the Agreement, that its contents are acceptable to me and that I agree to be bound by the terms of Sections 2 and 3.

/s/ Timor Baasov
Professor Timor Baasov

Exhibit A

PatentNum	PatentName	PatentStatusDesc	ApplicationData	ApplicationNum	CountryDesc	PatentDate	PatentNo	PublicationDate	PublicationNum
1302	REPAIRING FAULTY GENES BY AMINOGLYCOSIDES: IDENTIFICATION OF NEW PHARMACOPHORE WITH ENHANCED SUPPRESSION OF DI	NP from PCT			N/A				
1302-00	REPAIRING FAULTY GENES BY AMINOGLYCOSIDES: IDENTIFICATION OF NEW PHARMACOPHORE WITH ENHANCED SUPPRESSION OF DI	Expired	18/11/2010	61/414,956	United States				
1302-01	AMINOGLYCOSIDES AND USES THEREOF IN TREATING GENETIC DISORDERS	Expired	17/11/2011	PCT/IL2011/000889	PCT			24/05/2012	WO2012/066546
1302-02	AMINOGLYCOSIDES AND USES THEREOF IN TREATING GENETIC DISORDERS	Filed	16/05/2013	13/885,715	United States				
1302-03	AMINOGLYCOSIDES AND USES THEREOF IN TREATING GENETIC DISORDERS	Filed	17/11/2011	11799501,9	Europe				
1302-04	AMINOGLYCOSIDES AND USES THEREOF IN TREATING GENETIC DISORDERS	Filed	20/05/2013		Japan				
1302-05	AMINOGLYCOSIDES AND USES THEREOF IN TREATING GENETIC DISORDERS	Filed	02/05/2013	2,816,789	Canada				
1302-06	AMINOGLYCOSIDES AND USES THEREOF IN TREATING GENETIC DISORDERS	Filed	07/05/2013	876/MUMNP/2013	India				
1302-07	AMINOGLYCOSIDES AND USES THEREOF IN TREATING GENETIC DISORDERS	Filed	16/05/2013	226390	Israel				

PatentNum	PatentName	PatentStatusDesc	ApplicationData	ApplicationNum	CountryDesc	PatentDate	PatentNo	PublicationDate	PublicationNum
1302	REPAIRING FAULTY GENES BY AMINOGLYCOSIDES: IDENTIFICATION OF NEW PHARMACOPHORE WITH ENHANCED SUPPRESSION OF DI	NP from PCT			N/A				
1302-00	REPAIRING FAULTY GENES BY AMINOGLYCOSIDES: IDENTIFICATION OF NEW PHARMACOPHORE WITH ENHANCED SUPPRESSION OF DI	Expired	18/11/2010	61/414,956	United States				
1302-01	AMINOGLYCOSIDES AND USES THEREOF IN TREATING GENETIC DISORDERS	Expired	17/11/2011	PCT/IL2011/000889	PCT			24/05/2012	WO2012/066546
1302-02	AMINOGLYCOSIDES AND USES THEREOF IN TREATING GENETIC DISORDERS	Filed	16/05/2013	13/885,715	United States				
1302-03	AMINOGLYCOSIDES AND USES THEREOF IN TREATING GENETIC DISORDERS	Filed	17/11/2011	11799501,9	Europe				
1302-04	AMINOGLYCOSIDES AND USES THEREOF IN TREATING GENETIC DISORDERS	Filed	20/05/2013		Japan				
1302-05	AMINOGLYCOSIDES AND USES THEREOF IN TREATING GENETIC DISORDERS	Filed	02/05/2013	2,816,789	Canada				
1302-06	AMINOGLYCOSIDES AND USES THEREOF IN TREATING GENETIC DISORDERS	Filed	07/05/2013	876/MUMNP/2013	India				
1302-07	AMINOGLYCOSIDES AND USES THEREOF IN TREATING GENETIC DISORDERS	Filed	16/05/2013	226390	Israel				

Exhibit B
Development Milestones

1. An additional amount of [...***...] raised by the Licensee within 6 months of the execution of the Agreement, confirmed by a certificate executed by the Licensee's CEO.

2. The filing of an Investigational New Drug application with respect to a Licensed Product (as defined in the Agreement) prior to the fourth anniversary of the Agreement.

3. First commercial sale of a Licensed Product in the U.S prior to the [...***...] anniversary of the Agreement.

*****Confidential Treatment Requested**

Exhibit C

Detailed plan tilll IND

Task	Y1Q1	Y1Q2	Y1Q3	Y1Q4	Y2Q1	Y2Q2	Y2Q3	Y2Q4	Y3Q1	Y3Q2
Tech transfer and lab set up initial compound characterization										
Lead optimization - In silco and synthetis of new leads										
Compound characterization (to determine dev. status) 2 compounds										
Characterization of optimized compounds + in- vivo										
EDC (if compounds need optimization)										
Preclinical development (CMC and IND enabling studies)										
IND submission										

Long term timeline	[...***...]	[...***...]	[...***...]	[...***...]	[...***...]	[...***...]	[...***...]	[...***...]	[...***...]	[...***...]	[...***...]	[...***...]
[...***...]	[...***...]	[...***...]	[...***...]	[...***...]	[...***...]	[...***...]	[...***...]	[...***...]	[...***...]	[...***...]	[...***...]	[...***...]
[...***...]	[...***...]	[...***...]	[...***...]	[...***...]	[...***...]	[...***...]	[...***...]	[...***...]	[...***...]	[...***...]	[...***...]	[...***...]
[...***...]	[...***...]	[...***...]	[...***...]	[...***...]	[...***...]	[...***...]	[...***...]	[...***...]	[...***...]	[...***...]	[...***...]	[...***...]
[...***...]	[...***...]	[...***...]	[...***...]	[...***...]	[...***...]	[...***...]	[...***...]	[...***...]	[...***...]	[...***...]	[...***...]	[...***...]
[...***...]	[...***...]	[...***...]	[...***...]	[...***...]	[...***...]	[...***...]	[...***...]	[...***...]	[...***...]	[...***...]	[...***...]	[...***...]

*****Confidential Treatment Requested**

Exhibit D

KNOW-HOW Generated by Prof. Baasov
Written by T. Baasov 26.08.2013

A) Proof of Principle: Decreased selectivity toward mitochondrial versus cytoplasmic ribosome confers decreased toxicity of compounds disclosed in the licensed patent.

One Sentence Summary: Here we provide answer on the question whether the ability of aminoglycoside to block mitochondrial or cytoplasmic protein synthesis in mammalian cells is a major cause in AG toxicity and provide proof of principle that by using mechanism-based drug-redesign we can mitigate aminoglycoside- induced toxic side effects.

Compelling evidence is now available that aminoglycoside (AG) antibiotics can induce the mammalian ribosome to suppress disease-causing nonsense mutation and partially restore the expression of functional proteins. However, prolonged AG treatment can cause detrimental side effects in patients, including cytotoxicity, nephrotoxicity and ototoxicity. Recent mechanistic postulates consider the contributions of mitochondrial and/or cytoplasmic protein synthesis inhibition to AG-induced ototoxicity. Yet, which of these mechanisms is imperative remain unclear. We showed that AGs that inhibit mitochondrial protein synthesis in mammalian cells perturb cell respiration, leading to time- and dose-dependent increase in superoxide overproduction and accumulation of free ferrous iron in mitochondria due to oxidative damage of mitochondrial aconitase, ultimately leading to cell apoptosis via the Fenton reaction. We demonstrated that these deleterious effects increase with the increased inhibition potency of AG on the mitochondrial rather than cytoplasmic protein synthesis, which in turn correlates with the measured cytotoxicity/ototoxicity potential of the tested compounds both in the cochlear explants and *in vivo* guinea pig model of ototoxicity. The deleterious effects of AGs were alleviated in cell culture and in guinea pig by the administration of synthetic AGs specially designed for the treatment of genetic diseases caused by nonsense mutations. This work highlights the benefit of mechanism-based drug-redesign strategy to mitigate drug-induced side effects, with the goal to maximize the translational value of “read-through therapy” approach to the point where it can actually help patients suffering from genetic diseases caused by nonsense mutations.

B) Potential Treatment of Leishmaniasis by designer AGs: compounds disclosed in the licensed patent that Exhibit Significantly Improved Activity than Paromomycin against Leishmaniasis.

Leishmaniasis, a parasitic disease caused by protozoa of the genus *Leishmania*, affects millions of people worldwide. The current state-of-art in treating leishmaniasis is based on chemotherapy using a limited array of drugs such as antimony containing agents, amphotericin B, and recently Miltefosine. However, due to the emergence of pronounced parasite drug resistance in some regions, relatively high costs, and/or the severe toxic effects; there has been an extensive search over the last few years for new therapeutic agents. Paromomycin, a clinically approved AG for the treatment of various bacterial and parasitic infections, is the major component of a topical ointment (Leishcutan) used to treat cutaneous leishmaniasis caused by several species of parasites, and attempts have been made to further improve existing formulations. Paromomycin is also effective against visceral leishmaniasis, the fatal form of this disease, and it is registered in India and Nepal. Clinical trials using Paromomycin in combination with other anti-leishmanial drugs are underway in order to prevent development of parasite resistance. Recently, by solving three dimensional X-Ray structures of AGs in the *Leishmania* ribosomal A-site, we identified molecular attributes for AGs activity against leishmaniasis (Baasov et al., PNAS 2013). Based on these finding we proposed that some of our compounds of NB-series especially developed to act on the eukaryotic ribose would also act against leishmaniasis. To test this hypothesis, we tested our designer structures for inhibition of growth using two species, *L. major* and *L. donovani*, which induce cutaneous and visceral leishmaniasis in humans, respectively. We found that some of them are more potent than paromomycin against both strains while in parallel they exhibit significantly reduced toxicity than paromomycin. The combined structural and physiological data sets the ground for the use of these designer structures as potential therapeutic agents against leishmaniasis.

C) Potential Treatment of Cancer by Designer AGs: compound disclosed in the licensed patent that Exhibit Significantly Improved Efficiency to treat rescue functional P53.

Many cancers are linked to a premature termination codon (PTC) in a tumor suppressor (TS) gene, resulting in the loss of protein expression or the synthesis of a truncated protein unable to either inhibit cell proliferation or promote apoptosis. Cancers are particularly suitable for treatment with readthrough-inducing drugs. Indeed, TS genes are especially good candidates for PTC suppression because they have a higher frequency of nonsense mutation than oncogenes, most of which are inactivated by missense mutations. We demonstrated that designer AGs of NB-series efficiently suppress PTC mutations and induce the expression of full-length functional P53 protein in a series of cancel cell lines from patients with mutant P53 protein. We also demonstrated that treatment with designer AGs decreased the viability of cancer cells specifically in the presence of nonsense-mutated P53 gene.

Exhibit E
Description of Technology Transfer Material

A) Proof of Principle: Decreased selectivity toward mitochondrial versus cytoplasmic ribosome confers decreased toxicity of compounds disclosed and/or claimed in the TRDF Patent Rights ("Disclosed Compounds").

One Sentence Summary: Here we provide answer on the question whether the ability of Disclosed Compounds to block mitochondrial or cytoplasmic protein synthesis in mammalian cells is a major cause in AG toxicity and provide proof of principle that by using such covered compounds made throught mechanism-based drug-redesign we can mitigate aminoglycoside-induced toxic side effects.

Compelling evidence is now available that aminoglycoside (AG) antibiotics can induce the mammalian ribosome to suppress disease-causing nonsense mutation and partially restore the expression of functional proteins. However, prolonged AG treatment can cause detrimental side effects in patients, including cytotoxicity, nephrotoxicity and ototoxicity. Recent mechanistic postulates consider the contributions of mitochondrial and/or cytoplasmic protein synthesis inhibition to AG-induced ototoxicity. Yet, which of these mechanisms is imperative remain unclear. We showed that Disclosed Compounds that inhibit mitochondrial protein synthesis in mammalian cells perturb cell respiration, leading to time- and dose-dependent increase in superoxide overproduction and accumulation of free ferrous iron in mitochondria due to oxidative damage of mitochondrial aconitase, ultimately leading to cell apoptosis via the Fenton reaction. We demonstrated that these deleterious effects increase with the increased inhibition potency of AG on the mitochondrial rather than cytoplasmic protein synthesis, which in turn correlates with the measured cytotoxicity/ototoxicity potential of the tested compounds both in the cochlear explants and *in vivo* guinea pig model of ototoxicity. The deleterious effects of AGs were alleviated in cell culture and in guinea pig by the administration of Disclosed Compounds specially designed for the treatment of genetic diseases caused by nonsense mutations. This work highlights the benefit of Disclosed Compounds to mitigate drug-induced side effects, with the goal to maximize the translational value of "read-through therapy" approach to the point where it can actually help patients suffering from genetic diseases caused by nonsense mutations.

B) Potential Treatment of Leishmaniasis by Disclosed Compounds: Disclosed Compounds that Exhibit Significantly Improved Activity than Paromomycin against Leishmaniasis.

Leishmaniasis, a parasitic disease caused by protozoa of the genus *Leishmania*, affects millions of people worldwide. The current state-of-art in treating leishmaniasis is based on chemotherapy using a limited array of drugs such as antimony containing agents, amphotericin B, and recently Miltefosine. However, due to the emergence of pronounced parasite drug resistance in some regions, relatively high costs, and/or the severe toxic effects; there has been an extensive search over the last few years for new therapeutic

agents. Paromomycin, a clinically approved AG for the treatment of various bacterial and parasitic infections, is the major component of a topical ointment (Leishcutan) used to treat cutaneous leishmaniasis caused by several species of parasites, and attempts have been made to further improve existing formulations. Paromomycin is also effective against visceral leishmaniasis, the fatal form of this disease, and it is registered in India and Nepal. Clinical trials using Paromomycin in combination with other anti-leishmanial drugs are underway in order to prevent development of parasite resistance. Recently, by solving three dimensional X-Ray structures of AGs in the *Leishmania* ribosomal A-site, we identified molecular attributes for Disclosed Compounds activity against leishmaniasis (Baasov et al., PNAS 2013). Based on these finding we proposed that some of our Disclosed Compounds of NB-series especially developed to act on the eukaryotic ribose would also act against leishmaniasis. To test this hypothesis, we tested our designer structures for inhibition of growth using two species, *L. major* and *L. donovani*, which induce cutaneous and visceral leishmaniasis in humans, respectively. We found that some of them are more potent than paromomycin against both strains while in parallel they exhibit significantly reduced toxicity than paromomycin. The combined structural and physiological data sets the ground for the use of these designer structures as potential therapeutic agents against leishmaniasis.

C) <u>Potential Treatment of Cancer by Disclosed Compounds:</u> Disclosed Compounds that Exhibit Significantly Improved Efficiency to treat rescue functional P53.

Many cancers are linked to a premature termination codon (PTC) in a tumor suppressor (TS) gene, resulting in the loss of protein expression or the synthesis of a truncated protein unable to either inhibit cell proliferation or promote apoptosis. Cancers are particularly suitable for treatment with readthrough-inducing drugs. Indeed, TS genes are especially good candidates for PTC suppression because they have a higher frequency of nonsense mutation than oncogenes, most of which are inactivated by missense mutations. We demonstrated that Disclosed Compounds of NB-series efficiently suppress PTC mutations and induce the expression of full-length functional P53 protein in a series of cancel cell lines from patients with mutant P53 protein. We also demonstrated that treatment with Disclosed Compounds decreased the viability of cancer cells specifically in the presence of nonsense-mutated P53 gene.

Exhibit 10.2
*****Text Omitted and Filed Separately**
With Securities and Exchange Commission
Confidential Treatment Requested
Under 17 C.F.R. Sections 200.80(b)(4) and 240.24b-2 of the
Securities Exchange Act of 1934, as amended.

Confidential

FIRST AMENDMENT TO RESEARCH AND LICENSE AGREEMENT

This First Amendment to Research and License Agreement is entered into as of November 26, 2013, by and between Technion Research and Development Foundation Ltd., a company formed under the laws of Israel, having a place of business at the Technion City, Haifa 32000, Israel, and Elmo(Pharmaceuticals Ltd., a company formed under the laws of Israel, having a place of business at 14 Shenkar St. Herzelia, Israel (together, the "**Parties**").

WHEREAS, the Parties executed that certain Research and License Agreement on August 29, 2013 (the "**License Agreement**"); and

WHEREAS, the Parties wish to replace the list of Development Milestones (as defined in the License Agreement) attached as Exhibit B to the License Agreement with the list specified in **Exhibit B** attached hereto.

NOW, THEREFORE, the Parties hereto, intending to be legally bound, hereby agree as follows:

1. Exhibit B

Exhibit B to the License Agreement is hereby replaced with **Exhibit B** attached hereto.

2. General

Except for the terms revised herein, all other terms and conditions of the License Agreement shall continue to apply and shall remain in full force and effect.

IN WITNESS WHEREOF, the Parties have caused this First Amendment to Research and License Agreement to be executed by their duly authorized representatives as of the date first written above.

Technion Research and Development Foundation Ltd.

By: /s/ Oded Shmueli
Name: Oded Shmueli
Title: Authorized Signatory

Eloxx Pharmaceuticals Ltd.

By: /s/ Silvia Noimain
Name: Silvia Noimain
Title:

*****Confidential Treatment Requested**

Exhibit B
Development Milestones

1. Within 6 months from the execution of the Agreement, the Licensee shall actually receive Funding in the aggregate amount of [...***...]. If at the end of said 6 months from the execution of the Agreement the Licensee has not received the Funding or if at the end of 24 months from the execution of the Agreement the Funding was not completed in accordance with the irrevocable commitments to be presented within said 6 months from the execution of the Agreement, the milestone shall be deemed not to have been fulfilled.

   "**Funding**" shall herein mean solely the following:

   a. Immediately available cash infusions, whether by investments in the Licensee's equity, debt or other instruments, or by funding provided by the Office of the Chief Scientist any other comparable governmental program, Israeli or international, or any multinational company ("**Non Dilutive Fund Providers**");

   b. Irrevocable commitments to provide funding as immediately- available cash infusion upon the occurrence of exiting milestones under Licensee's existing agreements with TRDF or Licensee investors, provided, that in any case, such funding shall be made available within 24 months from the execution of the Agreement; and

   c. Irrevocable commitments to provide funding as immediately available cash infusion upon the occurrence of technological milestones mutually agreed upon by the Company and any of the Non Dilutive Fund Providers, and determined by the Licensee's Board of Directors as reasonably achievable in the applicable timeframe, provided, that in any case, such funding shall be made available within 24 months from the execution of the Agreement.

2. The filing of an Investigational New Drug application with respect to a Licensed Product (as defined in the Agreement) prior to the fourth anniversary of the Agreement.

3. First commercial sale of a Licensed Product in the U.S prior to the [...***...] anniversary of the Agreement.

*****Confidential Treatment Requested**

Exhibit 10.3

SECOND AMENDMENT

TO THE RESEARCH AND LICENSE AGREEMENT

This Second Amendment to Research and License Agreement (the "**Second Amendment**") is made by and between The Technion Research & Development Foundation Ltd ("**TRDF**") and Eloxx Pharmaceuticals Ltd. ("**Licensee**" or "**Eloxx**").

WHEREAS, TRDF and Eloxx are parties to Research and License Agreement with an effective date of August 29th 2013 (the "**Agreement**"), as amended by the First Amendment to Research and License Agreement, dated November 26, 2013; and

WHEREAS, the parties desire to continue the relationship contemplated by the Agreement and therefore to further amend the Agreement as set forth herein;

Now, THEREFORE, the parties hereby agree as follows;

1. Unless otherwise defined herein, capitalized terms used in this Second Amendment shall have the meanings assigned thereto in the Agreement.
2. Subject to the full execution of this Second Amendment, TRDF and Eloxx agree to further amend the Agreement as set forth herein.
3. Exhibit D to the Agreement is hereby replaced with **Exhibit D** attached hereto.
4. The Parties wish to amend section 2.2.1 (Funding) as follows:
   - 4.1 Licensee shall fund the Research to be performed during the first year of the Research Period in the total amount of eighty thousand US dollars ($80,000) ("**First Year Research Budget**"). The Research shall commence on October 1st 2013 for 12 months until September 30th 2014.
   - 4.2 Licensee shall pay the First Year Research Budget in the following schedule:
     - 4.2.1 First installment of thirty thousand US dollars ($30,000) shall be paid upon signing this Second Amendment.
     - 4.2.2 Second installment of thirty thousand US dollars ($30,000) shall be paid no later than March 30th, 2014,
     - 4.2.3 Third installment of thirty thousand US dollars ($20,000) shall be paid no later than September 30th, 2014.
   - 4.3 VAT as applicable on time of payment, shall be added to each installment. TRDF shall issue a proper invoice for each installment.
   - 4.4 TRDF shall issue a proper invoice for each installment.
5. Except as amended herein, all other terms and conditions of the Agreement shall remain in full force and effect, specifically to the Research as shall be conducted in the coming years.

6. This Second Amendment may be executed in counterparts, each of which shall be deemed an original and all of which together shall constitute one and the same instrument. Any signature page delivered by facsimile or electronic image transmission shall be binding to the same extent as an original signature page.

IN WITNESS WHEREOF, the parties hereby accept and agree to the terms and conditions of this Second Amendment.

Eloxx Pharmaceuticals Ltd.

By: /s/ Silvia Noiman
Name: Silvia Noiman
Title: Chairman
Date: 1/14/2013

THE TECHNION RESEARCH & DEVELOPMENT FOUNDATION LTD.

By: /s/ Rita Bruckstein
Name: Rita Bruckstein
Title: Research Authority Director
Date: 12/30/2013

Exhibit 10.4

THIRD AMENDMENT

TO THE RESEARCH AD LICENSE AGREEMENT

This Third Amendment to Research and License Agreement (the **"Third Amendment"**) is made by and between The Technion Research & Development Foundation Ltd (**"TRDF"**) and Eloxx Pharmaceuticals Ltd. ("**Licensee**" or "**Eloxx**").

WHEREAS, TRDF **and** Eloxx are parties to Research and License Agreement with an effective date of August 29th, 2013 (the "**Agreement**"), as amended on November 26, 2013 and on January 14, 2014; and

WHEREAS, the parties desire to continue the relationship contemplated by the Agreement and therefore to further amend the Agreement as set forth herein;

NOW, therefore, the parties hereby agree as follows:

1. Unless otherwise defined herein, capitalized terms used in this Third Amendment shall have the meanings assigned thereto in the Agreement.
2. Subject to the full execution of this Third Amendment, TRDF and Eloxx agree to further amend the Agreement as set forth herein, *provided however*, that this Third Amendment shall only become effective upon and subject to the filing by TRDF and Eloxx of patent application no. 59529 to the USPTO.
3. The following shall be added to Section 13.1 of the Agreement:

   "Notwithstanding the above, Licensee shall be entitled to disclose Confidential Information that is related to nonsense mutations for genetic diseases
4. Except as amended herein, all other terms and conditions of the Agreement shall remain in full force and effect.
5. This Third Amendment may be executed in counterparts, each of which shall be deemed an original and all of which together shall constitute one and the same instrument. Any signature page delivered by facsimile or electronic image transmission shall be binding to the same extent as an original signature page.

IN WITNESS WHEREOF, the parties hereby accept and agree to the terms and conditions of this Third Amendment.

ELOXX PHARMACEUTICALS LTD.

By: /s/ Shmuel Tuvia
Name: Shmuel Tuvia
Title: COO
Date: 9/6/14

THE TECHNION RESEARCH & DEVELOPMENT FOUNDATION LTD.

By: /s/ Oded Shmueli
Name: Oded Shmueli
Title:
Date: 9/6/14

FIRST ADDENDUM

TO THE RESEARCH AND LICENSE AGREEMENT

This First Addendum to Research and License Agreement (the "**First Addendum**") is made by and between The Technion Research & Development Foundation Ltd. ("**TRDF**") and Eloxx Pharmaceuticals Ltd. ("**Licensee**" or "**Eloxx**").

WHEREAS, TRDF and Eloxx are parties to Research and License Agreement with an effective date of August 29th, 2013, as amended on November 26, 2013, January 14, 2014 and June 9, 2014 (the "**Agreement**"); and

WHEREAS, the parties desire to continue the relationship contemplated by the Agreement and therefore to further amend the Agreement as set forth herein;

NOW, THEREFORE, the parties hereby agree as follows:

1. Unless otherwise defined herein, capitalized terms used in this First Addendum shall have the meanings assigned thereto in the Agreement.

2. The Parties wish to add new specific research work under this First Addendum, all as described in **Exhibit D1** attached hereto which shall be added to Exhibit D of the Agreement (the "**First Addendum Research**").

3. For the First Addendum Research, a separated budget is required to be paid by Eloxx to TRDF, all as agreed upon and set in Exhibit D1, in the total amount of thirty thousand US dollars ($30,000) (the "**First Addendum Budget**").

    3.1 Licensee shall fund the First Addendum Budget to be performed within 3 months commencing as of the execution of this First Addendum, as follows:

        3.1.1 First installment of ten thousand US dollars ($10,000) shall be paid upon the execution of this First Addendum.

        3.1.2 Second installment of ten thousand US dollars ($10,000) shall be paid no later than June 30th, 2014.

        3.1.3 Third installment of ten thousand US dollars ($10,000) shall be paid upon completion of the First Addendum Research and supply to Eloxx of related materials.

    3.2 VAT as applicable on time of payment, shall be added to each installment.

    3.3 TRDF shall issue a proper invoice for each installment.

4. Except as added herein, all Confidential terms and conditions of the Agreement shall remain in full force and effect, as relevant to the First Addendum Research.

5. This First Addendum may be executed in counterparts, each of which shall be deemed an original and all of which together shall constitute one and the same instrument. Any signature page delivered by facsimile or electronic image transmission shall be binding to the same extent as an original signature page.

IN WITNESS WHEREOF, the parties hereby accept and agree to the terms and conditions of this First Addendum.

ELOXX PHARMACEUTICALS LTD.

By: /s/ Silvia Noiman
Name: Silvia Noiman
Title: CEO
Date: 3/8/14

THE TECHNION RESEARCH & DEVELOPMENT FOUNDATION LTD.

By: /s/ Benjamin Soffer
Name: Benjamin Soffer
Title: Technology Transfer Office, Manager
Date: 07.14.2014

Exhibit D-1

Submitted to Eloxx Pharmaceuticals LTD

Research Plan

Title

Development of Aminoglycose-Based Drug for Treatment of Human Genetic Diseases and Many Forms of Cancer Caused by Nonsense Mutations

I. Scientific and Technological Background

Nonsense mutations are in-frame premature termination codons (PTCs) that convert a sense codon of mRNA to UAA, UAG or UGA stop codon and lead to the production of truncated, nonfunctional proteins. PTCs are responsible for more than 1,800 inherited human diseases, including cystic fibrosis (CF), Duchenne muscular dystrophy (DMD), Usher syndrome (USH), Hurler syndrome (HS) and numerous types of cancer. For many of those diseases there is presently no effective treatment and the only treatment widely used is symptomatic.

One potential approach to treatment considers the use of small molecule drugs to selectively suppress the normal proofreading function at PTCs, but not at normal termination codons. This leads to a favorable competition of near-cognate aminoacyl-tRNAs with the release factor and to the insertion of a near-cognate amino acid at PTCs, allowing continued translation to full-length proteins. This approach, also called “translational readthrough” or “suppression therapy”, was first validated by using aminoglycoside (AG) antibiotics. Numerous *in vitro* and *in vivo* experiments including clinical trials have demonstrated the ability of selected structures of AGs (namely gentamicin, paromomycin and G418, Fig. 1) to induce readthrough at PTCs and partially restore functional proteins. However, severe side-effects of AGs, including high human toxicity, along with the reduced readthrough efficiency at subtoxic doses, have limited their clinical benefit for suppression therapy.

AGs selectively bind to the decoding A site on the 16S subunit of bacterial rRNA, and kill bacteria by disturbing the fidelity of the decoding process. Although prokaryotic selectivity is critical to their utility as antibiotics, they are not perfectly selective for the bacterial ribosome; they also bind to the eukaryotic A site resulting in PTC readthrough. Gentamicin and paromomycin are three orders of magnitude more selective to the prokaryotic *versus* the eukaryotic ribosome. For suppression therapy, this necessitates their use in high quantity, which in turn causes deleterious toxic side-effects, and hence, largely limits their utility.

A noteworthy exception is G418. In addition to its strong antibacterial activity, it also exhibits the highest readthrough activity among all AGs tested to date. G418 is however very cytotoxic to mammalian cells. It has not been clear whether its high cytotoxicity is due to higher specificity to the mammalian ribosome or to some other feature. Clearly, a systematic search for new structures with improved PTC suppression activity and lower toxicity, along with a deeper understanding on structure-activity-toxicity relationship, are required to extrapolate the approach to the point where it can actually help patients suffering from genetic diseases caused by nonsense mutations.

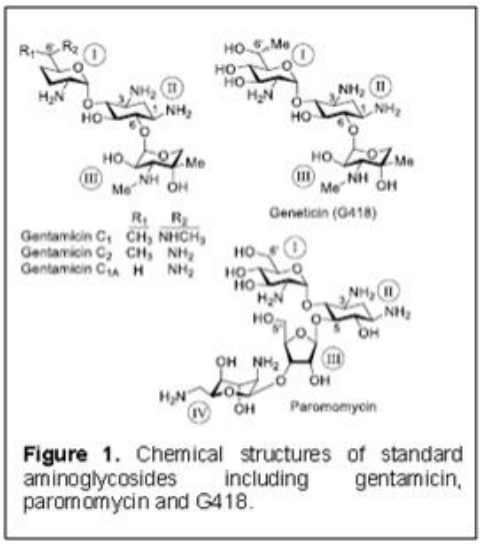


Figure 1. Chemical structures of standard aminoglycosides including gentamicin, paromomycin and G418.

Towards these ends, we hypothesized that by separating the structural elements of AGs that induce readthrough from those that affect toxicity we might obtain potent AG-derivatives with improved readthrough activity and reduced toxicity. By systematically fine-tuning the structure-activity-toxicity relationship, we recently reported a series of structures, **1**-**8** (Fig. 2), exhibiting significantly reduced toxicity and higher PTC suppression activity than either gentamicin or paromomycin. Protein translation inhibition studies along with antibacterial tests indicated that **1**-**8** have increased selectivity in their action towards eukaryotic cells than towards prokaryotic cells in comparison to gentamicin and paromomycin. However, none of those leads were able to outreach G418’s peak suppression potency, nor its elevated eukaryotic specificity.

The observed increased selectivity of action of **1**-**8** towards eukaryotic versus prokaryotic ribosome along with their reduced toxicity drew our attention and prompted us to ask several fundamental questions: what structural and mechanistic features are responsible for the observed selectivity increase and toxicity decrease of these synthetic derivatives? Can a general molecular principle for their structure-activity-toxicity relationship be devised? Using this principle, can a synthetic variant with similar or higher PTC suppression activity and lowered toxicity than those of G418 be generated?

To address these questions, very recently we reported (see reference in *J. Med. Chem.* 2012, in the publications list of the PI) on the design, synthesis and evaluation of a new set of structures, **9**-**12** (Fig. 2) that perform better than G418 by the above criteria while exhibiting lower toxicity. Furthermore, by using a series of comparative readthrough, protein translation inhibition, antibacterial and toxicity assays between standard and the entire set of designer aminoglycosides **1**-**12**, we demonstrated that the increased specificity towards human cytoplasmic ribosome correlates with the increased PTC suppression activity, and that the decreased specificity towards mitochondrial ribosome confers, at least in part, to the lowered cell toxicity. These observations provide proof of principle that antibacterial activity and toxicity of aminoglycosides can be dissected from their suppression activity. The data further indicated that AG-induced inhibition of cytoplasmic ribosome is a key determinant for PTC suppression activity, and that the inhibition of mitochondrial ribosome is key to AG-induced cell toxicity. These results are therefore beneficial for further research on the development of AG-based drug for the treatment of genetic diseases caused by nonsense mutations.

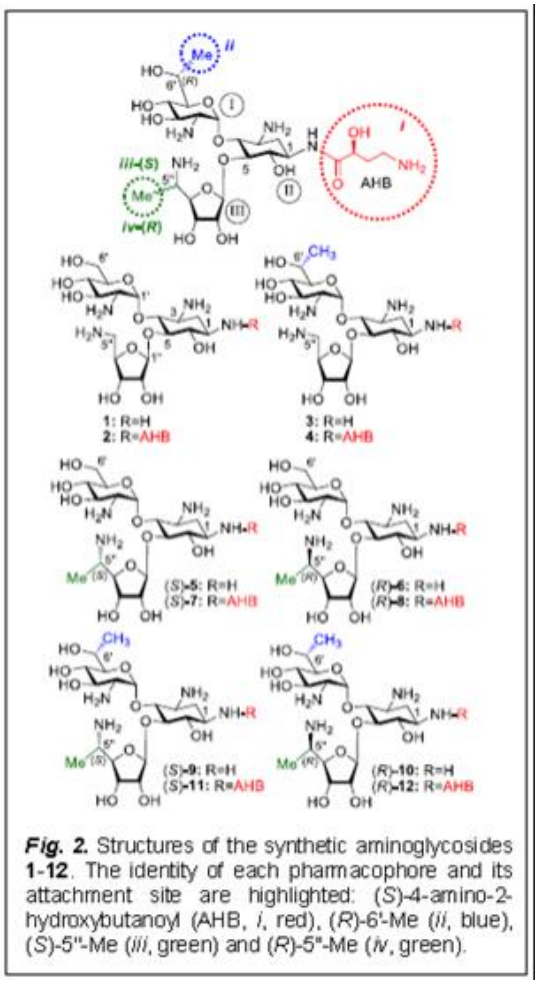


Fig. 2. Structures of the synthetic aminoglycosides **1**-**12**. The identity of each pharmacophore and its attachment site are highlighted: (*S*)-4-amino-2-hydroxybutanoyl (AHB, *i*, red), (*R*)-6'-Me (*ii*, blue), (*S*)-5''-Me (*iii*, green) and (*R*)-5''-Me (*iv*, green).

2. Market Survey

The National Institutes of Heanth (NIH) Office of Rare Diseases estimates that genetic disorders are responsible for the majority of rare diseases and that these diseases affect 25 million people in the US. Similar number of people is also affected in European Union, (EU, estimated 29 million). Orphan diseases are rare and often debilitating conditions, defined in the European Union (EU) as having a prevalence of no more than five per 10,000 people. There are between 5,000 to 8,000 different rare diseases. It is estimated that, on average, 5-15% of patients with any of at least 1,800 distinct genetic disorders have a nonsense mutation as an underlying cause of the disease. Orphan drugs are those medicines used in the diagnosis, prevention or treatment of orphan diseases.

Orphan drugs are a growing issue of importance to American and European healthcare policy makers. The success of orphan drug legislation has resulted in an increasing number of licensed medicines for rare diseases, and many more yet unlicensed products have received orphan drug designation. Several studies estimate a steady increase during 2010-2020 years in the cumulative number of diseases for which an orphan drug is approved (Fig. 3), averaging just over 5 new diseases per year over the next 10 years. The annual per patient cost of existing orphan drugs was seen to vary between €1,251 and €407,631, with the median cost

being €32,242 per year. The share of the total pharmaceutical market represented by orphan drugs is predicted to increase from 3.3% in 2010 to a peak of 4.6% in 2016 after which it is expected to level off through 2020, as growth falls into line with that in the wider pharmaceutical market.

Since to date CF is the most studied disease in this direction, we will focus on this disorder in regard to the market of the potential drugs. Currently, more than 1,000 different CF-causing mutations in the *CFTR* gene were identified, and 5-10% of the mutations are premature stop codons. In Ashkenazi Jews, the W1282X mutation and other nonsense mutations account for 64% of all CFTR mutant alleles. In the CF pipeline, there are promising new therapies designed to rectify the cause of CF—a faulty gene and/or its faulty protein product. Bellow is a "snapshot" of those potential CF therapies that are currently in development.

GENE THERAPHY: Because a faulty gene causes CF, adding normal copies of the gene to cells should correct these cells and ultimately cure the disease. *Copernicus Therapeutics, Inc.* developed an approach that delivers normal copies of the CF gene as tiny particles that slip into CF cells (the development is currently at Phase 2).

PROTEIN ASSIST/REPAIR: This therapy is designed to correct the function of the defective CFTR protein made by the CF gene to allow chloride and sodium to move properly in cells lining in the lungs and other organs. This therapy is not affected by the delivery challenges that have limited gene therapy and enzyme replacement therapy. In addition, it does not necessitate the delivery of foreign genetic material or viruses that gene therapy requires. It is anticipated that by addressing the underlying cause of the disease, small molecule drug might decrease dependence on palliative interventions and ameliorate the debilitation and mortality in patients with genetic disorders. In this category the following potential drugs are in pipeline:

a) PTC124 (PTC Therapeutics, Inc.) – The new drug candidate, PTC124, is designed to repair one type of CF gene mutation, namely nonsense mutation that causes the CFTR protein to stop being made in the cell before it is complete. PTC124 has been on 2012 in phase 3 trial in CF and in DMD patients. These preliminary results in patients with CF and DMD provide confirmation of proof-of-concept that the compound that was originally designed by this company to suppress premature stop mutations (PTC124) can indeed induce ribosomal readthrough of nonsense mutations as an approach to treat genetic disorders.

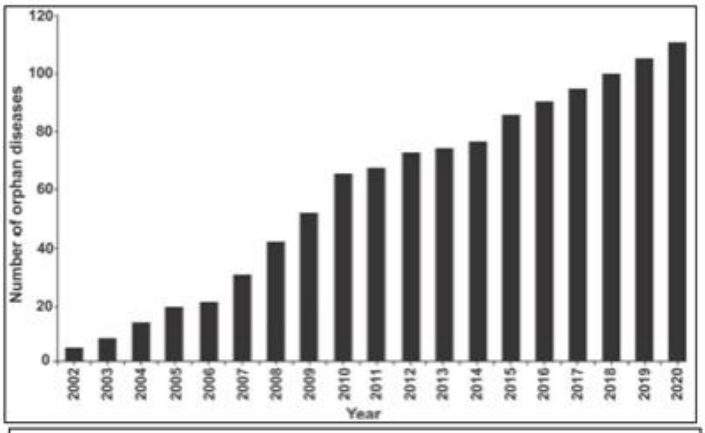


Fig. 3. Cumulative orphan diseases: observed (2002 - 2010) and forecast (2011 - 2020).
Schey *et al. Orphanet Journal of Rare Diseases* 2011 **6**:62
doi:10.1186/1750-1172-6-62

b) VX-770 (Vertex Pharmaceuticals, Inc.) – This new compound is called a "potentiator" and it may act upon the CFTR protein and help to open the chloride channel in CF cells. Phase 3 dosing has been completed in patients, and since November 2012 the compound is approved by FDA as a drug.

NBs *vs* PTC124: PTC124 also named as *Ataluren* (PTC Therapeutics, Inc. USA) is the most advanced drug candidate investigated today for the treatment of genetic defects resulting from nonsense mutations (Phase 3 in CF and DMD). However, yet several problems are faced with the use of Ataluren for the suppression therapy: (1) no real phenotype improvements have been seen after the clinical trials in patients of both diseases; (2) the mechanism of its action is still not conclusive; (3) its action as a readthrough inducer is somewhat controversial since several labs reported its lack of action in different diseases models while others reported opposite data.

In contrast, our developed structures **1-12** (Fig 2) belong to the same class of aminoglycosides as gentamicin, but have no antibacterial activity, exhibit significantly higher readthrough activity and lower toxicity than gentamicin and they consistently demonstrated higher efficiency than that of gentamicin in a series

of diseases models both in vitro and *in vivo* tests: compound 2 in cellular and animal models of CF (*ref. no. 7 in LP*), and cellular models of Rett syndrome (*refs. 5, 8*); compounds 1 and 2 in cellular and *in vivo* models of USH1 (*refs. 4, 11*); compound 4 in cellular and animal models of HS (*ref. 10*). *These observations, together with the relatively low toxicity and high degree of potency of the new generation structures* ***9-12*** *in targeting all six different nonsense constructs underlying USH1, CF, DMD and HS, support the feasibility of testing these novel AGs in treating these diseases in animal and human subjects.*

3. Comprehensive Description of the Proposed Research

The data presented in the previous sections suggest that the newly developed structures **1-12** (Fig. 2) also named NB-compounds (NBs) are worth for further tests and development as drugs for treatment of cystic fibrosis and other genetic diseases caused by nonsense mutations.

The main objectives of this research proposal are:

(1) to synthesize a large quantities of the selected NB-compounds, namely compound **3** (NB74), compound **4** (NB84) and compound **9** (NB124), and supply them to Eloxx company for the initial Eloxx evaluation to validate our published data on this particular compounds;

(2) to further development NB-compounds for improved cellular uptake, increased bioavailability and acute delivery.

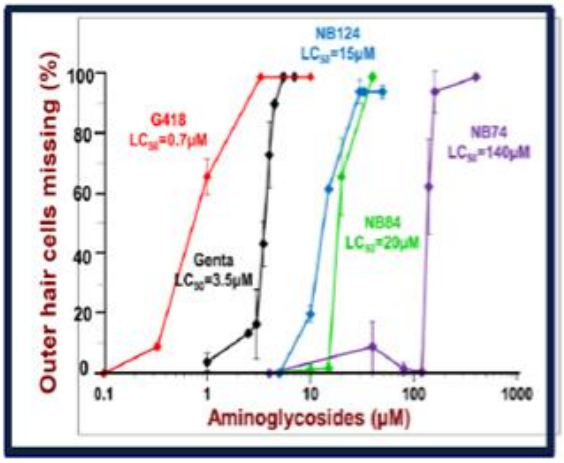


Fig. 5. Comparative ototoxicity tests of G418, gentamicin, **3** (NB74), **4** (NB84) and **9** (NB124) in cochlear explants of mouse Corti after 72 hr incubation. For each of the drugs, we established dose-response curves of hair cell loss over drug concentrations spanning several orders of magnitude, with multiple repetitions at critical points around dosages that produced 50% destruction of hair cells. A preparation of the organ of Corti and spiral ganglion neurons was obtained by dissection of the cochlea from postnatal day 3 mice. *T;Baasov and J.Schacht – unpublished data.*

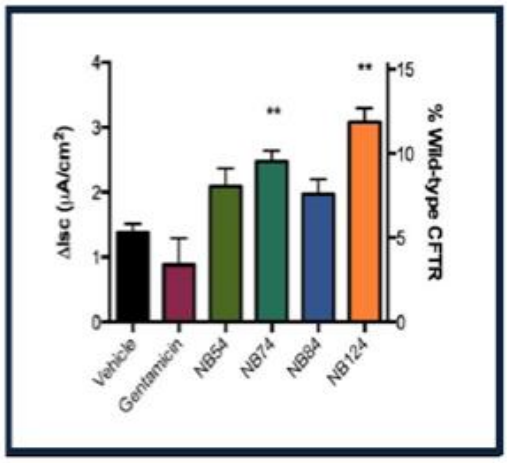


Fig. 4. Comparative stimulated short-circuit currents (Isc) in CF primary human airway cells. Fully differentiated primary airway cells derived from a CF (G542X/F508Del) donor were grown at air–liquid interface until terminally differentiated (e.g., 90% ciliated), and then treated with gentamicin, NB54 (comp. **2**), NB74, NB84, NB124 or vehicle (500 μg/ml) for 48 h, then mounted in modified Ussing chambers under voltage clamp conditions. *T.Baasov and D.Bedwell – unpublished data.*

Why we selected especially NB74, NB84 and NB124 for drug development? First, previous studies have shown that the efficiency of aminoglycosides-induced readthrough is highly dependent on: (i) the identity of stop codon (UGA > UAG > UAA), (ii) the identity of the first nucleotide immediately downstream from the stop codon (C > U > A ³ G) and (iii) the local sequence context around the stop codon. Second, while in general the efficiency rank follows NB124 > NB84 > NB74, it is not exactly true for all the mutations and the efficacy might be varied significantly between different mutations for different compounds. For example, our data on CF model shown in Fig. 4 (T. Baasov, S. Rowe and D. Bedwell, unpublished data) clearly demonstrates that NB74 is more efficient than NB84 to rescue the functional CFTR protein in primary bronchial epithelial cells of a CF donor. Even though NB124 demonstrated highest activity, it is still somewhat more toxic than NB84 and NB74 (Fig. 5), as demonstrated by comparative testing of the potential ototoxoicity of these compounds on the mice cochlear explants (T. Baasov and Jochen Schacht, unpublished data). It is clear that for the patients with genetic

diseases requiring a life-long treatment with these compounds, the potential toxicity of these compounds is the most critical factor that limits their further development as potential drug. Therefore, even though in general NB74 is less active than NB84 and NB124, because its low toxicity is definitely worth for further consideration for drug development.

Note that, because its low in vitro activity, NB74 has not pursued for long-term in vivo animal studies. NB84 and NB124 have been evaluated in vivo in various diseases models and have shown to be significantly better than gentamicin.

The proposed working plan includes:

Aim #1: According to our agreement my group will provide Eloxx the important lead compounds NB74, NB84 and NB124, each compound in the quantities of up to 200 mg, chromatographically pure materials in the estimated time frame outlined below. The stocks will undergo the desired biological tests including, readthrough activity assay in dual luciferase reporter (standard USH-R3X mutation) transfected in HEK cells and cytotixicity tests (HEK cells) to validate the published data on these compounds on these specific assays. Plasmids for readthrough activity assay and detailed synthesis and various biological assay protocols will be supplied as well.

Aim #2: My group will continue further development of the lead compounds (NB74, NB84 and NB124) to establish the formulation for increased bioavailability and acute delivery (instead of systemic delivery, e.g. intravenous and/or subcutaneous injection as they have been tested until to date). Shortly, because aminoglycosides (AGs), like gentamicin and our leads NB82, NB74 and NB84 are highly charged, water soluble compounds, they poorly absorb through intestinal tissues and therefore are usually administered by injection. In addition, AGs are short-lived molecules in the circulatory system, being rapidly eliminated by glomerular filtration in the kidney. They also exhibit poor permeability into eukaryotic cells, which requires their administration in higher dosages that in turn causes harmful side effects and limits their use in translational therapy. To solve these problems, we have initiated two different but complementary directions.

Aim #2a: *Chemical modification of NBs for increased lipophilicity and better cellular uptake*. To address this issue, we already initiated a project in which we examined attachment of various alkyl/aryl groups on the pseudo-disaccharide scaffold of lead structures (e.g. NB74 and NB124) at the N1 position and generated four new scaffolds, compounds **13-16** (Fig. 6, T. Baasov, unpublished data):

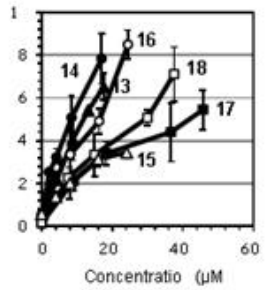
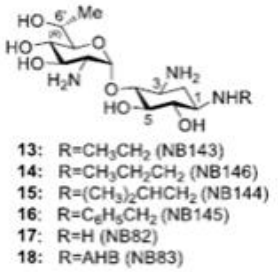


Fig. 6. *In vitro* stop codon suppression levels in a TGA C nonsense mutation (p2luc vector) induced by compounds **17** (■), **18** (□), **13** (▲), **14** (●), **15**(Δ), and **16** (○). Readthrough activity was measured as previously described by us. The results are the average of at least three independent experiments.



13: R=CH_3CH_2 (NB143)
14: R=$CH_3CH_2CH_2$ (NB146)
15: R=$(CH_3)_2CHCH_2$ (NB144)
16: R=$C_6H_5CH_2$ (NB145)
17: R=H (NB82)
18: R=AHB (NB83)

Interestingly, the readthrough activity of the previous pseudo-disaccharide scaffolds, compounds **17** (NB82) and **18** (NB83) that provide the basic disaccharide parts of NB74, NB124 (the compound **17**) and of NB84 (the compound **18**) have been significantly improved. Especially noteworthy are the compounds **14** and **16**, exhibiting the propyl and benzyl group substitutions at N-1 position, which exhibited highest activity. Compounds **14** and **16** were further tested for their comparative activity against **17** and **18** in various diseases relevant reporter systems (6 reporters that underline the diseases CF, DMD, USH and Hurler syndrome), along with their inhibition of protein synthesis and toxicity (data not shown) and found that these two scaffolds are indeed more active and less toxic than the previously reported

compounds **17** (NB82) and **18** (NB83). Based on these excellent preliminary data, we aim to use these two newly developed scaffolds, compounds **14** (NB146) and **16** (NB145) to construct new generation of pseudo-trisaccharides similar to our previous leads. These will be done by attachment of riboseamine and 5"-methyl ribosamine at C5 position of the scaffolds to generate four new structures, compounds **19**-**22** (Fig. 7). The synthesis of the new structures will be performed by using a general tools and methodologies as described in our previous reports. Once the new structures will be available they will be subjected to a series of readthrough, translation inhibition and toxicity tests as these methodologies are already well established in our laboratory.

Aim #2b: *Development of new formulation of the lead structures NB74, NB84 and NB124 for increased bioavailability and acute delivery*. To address this issue we have initiated a project in which we examined the formulation in which AGs are microencapsulated into nano-cochleates through charge-charge interaction between the AGs and lipid (phosphatidilserine-PS). We also developed an efficient ELISA assay method to detect the encapsulated AG drug in cochleates and/or in biological fluids (serum, urine, tissue, etc.). The preliminary data on comparative readthrough activity of the clinical drugs gentamicin and G418 are attached below as Appendix 1. As can be seen from these data, gentamicin-cochleate preparation is far better in terms of readthrough activity than the corresponding gentamicn drug in solution. Further steps include: a) to compare and contrast NB74, NB84 and NB124 in drug-cochleate versus solution in terms of readthrough efficiency in dual luciferase assay protocol; b) the best formulations from the previous step will be further evaluated for toxicity and rescue of functional CFTR protein (in collaboration with the University of Alabama at Birmingham) in cell lines and in CF-mouse models. c) To determine the structure/size of the resulted drug-cochleate complexes by various spectroscopic methods including cryo-electron-microscopy and freazfraction-microscopy techniques. d) Continueous structure-activity relationship study to develop appropriate size nano-cochleates with maximum activity and lowered toxicity suitable for acute administration to treat genetic diseases (this part of the project will be done in collaboration with Prof. Dganit Danino of the Biotechnology and Food Engineering Department of Technion).

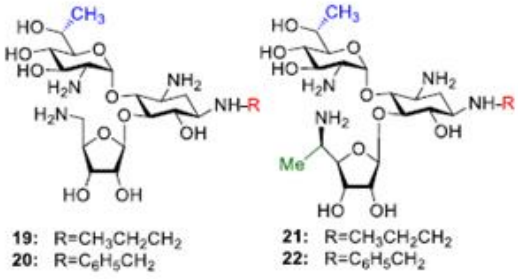


Fig. 7. *Proposed new structures to be syntehsized and tested as new generation NBs.*

Note that the labs of Profs. Bedwell and Schacht are already tightly collaborating with my lab and we have series of joint publications on this subject (Bedwell: *refs 7, 10* and Schacht: *J.Med.Chem. 2009, **52**, 2836- 2845*).

4. Proposed Budget (in US Dollars) and Time Frame

	Compounds	Time Frame	Budget Requested	Remarks	Notes
Aim # 1					PI T. Baasov
	~200 mg NB74	2 weks-1 month	$ 8,000	Rapid initial supply	
	~200 mg NB84	2-3 months	$ 10,000	Rapid initial supply	
	~200 mg NB124	2-3 months	$ 12,000	Rapid initial supply	
		Total Aim #1:	**$ 30,000**		
Aim # 2a					
	Synthesis of **19**-**22** and their evaluations	8-12 months	$ 40,000		
Aim # 2b					
	Preliminary studies for standard drug-cochleates SAR	4-6 months	$ 10,000	The cost of PS and the synthesis of NBs are included	
	NB84-cochleates SAR	4-6 months	$ 15,000		
		Total Aim #2:	**$ 65,000**		
		Grand total for the Aims # 1&2:	**$ 95,000**		

5. Detailed Budget (in US Dollars)

Personnel:

	Role in project	%	Time	Salary
1.	Lab. Assistant	Lab. Assistant	**50**	**12,000**
2.	Postdoctorant	Researcher	**50**	**12,000**
	Total:			**24,000**

Supplies:

1. Chemicals, absolute & deuterated solvents	28,000
2. Lab. equipment, glassware, plastic ware	12,000
3. Biochemicals	2,000
4. *In vitro* and *ex vivo* assay kits	10,000
5. Chromatography material for various purifications	13,000
6. NMR and Mass Spectrometry tests	6,000
Total:	71,000
Grand Total:	**$ 95,000**

Budget Justification:

The requests for laboratory assistant and postdoctorant for the duration of the grant period are in recognition of the amount of work required in this project. Considerable effort will be expended in the syntheses of various lead compounds discussed in the proposal, their structure determination and analysis, assays for their activity. The request for materials, supplies, and chemicals/biochemicals is an important part for a successful development and completion of the project.

6. Investigators' Curriculum Vitae

Surname: Baasov First name: Timor
Birthdate: January 3, 1954

(a) Education Background

From-To	Institution	Area of specialization	Degree
1981-1986	Weizmann Institute of Science	Chemistry	Ph. D.
1977-1979	Tel-Aviv University	Chemistry	M. Sc.
1975-1977	Tel-Aviv University	Chemistry	B. Sc.

Major research interest: Carbohydrate chemistry, Bioorganic and medicinal chemistry, Drug design and development, Rational design of substrate and inhibitors, Mechanistic enzymology.

(b) Employment

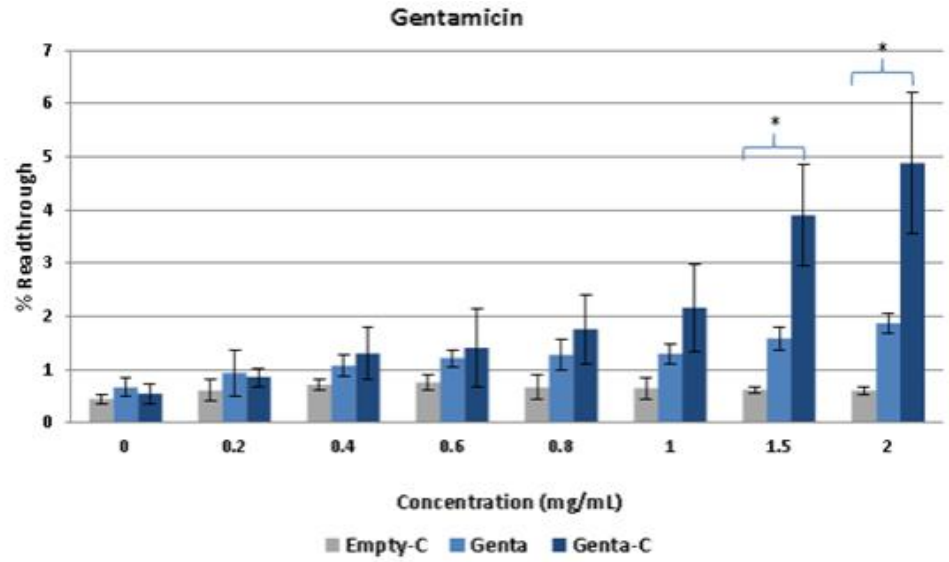
From-To	Institution	Research area	Title
2004-	Technion	Bioorganic Chemistry	Professor
3/1998-8/1998	The Scripps Research Institute, Cal	Bioorganic Chemistry	Visiting Prof.
1998-2003	Technion	Bioorganic Chemistry	Assoc. Prof.
1990-1998	Technion	Bioorganic Chemistry	Senior Lecturer
1988-1990	Technion	Bioorganic Chemistry	Lecturer
1986-1988	Harvard University	Bioorganic Chemistry	Post-Doct. Res.

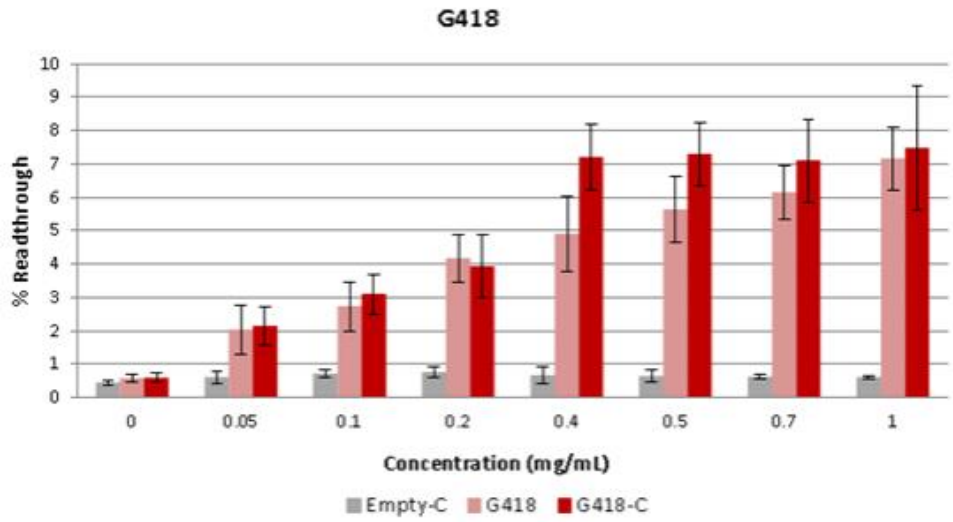
7. List of Publications (2010-2112)

1. I. Nudelman, D. Glikin, B. Smolkin, M. Hainrichson, V. Belakhov and **T. Baasov**. Repairing faulty genes by amino glycosides: Development of new derivatives of geneticin (G418) with enhanced suppression of diseases-causing nonsense mutations. *Bioorg. Med. Chem.* **18**, 3735-3746, (2010).
2. V. Pokrovskaya, I. Nudelman, J. Kandasamy and **T. Baasov**. Aminoglycosides: Redesign Strategies for Improved Antibiotics and Compounds for Treatment of Human Genetic Diseases. *Methods in Enzymology.* **478** (Glycomics), 437-462, (2010).
3. V. Pokrovskaya and **T. Baasov**. Dual-acting hybrid antibiotics: a promising strategy to combat bacterial resistance. *Expert Opinion in Drug Discovery*. **5**(9), 883-903, (2010).
4. T. Goldman, A. Rebibo-Sabbah, N. Overlack, I. Nudelman, V. Belakhov, **T. Baasov**, T. Ben-Yosef, U. Wolfrum and K. Nagel-Wolfrum. Designed aminoglycoside NB30 induces beneficial read-through of a USH1C nonsense mutation in the retina. *Investigative Ophthalmology & Visual Science*, **51**(12), 6671-6680, (2010).
5. C. Brendel, V. Belakhov, H. Werner, E. Wegener, J. Gaertner, I. Nudelman, **T. Baasov**, P. Huppke. Readthrough of Nonsense Mutations in Rett Syndrome: Evaluation of novel aminoglycosides and generation of a new mouse model. *Journal Molecular Medicine*, **89**, 389-398, (2011).
6. J. Kandasamy, D. Atia-Glikin, V. Belakhov, **T. Baasov**. Repairing faulty genes by aminoglycosides: Identification of new pharmacophore with enhanced suppression of diseases-causing nonsense mutations. *Medicinal Chemistry Communications*, **2**, 165-171 (2011).
7. S.M. Rowe, L.P. Tang, P. Sloane, K. Backer, M. Mazur, J. Buck;ey-Lauriel, I. Nudelman, V. Belakhov, Z. Belok, E. Schwiebert, **T. Baasov**, D.M. Bedwell. Suppression of CFTR Premature Termination Codons and Rescue of CFTR Protein and Function by the Synthetic Aminoglycoside NB54. *Journal Molecular Medicine (Berl)*, **89**, 1149-1154 (2011).
8. M. Vecsler, B. Ben Zeev, I. Nudelman, Y. Anikster, A. J. Simon, N. Amariglio, G. Rechavi, **T. Baasov**, E. Gak. Ex Vivo Treatment with a Novel Synthetic Aminoglycoside NB54 in Primary Fibroblasts from Rett Syndrome Patients Suppresses MECP2 Nonsense Mutations. *PLoS ONE*, **6** (6), **e20733** (2011).
9. H-L. R. Lee, C-C. Chen, **T. Baasov**, Y. Ron, J. P. Dougherty. Post-transcriptionally Regulated Expression System in Human Xenogeneic Transplantation Models. *Molecular Therapy*, **19**(9), 1645-1655 (2011).
10. D. Wang , V. Belakhov, J. Kandasamy, **T. Baasov**, S-C. Li, Y-T Li, D.M. Bedwell, K.M. Keeling. The designer aminoglycoside NB84 significantly reduces glycosaminoglycan accumulation associated with MPS I-H in the Idua-W392X mouse. *Molecular Genetics and Metabolism* **105**, 116-125 (2012).
11. T. Goldmann, N. Overlack, F. Möller, V. Belakhov, M. van Wyk, **T. Baasov**, U. Wolfrum, and K. Nagel-Wolfrum. A comparative evaluation of NB30, NB54 and PTC124 in translational read-through efficacy for treatment of an USH1C nonsense mutation. *EMBO Molecular Medicine*, **4**, 1-14, (2012).
12. J. Kandasamy, D. Atia-Glikin, E. Shulman, K. Shapira, M. Shavit, V. Belakhov **T. Baasov**. Increased Selectivity toward Cytoplasmic versus Mitochondrial Ribosome Confers Improved Efficiency of Synthetic Aminoglycosides in Fixing Damaged Genes: A Strategy for Treatment of Genetic Diseases Caused by Nonsense Mutations. *J. Med. Chem*. **55**(23), 10630-10643 (2012).
13. M. Schalev, J. Kandasamy, N. Skalka, V. Belakhov, R. Rosin-Arbesfeld, **T. Baasov**. Development of generic immunoassay for the detection of a series of aminoglycosides with 6'-OH group for the treatment of genetic diseases in biological samples. *Journal of pharmaceutical and biomedical analysis*. **75**, 33-40 (2013).
14. K.M. Keeling, D. Wang, Y. Dai, S. Murugesan, B. Chenna, J. Clark; V. Belakhov, J. Kandasamy, S.E. Velu, **T. Baasov**, D.M. Bedwell. Attenuation of Nonsense-Mediated mRNA Decay Enhances In Vivo Nonsense Suppression. *PLoS ONE* **8** (4), e60478 (2013).
15. M. Schalev, J. Kondo, D. Kopelyanskiy, C.L. Jaffe, N. Adir, **T. Baasov**. Identification of the molecular attributes required for Aminoglycoside activity against Leishmania. *PNAS* **110** (33), 13333-13338 (2013).
16. X. Xue, V. Mutyam, L.P. Tang, S. Biswas, M. Du, L. A. Jackson, Y. Dai, V. Belakhov, M. Shalev, F. Chen, J. Schacht, R. Bridges, **T. Baasov**, J. Hong, D. M. Bedwell, S.M. Rowe. Synthetic Aminoglycosides Efficiently Suppress CFTR Nonsense Mutations and Are Enhanced by Ivacaftor. *Submitted* (2013).
17.

Appendix I

Comparative ex-vivo read through activity of aminoglycosides between the solution and encapsulated within phosphatydylserine multilamelar structures (cochleates)





Empty-C: Phosphatidyserine (PS) based cochleates has been prepared in the absence of an aminoglycosidic agent ($CaCl_2$ was used to replace the cation required for cochleation procedure). **Genta/G418**: in solution. **Genta-C/G-418-C**: Gentamicin or G418 were encapsulated within PS based cochleates.

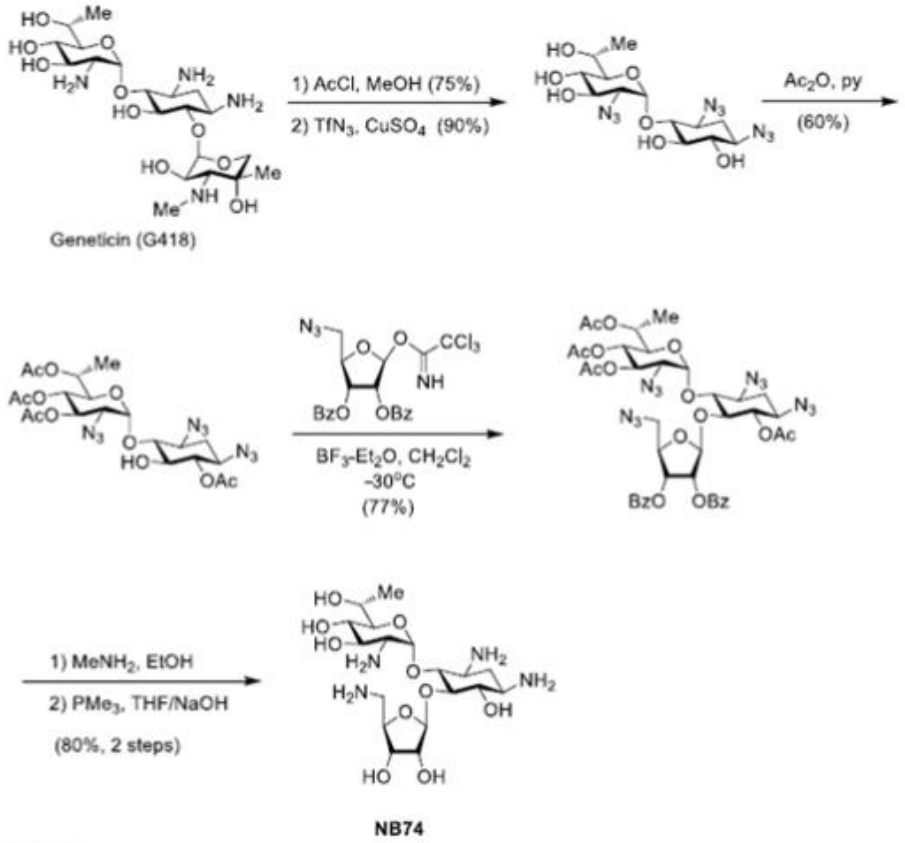
Ex-vivo suppression of the **R3X** (USH1) mutation. The constructs of p2luc plasmid harboring the R3X mutation were transfected to **HEK-293** cells and addition of the tested compounds was performed 6 h post transfection. Luciferase activity was determined using the Dual Luciferase Reporter Assay System (Promega™).

Each bar represents the mean ± S.E.M. of 3 independent experiments (2 duplicated each). Bars that are marked in an asterix (*) sign differ significantly at $p < 0.05$ according to a paired t test analysis.

Appendix II

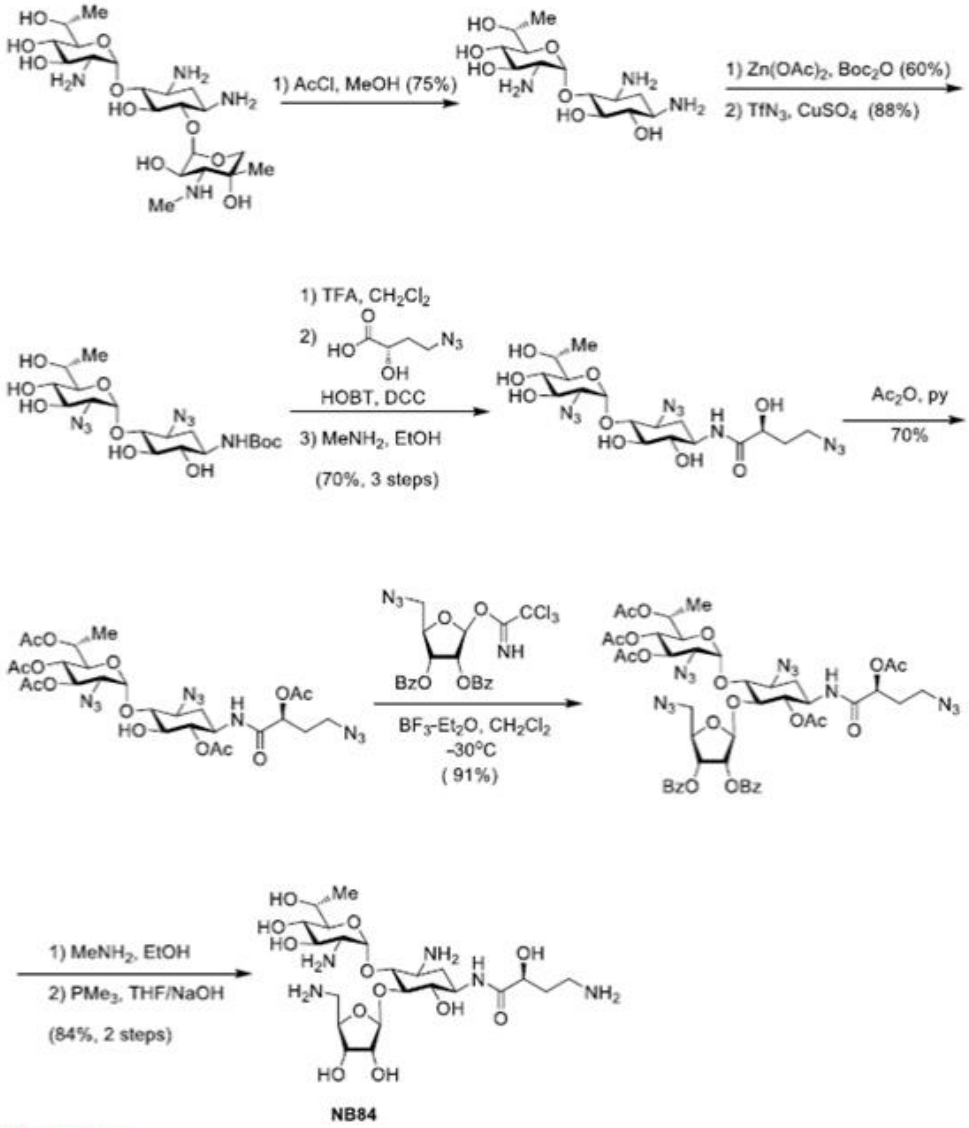
Synthetic schemes for the assembly of the developed leads NB74 and NB84 along with of the required donor structure

Synthesis of NB74



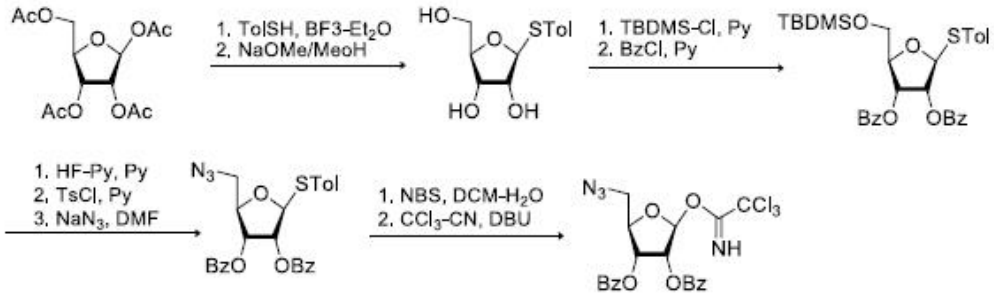
Overall yield: 23.2%

Synthesis of NB84



Overall yield: 14.8%

Preparation of Trichloroacet-imidate DONOR (for both NB74 and NB84)



Note: All the synthetic procedures and analytical data for the above syntheses of NB74, NB84 and NB124 are published in the Bioorganic and Medicinal Chemistry Paper (2010) and JMC (2012).

Exhibit 10.6

SECOND ADDENDUM

TO THE RESEARCH AND LICENSE AGREEMENT

This Second Addendum to Research and License Agreement (the "Second Addendum") is made by and between The Technion Research & Development Foundation Ltd. ("TRDF") and Eloxx Pharmaceuticals Ltd. ("Licensee" or "Eloxx").

WHEREAS, TRDF and Eloxx are parties to Research and License Agreement with an effective date of August 29th, 2013 (the "License Agreement"), as amended on November 26, 2013, January 14, 2014, June 9, 2014 and August 3, 2014 (collectively, the "Agreement"); and

WHEREAS, the parties desire to continue the relationship contemplated by the Agreement and to further amend the Agreement as set forth herein;

Now, THEREFORE, the parties hereby agree as follows:

1. Unless otherwise defined herein, capitalized terms used in this Second Addendum shall have the meanings assigned thereto in the Agreement.
2. The Parties agree to add those certain patents and patent applications described in Exhibit A(3) attached hereto, to Exhibits A(1) and A(2) of the Agreement.
3. Except as added herein, all other terms and conditions of the Agreement shall remain in full force and effect, as relevant to this Second Addendum.
4. This Second Addendum may be executed in counterparts, each of which shall be deemed an original and all of which together shall constitute one and the same instrument. Any signature page delivered by facsimile or electronic image transmission shall be binding to the same extent as an original signature page.

IN WITNESS WHEREOF, the parties hereby accept and agree to the terms and conditions of this First Addendum.

ELOXX PHARMACEUTICALS LTD.

By: /s/ Shmuel Tuvia
Name: Shmuel Tuvia
Title: COO
Date: Jan. 21, 2015

THE TECHNION RESEARCH & DEVELOPMENT FOUNDATION LTD.

By: /s/ Benjamin Soffer
Name: Benjamin Soffer
Title: Technology Transfer Office, Manager
Date:

Exhibit A(3)

USE OF AMINOGLYCOSIDE ANALOGS IN THE TREATMENT OF RETT SYNDROME

Our Ref Client Ref	Country	Earliest Priority	Entry Date	Filing Date Application No.	Issue Date Patent No.	Status	Assignee
59529 ?	USA PRO			05-Jun-2014 62/006,028		Filed	Technion Research & Development Foundation Limited ; Eloxx Pharmaceuticals Ltd.

PatentNum	PatentName	PatentStatus Desc	ApplicationDate	ApplicationNum	CountryDesc	Patent Date	PatentNo	PublicationDate	PublicationNum
0816	NOVEL AMINOGLYCOSIDES AND USES THEREOF IN THE TREATMENT OF GENETIC DISORDERS	NP from PCT			N/A				
0816-00	REDESIGN OF AMINOGLYCOSIDES FOR TREATMENT OF HUMAN GENETIC DISEASES CAUSED BY PREMATURE STOP MUTATIONS	Expired	03/04/2006	60/788,070	United States				
0816-01	NOVEL AMINOGLYCOSIDES AND USES THEREOF IN THE TREATMENT OF GENETIC DISORDERS	Expired	10/04/2007	PCT/IL/2007/000463	PCT			11/10/2007	WO 2007/113841
0819-02	NOVEL AMINOGLYCOSIDES AND USES THEREOF IN THE TREATMENT OF GENETIC DISORDERS	Filed	25/09/2008	194370	Israel				
0816-03	NOVEL AMINOGLYCOSIDES AND USES THEREOF IN THE TREATMENT OF GENETIC DISORDERS	Filed	25/09/2008	2,646,407	Canada				
0816-04	NOVEL AMINOGLYCOSIDES AND USES THEREOF IN THE TREATMENT OF GENETIC DISORDERS	Filed	10/04/2007	07736203.6	Europe				
0816-05	NOVEL AMINOGLYCOSIDES AND USES THEREOF IN THE TREATMENT OF GENETIC DISORDERS	Filed	03/10/2008	2009-503741	Japan			10/09/2009	2009-532461
0816-06	NOVEL AMINOGLYCOSIDES AND USES THEREOF IN THE TREATMENT OF GENETIC DISORDERS	Filed	01/10/2008	12/285,299	United Slates				
0816-07	NOVEL AMINOGLYCOSIDES AND USES THEREOF IN THE TREATMENT OF GENETIC DISORDERS	Filed	31/10/2008	09136/DELNP/2006	India				
0816-08	NOVEL AMINOGLYCOSIDES AND USES THEREOF IN THE TREATMENT OF GENETIC DISORDERS	Filed	10/04/2007	11173958.7	Europe			30/11/2011	2390255

PatentNum	PatentName	PatentStatusDesc	Application Date	ApplicationNum	CountryDesc	PatentDate	PatentNo	PublicationDate	PublicationNum
1302	REPAIRING FAULTY GENES BY AMINOGLYCOSIDES: IDENTIFICATION OF NEW PHARMACOPHORE WITH ENHANCED SUPPRESSION OF DI	NP from PCT			N/A				
1302-00	REPAIRING FAULTY GENES BY AMINOGLYCOSIDES: IDENTIFICATION OF NEW PHARMACOPHORE WITH ENHANCED SUPPRESSION OF DI	Expired	18/11/2010	61/414,956	United States				
1302-01	AMINOGLYCOSIDES AND USES THEREOF IN TREATING GENETIC DISORDERS	Expired	17/11/2011	PCT/IL/2011/000889	PCT			24/05/2012	WO2012/066546
1302-02	AMINOGLYCOSIDES AND USES THEREOF IN TREATING GENETIC DISORDERS	Filed	16/05/2013	13/885,715	United States				
1302-03	AMINOGLYCOSIDES AND USES THEREOF IN TREATING GENETIC DISORDERS	Filed	17/11/2011	11799501.9	Europe				
1302-04	AMINOGLYCOSIDES AND USES THEREOF IN TREATING GENETIC DISORDERS	Filed	20/05/2013		Japan				
1302-05	AMINOGLYCOSIDES AND USES THEREOF IN TREATING GENETIC DISORDERS	Filed	02/05/2013	2,816,789	Canada				
1302-06	AMINOGLYCOSIDES AND USES THEREOF IN TREATING GENETIC DISORDERS	Filed	07/05/2013	876/MUMNP/2013	India				
1302-07	AMINOGLYCOSIDES AND USES THEREOF IN TREATING GENETIC DISORDERS	Filed	16/05/2013	226390	Israel				

THIRD ADDENDUM

TO THE RESEARCH AND LICENSE AGREEMENT

This Third Addendum to Research and License Agreement (the "***Third Addendum***") is made by and between The Technion Research & Development Foundation Ltd. ("***TRDF***") and Eloxx Pharmaceuticals Ltd. ("***Licensee***" or "***Eloxx***").

WHEREAS, TRDF and Eloxx are parties to Research and License Agreement with an effective date of August 29, 2013, as amended on November 26, 2013, January 14, 2014, June 9, 2014, August 3, 2014 and January 21, 2015 (collectively, the "***Agreement***"); and

WHEREAS, the parties desire to continue the relationship contemplated by the Agreement and therefore to further amend the Agreement as set forth herein:

NOW, THEREFORE, the parties hereby agree as follows:

1. Unless otherwise defined herein, capitalized terms used in this Third Addendum shall have the meanings assigned thereto in the Agreement.
2. Licensee wishes to receive materials from the Principal Investigator under this Third Addendum, all as described in **Exhibit A** attached hereto which shall be added to the Agreement (the "***Materials***").
3. TRDF has already provided Licensee the Materials, on December 2014.
4. In consideration of the Materials provision, TRDF is entitled to a total amount of ten thousand US dollars ($10,000) (the "***Payment***"), VAT, as applicable on time of payment, shall be added to the Payment.
5. Licensee shall pay TRDF the Payment, immediately upon signing this Third Addendum and receipt of proper invoice from TRDF.
6. Except as added herein, all other terms and conditions of the Agreement shall remain in full force and effect, as relevant to the Third Addendum.
7. This Third Addendum may be executed in counterparts, each of which shall be deemed an original and all of which together shall constitute one and the same instrument. Any signature page delivered by facsimile or electronic image transmission shall be binding to the same extent as an original signature page.

IN WITNESS WHEREOF, the parties hereby accept and agree to the terms and conditions of this Third Addendum.

ELOXX PHARMACEUTICALS LTD.

By: /s/ Silvia Norman
Name: Silvia Norman
Title: CEO
Date: 27/01/15

THE TECHNION RESEARCH & DEVELOPMENT FOUNDATION LTD.

By: /s/ Rita Bruckstein
Name: Rita Bruckstein
Name: Research Authority
Date: 9/2/2015

Exhibit A

Supply of the compounds: NB84, NB122, NB124 and NB127, each in the amount of 100 mg

Exhibit 10.8

Execution Copy

FOURTH ADDENDUM

TO THE RESEARCH AND LICENSE AGREEMENT

This Fourth Addendum to Research and license Agreement (the "**Fourth Addendum**") is made by and between the Technion Research and Development Foundation Ltd. ("**TRDF**") and Eloxx Pharmaceuticals Ltd. ("**Licensee**" or "**Eloxx**").

Whereas, TRDF and Eloxx are parties to a Research and License Agreement with an effective date of August 29th 2013 (the "**License Agreement**"), as amended on November 26th, 2013 ("**First Amendment**"), January 14th, 2014 ("**Second Amendment**"), June 9th, 2014 ("**Third Amendment**"), August 3rd 2014 ("**First Addendum**"), January 21st, 2015 ("**Second Addendum**") and February 9th 2015 ("**Third Addendum**") (collectively, the "**Agreement**"); and

Whereas, according to Section 1.26 to the License Agreement, the first Research Period has ended on September 30th, 2014 ("**First Research Period**") and the First Research Plan was completed respectively ("**First Research Plan**");and

Whereas, the parties desire to extend and continue the Research Period and the Research for a second year; and

Whereas, the parties desire to continue the relationship contemplated by the Agreement and therefore to further amend the Agreement as set forth herein;

NOW, THEREFORE, the parties hereby agree as follows:

1. Unless otherwise defined herein, capitalized terms used in this Fourth Addendum shall have the meaning assigned thereto in the Agreement.
2. The parties wish to extend the Research Period for a second year, commencing upon the expiration of the First Research Period, on October 1st, 2014 for twelve (12) months until September 30th, 2015 ("**Second Research Period**"). The extension shall be on the same terms and conditions as contained in the Agreement unless otherwise agreed in this Fourth Addendum.
3. Exhibit D to the Agreement is hereby replaced with a new Exhibit D attached hereto ("**Second Research Plan**").
4. The parties wish to set the terms tor the funding for the performance of the Second Research Plan during the Second Research Period, and replace section 2.2.1 of the License Agreement, as follows:
    a) Licensee shall fund the Research to be performed during the Second Research Period under the Second Research Plan in the total amount of fifty thousand US Dollars ($50,000) in accordance with the following schedule:
        1) First installment of twenty five thousand US Dollars ($25,000) shall be paid upon signing this Fourth Addendum.
        2) Second installment of twenty five thousand US Dollars ($25,000) shall be paid upon completion of the Second Research Plan and no later than October 1st 2015.

b) V.A.T as applicable on time of payment shall be added to each installment.

c) TRDF shall issue a proper invoice for each installment.

5. Except as amended herein, all other terms and conditions of the Agreement shall remain in full force and effect.

ELOXX PHARMACEUTICALS LTD. DEVELOPMENT

By: /s/ Silvia Norman
Name: Silvia Norman
Title: CEO
Date: 24/4/15

THE TECHNION RESEARCH & FOUNDATION LTD.

By: /s/ Mano Medalsi
Name: Mano Medalsi, CPA
Title:
Date: 29/4/15

Exhibit D

Submitted to Eloxx Pharmaceuticals LTD

Research Plan

(Continuation for the second year 1.10.2014-30.092015)

Title

Development of Aminoglycose-Based Drug for Treatment of Human Genetic Diseases and Many Forms of Cancer Caused by Nonsense Mutations

I. Brief Summary of the First Year's Research

The two specific aims were: To provide Eloxx with all the important lead compounds developed by us in appropriate quantities (as agreed and signed) for the validation of our previously published data, along with the detailed protocols of the synthesis and biological evaluations performed in our labs (**Aim #1**)*; Further modifications of the developed leads and/or development of new lead structures for improved efficacy as potential drugs* (**Aim #2**). The main achievements include:

(1) We successfully synthesized all the lead compounds, provided them to Eloxx, and the company has successfully validated with these compounds the entire biological and toxicity data previously reported by us.

(2) We have generated a new series of N1-alkyl derivatives on the disaccharide scaffold and demonstrated their improved activity in comparison to parent compounds. Encouraged, the best disaccharide derivative NB146 was further converted to the corresponding trisaccharide derivative, NB147. Both these new leads (NB146 and NB147) were provided to Eloxx for further assessment their biological tests.

(3) By developing a simple and robust synthetic scheme for the modification of the developed leads as poly-ester derivatives, we have produced two such new derivatives Bz-G418 (a prototype structure for the proof-of-concept) and Bz-NB124 (along with their parent structures) and provided them to Eloxx for further assessment their biological tests.

In addition, two workshops have organized by the PI during this grant period with Eloxx together with a professional in CF, Prof S. Rowe (UAB, USA) and the professional in Hurler syndrome, Prof. D. Bedwell (UAB, USA) to critically discuss our recent developments and future progresses.

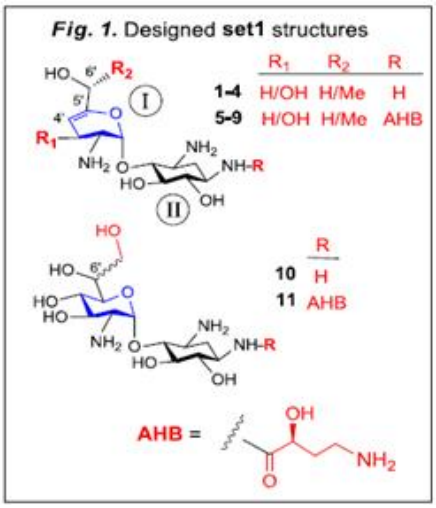
II. Proposed Working Plan for the Second Year Research

Specific Aims

Aim # 1: Rational Design and Synthesis of New Readthrough Drugs. Our design principles integrate the insights from the first year's achievements in our lab along with the insights in other labs in order to construct new classes of compounds by a structure-based approach. Several sets of structurally distinct chemical compounds will be included in the initial library and promising lead compounds will be further refined for better cell permeability and prolonged in-vivo action. The synthesis will use state-of-the-art strategies for the assembly of complex carbohydrate, along with the convenient up-to-date analytical techniques.

Aim #2: Chemical Modification of NBs for Improved Cell Permeability and Oral Bioavailability. We will continue the project from the first year on the polyester derivatives of NBs and this strategy will be further expanded with polyamide derivatives and with the special modifications of NBs as pro-drugs for better blood-brain-barrier (BBB) permeability.

Aim #1- (a) rational design of pseudo-disaccharide scaffolds: Based on our previous results with development of lead structures of NB-series, we propose to modify these compounds as well as to extend our study to more diverse structures with potentially improved suppression activity and lower toxicity. We will probe the pseudo-disaccharides of **set1** (Fig. 1) as the minimum basic structures. The rationale in selecting them is based on our observations with previous leads exhibiting C6'-OH, and that further modifications by inserting either unsaturation at ring I (glucosamine ring, compounds **1**-**9**) or the 6',7'-diol (compounds **10**-**11**) are expected to improve their specificity



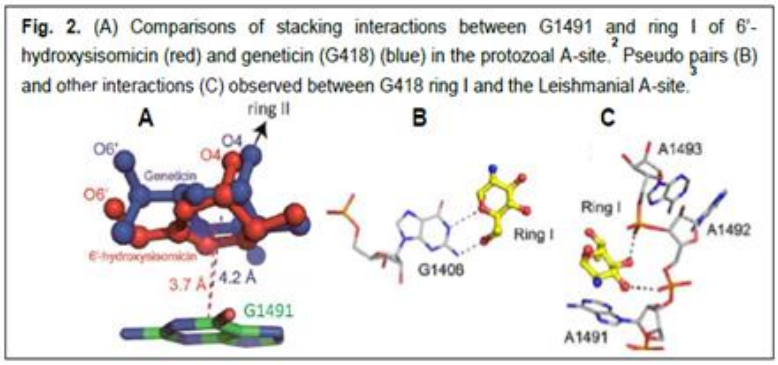


Fig. 2. (A) Comparisons of stacking interactions between G1491 and ring I of 6'-hydroxysisomicin (red) and geneticin (G418) (blue) in the protozoal A-site.[2] Pseudo pairs (B) and other interactions (C) observed between G418 ring I and the Leishmanial A-site.[3]

towards the cytoplasmic A-site, leading to enhanced readthrough and reduced toxicity. This expectation is supported by: (i) the aminoglycoside (AG) sisomicin that exhibits a similar unsaturated ring between C4'- C5' at ring I displays better antibacterial activity than similar 4,6-disubstituted AGs with a saturated ring I, like gentamicin, tobramycin and amikacin. The superior antibacterial activity of sisomicin has been attributed to its specific binding mode[1]: while a typical saturated ring I with a chair conformation stacks on G1491 through CH-p interactions, the unsaturated ring I of sisomicin stacks with a partially planar conformation through p -p interactions with G1491 and achieves a closer fit within the binding pocket; (ii) while sisomicin is active only against bacteria, 6'-hydroxysisomicin possesses promising antiprotozoal activity[2]: a comparison of stacking interactions between G1491 and ring I of 6'-hydroxysisomicin and geneticin in the protozoal A-site clearly favors the former (Fig. 2A). 6'-hydroxysisomicin can adopt a lower energy conformation within the protozoal A-site, leading to the entropically favorable burying of the hydrophobic region of ring I with optimized p-p stacking on G1491. (iii) Our recently solved crystal structure of G418 bound to a model of the Leishmania ribosomal A-site supported the above notions[3]: the ring I of G418 is fixed into the *Leishmania* A-site due to a stable pseudo pair with G1408 (Fig. 2B) and the additional H-bonds O3' $H\dot{O}\dot{O}^{\cdots}$ $O2P_{A1492}$ and $O4'\text{-}H^{\cdots}$ $O2P_{A1493}$ on the opposite site of the pseudo pair (Fig. 2C), leading to an unfavorable stacking of ring I with the A1491. [*Note that one of the major differences between the protozoal and Leishmanial A-sites is the nucleotide at position 1491 (E. coli numbering): G1491 in most protozoa and A1491 in Leishmania; therefore the Leishmanial ribosome shares greatest similarity with human ribosomes, with only a single nucleotide differentiating the AGs putative binding sites (U1409 in Leishmania vs. C1409 in human*]. Therefore, the deletion of only C4'-OH (1-9, R_1=OH, Fig 1) with simultaneous introduction of C4'-C5' double bond, can make ring I relatively free to move within the binding pocket and form stronger n-n stacking with A1491.

The rationale for the selective attachment of (S)-4-amino-2-hydroxybutanoyl (AHB) at the N1 position of **set1** (R=AHB) is based on the highly positive impact of this group (for example in NB84) compared to their parent structures (for example NB74), respectively[4-8]. Therefore, we will continue this approach in new designs. Finally, in all **set1** structures we preserved the C6'-OH function as a crucial motif for favorable H-bond interactions between ring I of AG and G1408 (Fig. 2B). We anticipate that the deletion of C4'-OH or C3',C4'-hydroxyls with a simultaneous introduction of unsaturation on ring I will make the ring relatively "free" to move within the binding pocket for better pseudo-pair interaction with G1408 and improved p-p stacking with A1491 (Fig. 2C). The recent comparative x-ray data of G418 and 6'-hydroxysisomicin in complex with the bacterial and protozoal A-sites support this expectation[1-2] (Fig. 2A). In order to form a pseudo pair with 6'- hydroxysisomicin, the G1408 residue in the protozoal A-site shifts toward the deep/major groove compared with the position of A1408 in bacterial A-site, while ring I rotates approximately 13º around O4- C1' glycosidic bond between rings I and II; allowing the formation of a stable pseudo-pair between the ring I of 6'- hydroxysisomicin and G1408, along with the simultaneous strong p-p stacking of ring I with G1491.

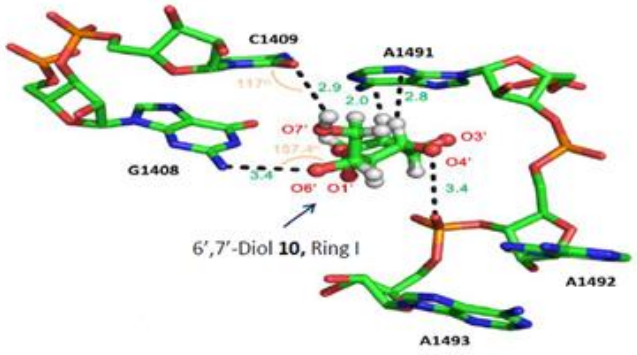


Fig. 3. Modelling of ring I of the diol-**10** into the binding site of the G418 ring I in the yeast ribosomal structure (PDB ID code 4U4O), recently published by Yusopov and co-workers[9]. The rRNA bases are numbered according to the *E. coli* numbering; H-bonds are in black dashed lines, bond lengths in green (Å) and bond angles in orange in (degrees).

While these data support the likelihood that the compounds **1-9** of **set1** structures (Fig. 1) with 6'-OH and unsaturation at ring I may perform better than previous leads with the saturated ring I, we want to introduce additional structural motifs at the C6'- region that would further increase this expectation. We plan to replace the CH_2OH (and/or $CH(CH_3)OH$) at 6'-position with the vicinal 6',7'-diol (compounds **10-11**, Fig.1). The replacement of C6'-OH with 6',7'-diol is expected to generate stronger H-bond interactions of ring I with A site residues G1408 and C1409 resulting in better pseudo-disaccharide scaffold of **set1** (Fig. 3). Following important points in Fig. 3 are of note. First, unlike our solved structure of G418 bound to Leishmania A-site (Fig. 2B and 2C) in which ring I of G418 makes two H-bonds with G1408, the structure of G418 bound to the entire yeast ribosome recently reported by Yusupov and co-workers[9], shows only one H-bond between O6' and G1408 nitrogen (Fig. 3). Modelling ring I of the 6',7'-diol **10** onto this structure of Yusopov, clearly shows that O7'-OH can make additional H-bond with the oxygen of C1409.

To test this issue, we initially synthesized compound **10** (Fig. 1) as a single diastereomer at C6' with unknown configuration (the complete assignment of the absolute configuration of 10 at C6', along with the synthesis of its C6'- distereomer are underway). Preliminary in-vitro suppression tests demonstrated that **10** exhibits superior readthrough to that of **12**, and paromamine (Fig. 4). Interestingly, installation of 6',7'-diol on the paromamine scaffold (**10**) dramatically increases its in-vitro readthrough activ ity. It is of note that the observed activity increase in **10** is far higher than the impact of the chiral (*R*)-6'- methyl group in **12**, which was to date our most favorable pharmacophore at C6'- regon[7,8]. *With compound **10** we are already one step ahead!* Further installation of chiral (R)-6'-methyl group and/or N1-AHB group on compound **10** will likely provide additional improvement of this performance, and these potentials will be tested in the subsequent steps.

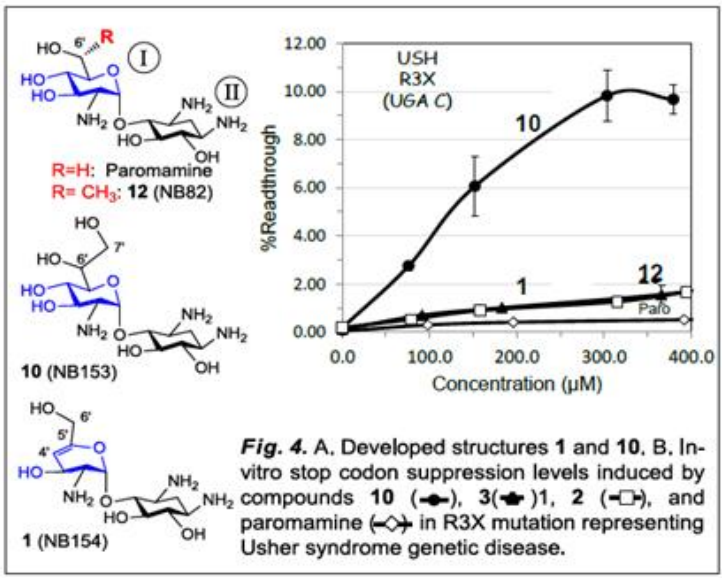
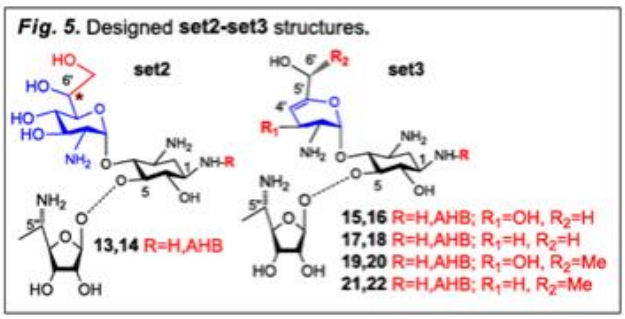


Fig. 4. A. Developed structures **1** and **10**. B. In-vitro stop codon suppression levels induced by compounds **10** (●), **3**(●)1, **2** (□), and paromamine (◇) in R3X mutation representing Usher syndrome genetic disease.

In addition to **10** we also synthesized the simplest representative of **set1** structures, compound **1** (R=R1=R2=H, Figs. 1 and 2). Preliminary comparative in-vitro suppression tests demonstrated that **1** exhibits superior readthrough to that of its parent paromamine and is very similar to that of compound **12** (Fig. 4). These data suggest that the anticipated p-p stacking interaction of the unsaturated ring I of **1** with A1491 is much stronger than the CH-p interactions of the saturated ring I of paromamine with A1491. The data in Fig. 4 also suggests that the advantage of such stacking interactions in **1** (paromamineg**1**) is similar to that of (*R*)-6'-methyl group in **12** (paromamineg**12**), and thus identifies unsaturation at ring I as a potential new pharmacophore.

Aim #1- b) rational design of pseudo-trisaccharide scaffolds: It should be noted that the **set1** structures (Fig. 1) are not expected to possess significant PTC suppression activity (Fig. 4); rather they will be used as scaffolds for the construction of new efficacious structures by attaching various sugar and/or acyclic appendages. For a systematic study, the same modifications will be performed on all pairs of **set1**, with the aim to reach the best lead compound. As a ring III we have developed a new structure of (*S*)- 5''-amino-5''-methyl-D-ribose, and its advantage over 5"-aminoribose was evident in our previous leads[7,8]. Therefore, we will use this novel ring III for the generation of new pseudo-trisaccharides (**set2-set3**, Fig. 5). Encouraged by the preliminary data obtained with **10** (Fig. 4), we will scrutinize the stereochemistry at C6' of **10** and will assemble the corresponding *pseudo-*



trisaccharides **13** and **14** (**set2**, Fig. 5), along with all the variations of pseudo-trisaccharides with unsuterated ring I (compounds **15-22**, **set3**, Fig. 5). In addition, based on the observed strong impact of the vicinal 6',7'-diol in **10** (Fig. 4), this variable (6',7'-diol) will further be added to the planned *pseudo*-trisaccharides of **set3** structures in Fig. 5, to yield additional sets of compounds incorporating the vicinal 6',7'-diol and unsaturation at ring I.

Aim #2. a) *Modification of lead structures for improved cell permeability and oral bioavailability:* Because AGs are highly charged, water soluble compounds, they have poor intestinal absorption and are usually injected. In addition, AGs are short-lived in the circulatory system, rapidly eliminated by glomerular filtration in the kidney. They also exhibit poor permeability into eukaryotic cells, which requires higher dosages that often cause harmful side effects that limit their use in therapy. In order to overcome these limitations we designed different sets of compounds. One of such sets (Fig. 6) considers that all hydroxyls of the AG are replaced by esters. The rationale is to increase the lipophilicity and cell-permeability of the drugs, improve in-vivo half-life and oral bioavailability. These changes should provide important therapeutic benefit over treatment with the initial lead alone.

The suggested modifications on NB124 and G418 (Fig. 6) to yield the corresponding per-benzoate esters (OBz, **51** and **52**, respectively) are based on the following observations. (i) In our most recent comparative study of our lead compounds using an extended repertoire of CF cell lines, reporters, assays and animal models, comp. NB124 was able to most effectively rescue CFTR function, was superior to gentamicin, exhibited favorable pharmacokinetics, and was less cytotoxic than gentamicin in the explant model of ototoxicity[10]; (ii) the benzoate esters **51** and **52** are chemically more stable than the corresponding simple alkyl asters (like acetate, isobutirate, isopropionate); (iii) the poly-esters **51** and **52** can easily be prepared in good overall yields from the corresponding AGs in three steps (Boc_2O, Et_3N, H_2O/MeOH; BzCl, Py, 4DMAP; TRA, CH_2Cl_2); (iv) to test our hypothesis we initially used 52 as a prototype derived from commercial G418.

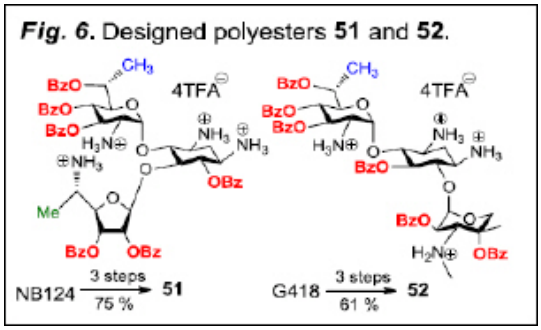


Fig. 6. Designed polyesters **51** and **52**.

Preliminary tests of **52** against its parent G418 demonstrated that **52** lacks any readthrough activity both in cell free (see the data in the 1st year research report) assays and HEK293 cells stably expressing UGAC/CGAC dual luciferase (Fig. 7A) even when the incubation time was extended up to 72 hrs. Interestingly, when we tested the antibacterial activities of G418 and **52**, we found that while the activity of **52** was similar to that of G418 against various G- and G^+ WT bacteria, the MIC values of **52** were significantly lower than that of G418 in bacterial strains harboring plasmids of AG resistance determinant enzymes (see the data in the 1st year research report). Encouraged, we argued that HEK293 cells, being engineered cell lines, might not contain the required esterases to hydrolyze the benzoate esters in **52**. Indeed, using MEFs derived from homozygous Idua-W402X mice[11], we found that the activity of **52** significantly exceeds that of G418 at all incubation times and concentrations tested. At a dose of only 13.6 micromolar, treated cells had already reached the glycosaminoglycan (GAG) levels found in WT cells (Fig. 7B). These encouraging data with **52** prompted us to prepare compound **51** (see the data in the 1st year research report), which is currently under similar tests in Idua-W402X MEFs (by our collaborator D. Bedwell at Univ. of Alabama, Birmingham) and CF cell lines (primary human bronchial epithelial, HBE cells, G542X/delF508, S. Rowe at the UAB). In-vivo tests in the Idua-W402X mice (D. Bedwell) will follow these experiments.

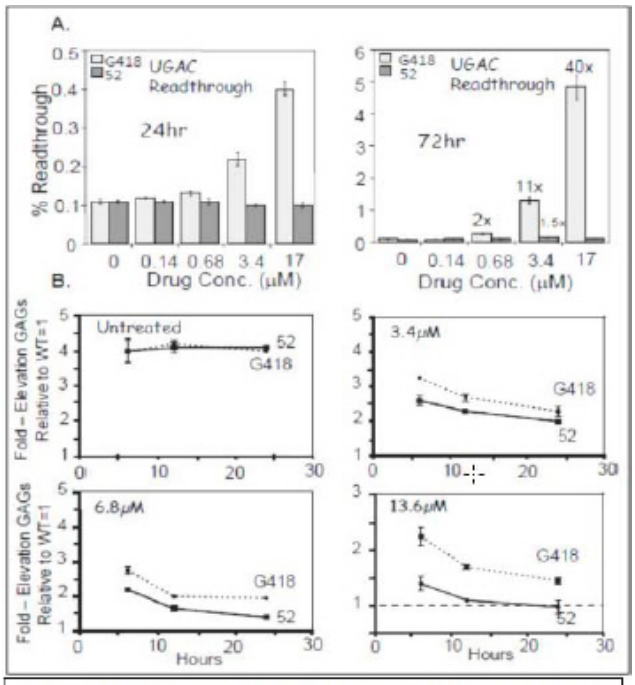


Fig 7. Comparative ex-vivo readthrough assays of G418 and comp. **52**. (A) The percent readthrough values in HEK293 cells expressing UGAC/CGAC dual luciferase. (B) Idua-W402X MEF GAG assay at different concentrations and incubation times.

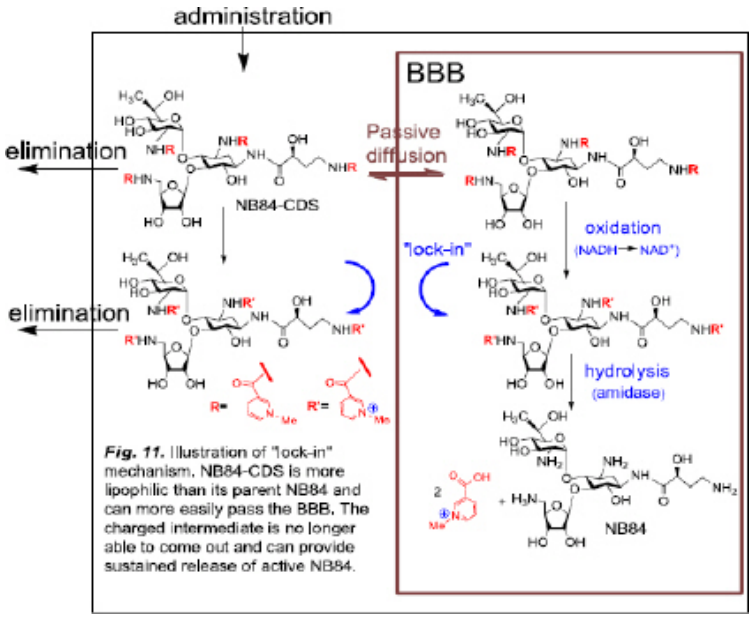


Fig. 11. Illustration of "lock-in" mechanism. NB84-CDS is more lipophilic than its parent NB84 and can more easily pass the BBB. The charged intermediate is no longer able to come out and can provide sustained release of active NB84.

Aim #2 b) *Modifications for improved capacity to pass the blood-brain barrier (BBB).* While we have been successful in identifying promising nonsense suppression agents (NB84) for the Idua-W402X mutation and partially alleviating the primary GAG storage defect associated with MPS I-H within a variety of tissues (including brain), we have been unable to completely restore GAG levels in the mouse model, even in a long-term, 28-week drug-treatment[12,13]. Even though the newly proposed sets of compounds might prove better than the previously examined leads (especially the structures with elevated lipophilicity like **51**) for treatment of MPS I-H, we propose to also test a **brain-targeted chemical delivery system** (CDS)[14] which is expected to produce a more robust therapeutic response. The approach is based on the attachment of a dihydropyridine moiety as a carrier for delivering drugs through the BBB (Fig. 8). This site-selective delivery will reduce the exposure of the body to high drug levels and consequently increase their therapeutic index. Since NB84 has already been proven to significantly moderate disease progression in-vivo in our MPS I-H mouse model ,[12] we will now synthesize the new derivative of NB84, the compound NB84-CDS (Fig. 11). We (our collaborator at UAB, D. Bedwell) will then determine whether delivery of NB84-CDS through the BBB is better than NB84 in a long term study using established biochemical and immunohistochemical assays as previously described[12].

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(7) Kandasamy Atia-Glikin, D., Belakhov, V. and Baasov, T., J. (2011) Repairing faulty genes by aminoglycosides: Identification of new pharmacophore with enhanced suppression of diseases-causing nonsense mutations. *Med Chem Comm 2*, 165–171.
(8) Kandasamy, J., Atia-Glikin, D., Shulman, E., Shapira, K., Shavit, M., Belakhov, V., and Baasov, T. (2012) Increased selectivity toward cytoplasmic versus mitochondrial ribosome confers improved efficiency of synthetic aminoglycosides in fixing damaged genes: A strategy for treatment of genetic diseases caused by nonsense mutations. J. *Med. Chem. 55*, 10630– 10643.
(9) De Loubresse, N. G., Prokhorova, I., Holtkamp, W., Rodnina, M. V., Yusupova, G., and Yusupov, M. (2014) Structural basis for the inhibition of the eukaryotic ribosome. *Nature 513*, 517-522.
(10) Gunn, G., Dai, Y., Du, M., Belakhov, V., Kandasamy, J., Schoeb, T. R., Baasov, T., Bedwell, D. M., and Keeling, K. M. (2014) Long-term nonsense suppression therapy moderates MPS I-H disease progression. *Mol. Genet. Metab. 111*, 374-381.
(11) Keeling, K. M., Wang, D., Dai, Y., Murugesan, S., Chenna, B., Clark, J., Belakhov, V., Kandasamy, J., Velu, S. E., Baasov, T., and Bedwell, D. M. (2013) Attenuation of Nonsense-Mediated mRNA Decay Enhances In Vivo Nonsense Suppression. *PLoS One 8*, *4*, *e60478*.
(12) Gunn, G., Dai, Y., Du, M., Belakhov, V., Kandasamy, J., Schoeb, T. R., Baasov, T., Bedwell, D. M., and Keeling, K. M. (2014) Long-term nonsense suppression therapy moderates MPS I-H disease progression. *Mol. Genet. Metab. 111*, 374-381.
(13) Keeling, K. M., Wang, D., Dai, Y., Murugesan, S., Chenna, B., Clark, J., Belakhov, V., Kandasamy, J., Velu, S. E., Baasov, T., and Bedwell, D. M. (2013) Attenuation of Nonsense-Mediated mRNA Decay Enhances In Vivo Nonsense Suppression. *PLoS One 8*, *4*, *e60478*.
(14) Bodor, N., and Buchwald, P. (2008) Retrometabolic drug design: Principles and recent developments. *Pure Appl. Chem. 80*, 1669-1682.

III. Proposed Budget (in US Dollars) and Time Frame

	The proposed task	Time Frame	Budget Requested	Remarks	Notes
Aim # 1	Establishment of config. In **10** and synthesis of **13**.	6-12 months	$ 15,000	One postdoc/student dedicated.	PI T. Baasov
	Synthesis of **15** and preliminary biochem. Analysis of **10**,**13** and **15**.	6-12 months	$ 15,000	One postdoc/student dedicated.	
		Total Aim #1:	**$ 30,000**		
Aim # 2a	Synthesis of **NB84-esters** and **NB124-esters**	8-12 months	$ 10,000	One postdoc/student dedicated.	
Aim # 2b	Synthesis of **NB84-CDS** and its Preliminary biochemical analysis	6-12 months	$ 10,000	One postdoc/student dedicated.	
		Total Aim #2:	**$ 20,000**		
		Grand total for the Aims # 1&2:	**$ 50,000**		

NOTE the budget does not include ex vivo (MEFs) and in vivo studies required for the project completion and only can be done with additional funding of collaborators labs (Bedwell and Rowe at UAB)!

IV. Detailed Budget (in US Dollars)

Personnel:

Role in project			% Time	Salary
1.	Lab. Assistant	Lab. Assistant	50	12,000
2.	Postdoctorant	Researcher	50	12,000
	Total:			24,000

Supplies:

1. Chemicals, absolute & deuterated solvents	18,000
2. Lab. equipment, glassware, plastic ware	2,000
3. Biochemicals	2,000
4. *In vitro* and *ex vivo* assay kits	2,000
5. Chromatography material for various purifications	1,000
6. NMR and Mass Spectrometry tests	1,000
Total:	26,000
Grand Total:	**$50,000**

Budget Justification:

The requests for laboratory assistant and postdoctorant for the duration of the grant period are in recognition of the amount of work required in this project. Considerable effort will be expended in the syntheses of various lead compounds discussed in the proposal, their structure determination and analysis, assays for their activity. The request for materials, supplies, and chemicals/biochemicals is an important part for a successful development and completion of the project.

V. Investigators' Curriculum Vitae

Surname: Baasov First name: Timor
Birthdate: January 3, 1954

(a) Education Background

From-To	Institution	Area of specialization	Degree
1981-1986	Weizmann Institute of Science	Chemistry	Ph. D.
1977-1979	Tel-Aviv University	Chemistry	M. Sc.
1975-1977	Tel-Aviv University	Chemistry	B. Sc.

Major research interest: Carbohydrate chemistry, Bioorganic and medicinal chemistry, Drug design and development, Rational design of substrate and inhibitors, Mechanistic enzymology.

(b) Employment

From-To	Institution	Research area	Title
2004-	Technion	Bioorganic Chemistry	Professor
3/1998-8/1998	The Scripps Research Institute, Cal	Bioorganic Chemistry	Visiting Prof.

1998-2003	Technion	Bioorganic Chemistry	Assoc. Prof.
1990-1998	Technion	Bioorganic Chemistry	Senior Lecturer
1988-1990	Technion	Bioorganic Chemistry	Lecturer
1986-1988	Harvard University	Bioorganic Chemistry	Post-Doct. Res.

VI. T. Baasov - List of Publications last three years (2011-2014)

1. C. Brendel, V. Belakhov, H. Werner, E. Wegener, J. Gaertner, I. Nudelman, **T. Baasov**, P. Huppke. Readthrough of Nonsense Mutations in Rett Syndrome: Evaluation of novel aminoglycosides and generation of a new mouse model. *Journal Molecular Medicine*, **89**, 389-398, (2011).

2. J. Kandasamy, D. Atia-Glikin, V. Belakhov, **T. Baasov**. Repairing faulty genes by aminoglycosides: Identification of new pharmacophore with enhanced suppression of diseases-causing nonsense mutations. *Medicinal Chemistry Communications*, **2**, 165-171 (2011).

3. S.M. Rowe, L.P. Tang, P. Sloane, K.Backer, M. Mazur, J. Buck;ey-Lauriel, I. Nudelman, V. Belakhov, Z. Belok, E. Schwiebert, **T. Baasov**, D.M. Bedwell. Suppression of CFTR Premature Termination Codons and Rescue of CFTR Protein and Function by the Synthetic Aminoglycoside NB54. *Journal Molecular Medicine (Berl)*, **89**, 1149-1154 (2011).

4. M. Vecsler, B. Ben Zeev, I. Nudelman, Y. Anikster, A. J. Simon, N. Amariglio, G. Rechavi, **T. Baasov**, E. Gak. Ex Vivo Treatment with a Novel Synthetic Aminoglycoside NB54 in Primary Fibroblasts from Rett Syndrome Patients Suppresses MECP2 Nonsense Mutations. *PLoS ONE*, **6** (6), **e20733** (2011).

5. H-L. R. Lee, C-C. Chen, **T. Baasov**, Y. Ron, J. P. Dougherty. Post-transcriptionally Regulated Expression System in Human Xenogeneic Transplantation Models. *Molecular Therapy*, **19**(9), 1645-1655 (2011).

6. D. Wang , V. Belakhov, J. Kandasamy, **T. Baasov**, S-C. Li, Y-T Li, D.M. Bedwell, K.M. Keeling. The designer aminoglycoside NB84 significantly reduces glycosaminoglycan accumulation associated with MPS I-H in the Idua-W392X mouse. *Molecular Genetics and Metabolism* **105**, 116-125 (2012).

7. T. Goldmann, N. Overlack, F. Möller, V. Belakhov, M. van Wyk, **T. Baasov**, U. Wolfrum, and K. Nagel-Wolfrum. A comparative evaluation of NB30, NB54 and PTC124 in translational read-through efficacy for treatment of an USH1C nonsense mutation. *EMBO Molecular Medicine*, **4**, 1-14, (2012).

8. J. Kandasamy, D. Atia-Glikin, E. Shulman, K. Shapira, M. Shavit, V. Belakhov **T. Baasov**. Increased Selectivity toward Cytoplasmic versus Mitochondrial Ribosome Confers Improved Efficiency of Synthetic Aminoglycosides in Fixing Damaged Genes: A Strategy for Treatment of Genetic Diseases Caused by Nonsense Mutations. J. *Med. Chem.* **55**(23), 10630-10643 (2012).

9. M. Schalev, J. Kandasamy, N. Skalka, V. Belakhov, R. Rosin-Arbesfeld, **T. Baasov**. Development of generic immunoassay for the detection of a series of aminoglycosides with 6'-OH group for the treatment of genetic diseases in biological samples. *Journal of pharmaceutical and biomedical analysis*. **75**, 33-40 (2013).

10. K.M. Keeling, D. Wang, Y. Dai, S. Murugesan, B. Chenna, J. Clark; V. Belakhov, J. Kandasamy, S.E. Velu, **T. Baasov**, D.M. Bedwell. Attenuation of Nonsense-Mediated mRNA Decay Enhances In Vivo Nonsense Suppression. *PLoS ONE* **8** (4), e60478 (2013).

11. M. Schalev, J. Kondo, D. Kopelyanskiy, C.L. Jaffe, N. Adir, **T. Baasov**. Identification of the molecular attributes required for Aminoglycoside activity against *Leishmania. PNAS* **110** (33), 13333-13338 (2013).

12. M. Kamei, K. Kasperski, M. Fuller, E. Parkinson-Lawrence, L. Karageorgos,, V. Belakhov, **T. Baasov**, J.J. Hopwood, D.J. Brooks. Am inoglycoside-Induced Premature Stop Codon Read-Through of Mucopolysaccharidosis Type I Patients Q70X and W402X Mutations in Cultured Cells. *Journal of Inherited Metabolic Disease Reports*. **13**, 139-147 (2014)

13. X. Xue, V. Mutyam, L.P. Tang, S. Biswas, M. Du, L. A. Jackson, Y. Dai, V. Belakhov, M. Shalev, F. Chen, J. Schacht, R. Bridges, **T. Baasov**, J. Hong, D. M. Bedwell, S.M. Rowe. Synthetic Aminoglycosides Efficiently Suppress CFTR Nonsense Mutations and Are Enhanced by Ivacaftor. *Am. J. Respir. Cell Mol. Biol.* **50** (4), 805- 816 (2014).

14. E. Shulman, V. Belakhov, G. Wei, A. Kendall, E. G. Meyron-Holtz, D. Ben-Shachar, J. Schacht, **T. Baasov**. Designer aminoglycosides that selectively inhibit cytoplasmic rather than mitochondrial ribosomes show decreased ototoxicity: a strategy for the treatment of genetic diseases. *J. Biol. Chem.* **289**(4), 2318-2330 (2014).

15. G. Gunn, Y. Dai, M. Du, V. Belakhov, J. Kandasamy, T.R. Schoeb, **T. Baasov**, D.M. Bedwell, K.M. Keeling. Long-term nonsense suppression therapy with NB84 moderates MPS IH disease progression. *Molec. Genet. Metabol.* **111**, 374-381 (2014).

16. M. Shalev, **T. Baasov**. When Proteins Start to Make Sense: Fine-tuning of Aminoglycosides for PTC Suppression Therapy. *Med. Chem. Commun*. **5**, 1092-1105 (2014). ***Invited Review Perspective Article***

Chapters in Books and other Publications

1. V. Mutyam, X. Xue, X. Jackson, L. Hong, S. Biswas, D. Bridges, **T. Baasov**, V. Belakhov, D. Bedwell, S. Rowe. Use of transepithelial conductance as a screening technique for identification of drugs that promote readthrough of premature stop codons. *Pediatric Pulmonology* 48, page 232 (supplement 36; meeting abstract). ISSN: 8755-6863 (2013).
2. K. Nagel-Wolfrum, **T. Baasov**, U. Wolfrum. Therapy strategies for Usher syndrome Type 1C in the retina. *Advances in experimental medicine and biology*. Vol. 801, pp. 741-747 (2014).
3. **T. Baasov**, M. Fridman. Foreword-The 17th European Carbohydrate Symposium-EuroCarb17. *Carbohydrate Research* **389**, 1 (2014). (Guest Editor of the special issue.)
4. S. Garneau-Tsodikova, **T. Baasov**. Editorial – Carbohydrates Themed Issue. *Med. Chem. Commun.*, **5**, 1010-1013 (2014). (Guest Editor of the special issue.)

Exhibit 10.9

FIFTH ADDENDUM

TO THE RESEARCH AND LICENSE AGREEMENT

This Fifth Addendum to Research and License Agreement (the" **Fifth Addendum**"} is made by and between The Technion Research & Development Foundation Ltd. ("**TRDF**") and Eloxx Pharmaceuticals Ltd. ("**Eloxx**").

WHEREAS, TRDF and Eloxx are parties to Research and License Agreement with an effective date of August 29· 2013, as amended on November 26, 2013, January 14, 2014, June 9, 2014, August 3 , 2014, January 21, 2015, February 9 2015 and April 29, 2015 (collectively, the "**Agreement**"); and

WHEREAS, the parties desire to continue the relationship contemplated by the Agreement and to further amend the Agreement as set forth herein;

Now, THEREFORE, the parties hereby agree as follows:

1. Unless otherwise defined herein, capitalized terms used in this Fifth Addendum shall have the meanings assigned thereto in the Agreement.

2. The last sentence of Section 3.1.4 to the Agreement shall be revised as follows:

   "[...] For clarity, this Section 3.1.4 does not apply to any Research Inventions, to any Research Results nor to any Patent Rights claiming Research Inventions or Research Result, but will apply with respect to any rights, title and interest in and to the patents listed in Exhibit F attached hereto.".

3. Except as added herein, all other terms and conditions of the Agreement shall remain in full force and effect, as relevant to this Fifth Addendum.

4. This Fifth Addendum may be executed in counterparts, each of which shall be deemed an original and all of which together shall constitute one and the same instrument. Any signature page delivered by facsimile or electronic image transmission shall be binding to the same extent as an original signature page.

IN WITNESS WHEREOF, the parties hereby accept and agree to the terms and conditions of this Fifth Addendum.

ELOXX PHARMACEUTICALS LTD.		**THE TECHNION RESEARCH & DEVELOPMENT FOUNDATION LTD.**	
By:	/s/ Silvia Norman	By:	/s/ Benjamin Soffer
Name:	Silvia Norman	Name:	Benjamin Soffer
Title:	CEO	Title:	Technology Transfer Office, Manager
Date:	2/6/2015	Date:	23.7.15

ASSIGNMENT

For good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the undersigned (hereinafter called the ”Assignor’’):

Technion Research & Development Foundation Limited
Senate House, Technion City
3200004 Haifa
Israel

hereby sell(s), assign(s) and transfer(s) to:

Eloxx Pharmaceuticals Ltd,
14 Sbenkar Street
4672514 Herzlia
Israel

(hereinafter called the “Assignee”), its successors, assigns, nominees or other legal representatives, the undersigned’s entire rights, title and interest in and to the invention titled:

USE OF AMINOGLYCOSIDE ANALOGS IN THETREATMENT OF RETT SYNDROME

described and claimed in the following Patent Application:

US Provisional Patent Application No. 6:2/008,028,
filed on June 5; 2014,
and identified as Attorney Docket No. 595:29

and in and to said Patent Application, and all original and reissued Patents granted therefore, and all divisions and continuations thereof, any corresponding PCT Patent Application and the National Phases thereof, including the right to apply and obtain Patents in all other countries, the right to claim priority under International Conventions, and the Letters Patent which may be granted thereon:

covenant that the undersigned have (has) the full right to convey the entire interest therein assigned;

authorize(s) and request(s) the Registrar of Patents, and any Official of any country whose duty it is to issue Patents on applications as aforesaid, to issue the said Letters Patent to the said Assignee;

and agree(s) to sign all lawful papers, make all rightful oaths, do all lawful acts requisite for such Patent Applications, and do everything possible to aid said Assignee to apply for, obtain and enforce Patent protection for said invention.

ASSIGNOR		**ASSIGNEE**	
Technion Research & Development foundation Limited		**Eloxx Pharmaceutical Ltd.**	
Signature	: /s/ Benjamin Soffer	Signature	: /s/ Silvia Norman
Name	: Benjamin Soffer	Name	: Silvia Norman
Capacity	: Technology Transfer Office, Manager	Capacity	: CEO
Date	: June 2, 2015	Date	: 2/6/15

Signature : /s/ Wayne D. Kaplan

Name : Wayne D. Kaplan

Capacity : Executive Vice President for Research

Date : June 2, 2015

Confidential

Execution Copy

SIXTH ADDENDUM

TO THE RESEARCH AND LICENSE AGREEMENT

This Sixth Addendum to Research and License Agreement (the "**Sixth Addendum**") is made by and between The Technion Research & Development Foundation Ltd. ("**TRDF**") and Eloxx Pharmaceuticals Ltd. ("**Eloxx**").

WHEREAS, TRDF and Eloxx are parties to a Research and License Agreement with an effective date of August 29· 2013, as amended on November 26, 2013, January 14, 2014, June 9, 2014, August 3, 2014, January 21, 2015, February 9, 2015, April 29, 2015 and June 2, 2015 (collectively, the "**Agreement**"); and

WHEREAS, the parties desire to continue the relationship contemplated by the Agreement and to further amend the Agreement as set forth herein;

Now, therefore, the parties hereby agree as follows:

1. Unless otherwise defined herein, capitalized terms used in this Sixth Addendum shall have the meanings assigned thereto in the Agreement.

2. Subject to the terms and conditions contained herein and in the Agreement, TRDF hereby assigns to Eloxx all rights and title in and to the patents listed in **Exhibit A** attached hereto (the "**Assigned Patents**"). Eloxx hereby undertakes not to further assign and/or transfer the Assigned Patents nor incur any lien or other encumbrance upon the Assigned Patents, except in accordance with the terms and provisions of the Agreement, including, inter alia, Section 14.10. It is hereby clarified that such assignment shall not change the terms of the license granted to Eloxx with respect to such Assigned Patents nor shall it relieve or derogate from TRDF's rights to receive royalties for such Assigned Patents in accordance with the terms of the Agreement.

3. Upon termination of the Agreement, for any reason, such rights and title with respect to the Assigned Patents shall be promptly delivered and assigned back to TRDF without the need for any notice or additional action by TRDF. Any existing agreements that contain a sublicense of the Assigned Patents shall be treated according to the provisions of Section 12.3.1 to the Agreement. If and to the extent any additional action is required from Eloxx in order to perfect or enforce or effectuate the title and interest therein, as described above, including to effect or confirm the formal transfer thereof to TRDF, during and after the term of the Agreement, Eloxx shall fully cooperate with TRDF and shall take any and all necessary or desirable actions immediately upon the request of TRDF and shall provide any and all assistance, including the preparation or execution, as applicable, of documents, declarations, assignments and other data required to effectuate the assignment back of the title and interest therein. Eloxx shall bear the expenses of the assignment and assignment back to the extent there are any.

   If TRDF is unable for any reason to secure Eloxx's signature to or to apply for the assignment back of the Assigned Patents, then Eloxx hereby irrevocably designates and appoints TRDF and its duly authorized officers, agents and assigns as its agent and attorney in fact, to act for and on its behalf and stead to execute and file any such applications and to do all other lawfully permitted acts to further the assignment back, including without limitation the prosecution and issuance of letters patent or copyright registrations thereon, with the same legal force and effect as if executed by Eloxx.

4. Eloxx shall be responsible and shall bear all costs for the preparation, filling, prosecution, protection of the Assigned Patents using independent patent counsel reasonable to TRDF. Eloxx shall: (a) instruct such patent counsel to furnish TRDF with copies of all correspondence relating to the Assigned Patents from the United States Patent and Trademark Office (USPTO) and any other patent office, as well as copies of all proposed responses to such correspondence in time for TRDF to review and comment on each such response; (b) give TRDF an opportunity to review the text of each patent application before filing; (c) consult with TRDF with respect thereto; (d) supply TRDF with a copy of the application as filed, together with notice of its filing date and serial number; and (e) keep TRDF advised of the status of actual and prospective patent filings.

5. Should Eloxx decide it does not wish to bear the costs for the preparation, filing, prosecution and protection of the Assigned Patents, Eloxx shall immediately assign such patents back to TRDF, but in any event at least sixty (60) days prior to the applicable deadline for the filing of an application or responding to an office action regarding such application and/or patent.

6. Except as added herein, all other terms and conditions of the Agreement shall remain in full force and effect.

7. This Sixth Addendum may be executed in counterparts, each of which shall be deemed an original and all of which together shall constitute one and the same instrument. Any signature page delivered by facsimile or electronic image transmission shall be binding to the same extent as an original signature page.

IN WITNESS WHEREOF, the parties hereby accept and agree to the terms and conditions of this Sixth Addendum.

ELOXX PHARMACEUTICALS LTD.	**THE TECHNION RESEARCH & DEVELOPMENT FOUNDATION LTD.**
By: /s/ Silvia Noiman	By: /s/ Benjamin Soffer
Name: Silvia Noiman	Name: Benjamin Soffer
Title: CEO	Title:
Date: 11 January 2016	Date: January 20, 2016

Exhibit A

AMINOGLYCOSIDE DERIVATIVES AND USES THEREOF IN TREATING GENETIC DISORDERS [design around of Gen 3]

Our Ref Client Ref	Country	Earliest Priority	Entry Date	Filing Date Application No.	Publication Date + No. Issue Date + Patent No.	Next Action	Status	Assignee Inventor
59536	USA			02-Sep-2015		Foreign Filing Due		Eloxx Pharmaceuticals Ltd.
	PRO			62/213,143		02-Sep-2015		**BAASOV Timor**

AMINOGLYCOSIDE DERIVATIVES AND USES THEREOF IN TREATING GENETIC DISORDERS [design around of Gen 3]

Our Ref Client Ref	Country	Earliest Priority	Entry Date	Filing Date Application No.	Publication Date + No. Issue Date + Patent No.	Next Action	Status	Assignee Inventor
59535	USA			02-Sep-2015		Foreign Filing Due		Eloxx Pharmaceuticals Ltd.
	PRO			62/213,187		02-Sep-2016		**BAASOV Timor**

AMINOGLYCOSIDE DERIVATIVES AND USES THEREOF IN TREATING GENETIC DISORDERS US Provisional Patent Application No. 62/274,915

Exhibit 10.11

SEVENTH ADDENDUM

TO THE RESEARCH AND LICENSE AGREEMENT

This Seventh Addendum to Research and license Agreement (the "**Seventh Addendum**") is made by and between the Technion Research and Development Foundation Ltd. ("**TRDF**") and Eloxx Pharmaceuticals Ltd. ("**Licensee**" or "**Eloxx**").

Whereas, TRDF and Eloxx are parties to a Research and License Agreement with an effective date of August 29th 2013 (the "**License Agreement**"), as amended on November 26th, 2013, January 14th, 2014, June 9th, 2014, August 3rd, 2014, January 21st, 2015, February 9th 2015, April 29th, 2015, June 2nd, 2015, and January 1, 2016 (collectively, the "**Agreement**"); and

Whereas, according to Section 1.26 to the License Agreement, as amended, the first Research Period has ended on September 30th, 2014, the Second Research Plan has ended on September 30, 2015, the First Research Plan and the Second Research Plan were completed respectively;

Whereas, the parties desire to extend and continue the Research Period and the Research for a third year; and

Whereas, the parties desire to continue the relationship contemplated by the Agreement and therefore to further amend the Agreement as set forth herein;

NOW, THEREFORE, the parties hereby agree as follows:

1. Unless otherwise defined herein, capitalized terms used in this Seventh Addendum shall have the meaning assigned thereto in the Agreement.
2. The parties wish to extend the Research Period for a third year, commencing on March 1st, 2016 for twelve (12) months until February 28th 2017 ("**Third Research Period**"). The extension shall be on the same terms and conditions as contained in the Agreement unless otherwise agreed in this Seventh Addendum.
3. Exhibit D to the Agreement is hereby replaced with a new Exhibit D attached hereto ("**Third Research Plan**").
4. The parties wish to set the terms tor the funding for the performance of the Third Research Plan during the Third Research Period, and replace section 2.2.1 of the License Agreement, as follows:
    a) Licensee shall fund the Research to be performed during the Third Research Period under the Third Research Plan in the total amount of forty thousand US Dollars ($40,000) in accordance with the following schedule:
        1) First installment of twenty thousand US Dollars ($20,000) shall be paid upon signing this Seventh Addendum.
        2) Second installment of twenty thousand US Dollars ($20,000) shall be paid upon completion of the Third Research Plan and no later than September 1st 2016.
    b) V.A.T as applicable on time of payment shall be added to each installment.

c) TRDF shall issue a proper invoice for each installment.

5. Except as amended herein, all other terms and conditions of the Agreement shall remain in full force and effect.

ELOXX PHARMACEUTICALS LTD.
DEVELOPMENT

By: /s/ Silvia Norman
Name: Silvia Norman
Date: March 6, 2016

THE TECHNION RESEARCH & FOUNDATION LTD.

By: /s/ Rita Bruckstein
Name: Rita Bruckstein
Date: March 30, 2016

Exhibit D

Prof. Timor Baasov

Submitted to Eloxx Pharmaceuticals LTD

Research Plan

(*Continuation for the third year* 1.10.2015-30.09.2016)

Title

Development of Aminoglycose-Based Drug for Treatment of Human Genetic Diseases and Many Forms of Cancer Caused by Nonsense Mutations

I. Brief Summary of the Second Year's Research

The two specific aims were: Rational design and synthesis of new readthrough drugs (**Aim #1**); Chemical modification of NBs for improved cell permeability and bioavailability (**Aim #2**). The main achievements include:

(1) We have generated a new series of pseudodisaccharides NB154 (exhibits unsaturation on ring I) and NB153 (6',7'-chiral diol) by rational design strategy (employing the docking of NBs into our solved x-ray structures of AGs bound to the eukaryotic A-site rRNA oligonucleotide model) and demonstrated their improved activity in comparison to their parent compounds. Encouraged, the pseudo-disaccharide NB153 was used as a scaffold for the generation of two pseudo-trisaccharide structures NB156 and NB157, which then subsequently tested for a series of biological tests. Both were found significantly better than their parent structures NB74 (for NB156) and NB124 (for NB157). Thus, by using rational design approach we were able for the first time to provide the validation of this design strategy which provided significant activity improvement in comparison to the previous lead structures. In addition, the pseudo-disaccharide NB154 was used as a scaffold for the generation of the simplest pseudo-trisaccharide structure NB158, which again proved to be better than its parent NB30.

(3) By developing a simple and robust synthetic scheme for the modification of the developed leads as poly-ester derivatives, we have produced two such new derivatives Bz-G418 (a prototype structure for the proof-of-concept) and Bz-NB124 which then undergone a series of biological tests. We found that the ex vivo readthrough activity of Bz-NB124 in Idua-W402X MEFs significantly exceeds that of NB124 at all incubation times and concentrations tested, suggesting improved cell penetration and pharmacokinetics of this new potential pro-drug.

II. Proposed Working Plan for the Third Year Research

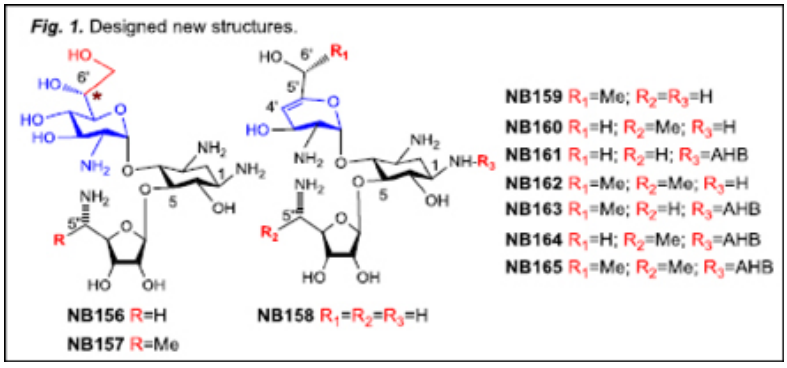
Specific Aims

Aim #1: Rational Design and Synthesis of New Readthrough Drugs. Our design principles integrate the insights from the second year's research achievements in our lab along with the insights in other labs in order to construct new classes of compounds by a rational structure-based approach. Several sets of structurally distinct compounds will be included in the initial library and promising lead compounds will be further refined for better cell permeability and prolonged in-vivo action. The synthesis will use state-of-the-art strategies for the assembly of complex carbohydrate, along with the convenient up-to-date analytical techniques.

Aim #2: Chemical Modification of NBs for Improved Cell Permeability, Oral Bioavailability and Reduced Toxic Side-Effects. Based on recent developments in aminoglycosides research to produce new antibiotics with reduced toxic side-effects, we suggest applying these developed strategies on our NBs and generating new series of compounds with improved activity/toxicity ratio – improved therapeutic index.

Aim #1 – Rational design and synthesis of new readthrough drugs. Based on our second year's research results, we propose to modify the developed new compounds as well as to extend our study to more diverse structures with potentially improved suppression activity and lower toxicity. Figure 1 illustrates the structures

Fig. 1. Designed new structures.



of our most recently developed leads (Eloxx funded second year's research) NB156-NB158, along with the proposed new structures NB159-NB165. These new structures are actually the derivatives of NB158. NB158 serves as the scaffold to which three already established pharmacophores including 6'-(*R*)-Me, 5"-(*S*)-Me and N1-AHB groups are sequentially introduced: the only one pharmacophore (compounds NB159, NB160 and NB161), two pharmacophores (compounds NB162, NB163 and NB164) and all three pharmacophores (NB165). The rationale in selecting NB159-NB165 as potential new leads is based on the following our past observations. First, NB158 exhibits similar to better activity to that of NB30, while its eukaryotic and prokaryotic translation inhibition are significantly lower to that of NB30. These observations suggest that NB158 may serve better scaffold than NB30 for further development. This expectation is supported by: (i) while the eukaryotic inhibition of translation of NB158 is only about two-fold poorer than that of NB30 (IC_{50}^{euk} values of 70 and 31 μM, respectively) this gap in the prokaryotic inhibition of translation is increased up two orders of magnitude (IC_{50}^{prok} values of 36.45 and 0.45 μM, respectively), suggesting significantly increased specificity and selectivity of NB158 towards eukaryotic versus prokaryotic ribosome than that of NB30 (the $IC_{50}^{prok}/IC_{50}^{euk}$ values of 1.9 and 69 for NB158 and NB30; see Table 1 of the 2nd year's research report). (ii) Since our previous data indicated that the reduction in prokaryotic ribosome specificity can be correlated with the reduction of mitochondrial ribosome specificity, the data suggest that the NB158 and its follow-up derivatives NB159-NB165 probably will enjoy with reduced mitochondrial inhibition and subsequently with reduced toxic side-effects. (iii) Once the synthesis of NB158 has already established in our lab, the generation and subsequent biological tests of the suggested new derivatives NB159-NB165 should be a relatively easy task.

The synthesis and evaluation of the suggested new structures NB159-NB165 will be done according to our second year's research report for the synthesis of NB158 and our previous reports for the introduction of the 6'-(*R*)-Me, 5"-(*S*)-Me and N1-AHB groups on the previously developed NBs.

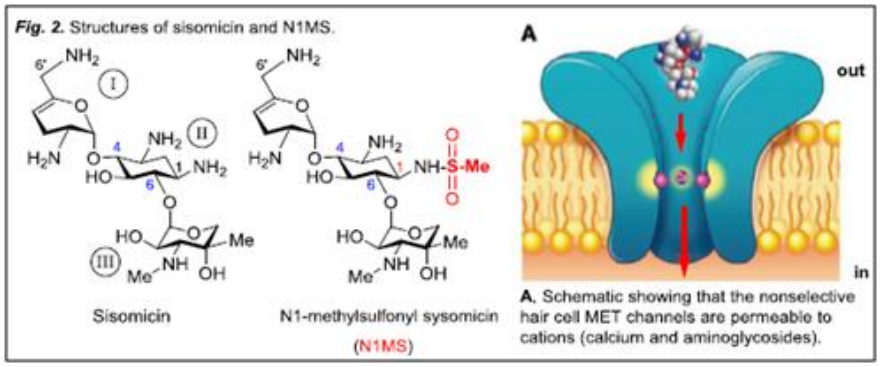
Note: one can argue that since NB156 showed better activity than its parent NB74, why we will not pursue this structure for further modification (e.g. attachment of N1-AHB) and development as the potential drug. Three arguments: (1) NB156 along with NB157 and NB158 are currently under the cochleotoxicity tests in Schachts' lab; the observed data will help us to see the potential therapeutic index of these compounds versus their parent NBs. If the data will found to be satisfactory, we will then attempt to continue their further development as well. (2) Because the lack of important data on the rescue of the functional protein in various disease models, we are largely hindered to make proposal in this direction (problems to obtain MTA from other collaborative groups). (3) Finally, since the establishment of the synthesis scheme towards the introduction of chiral 6',7'-diol in these series of compounds took us much efforts, and the current scheme includes rather several complicated synthetic steps, along with the highly increased cytotoxicity of the NB157 versus NB124, I decided to put those further perspectives in hold and promote those projects and compounds such as NB159-NB165 (Fig. 1) that I believe and fill that may open us new opportunities and discoveries.

Aim #2a – Modification of the developed NBs at N1-position for the production of non-ototoxic lead compounds: The major limiting side effects of aminoglycoside antibiotics is permanent hearing impairment, which is detected in approximately 20% of treated patients using conventional audiometry. Even though, our developed lead NB-compounds were proved in exhibiting significantly reduced ototoxicity potential, this toxicity issue is still somewhat problematic and introduces "red light mark" for all aminoglycosides for clinical development as a drug. This issue is especially more relevant when the aminoglycoside-based drug is used for the treatment of genetic diseases; because the compound must be administered to the patients for the lifelong. Therefore, the continuous attempts towards new designer structures towards eliminating their ototoxic effects, while preserving their potent readthrough activity, should be of our top priority.

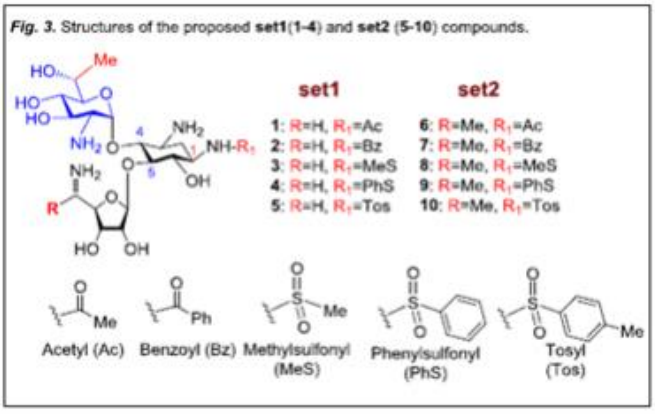
Towards these ends I suggest here to apply those most recent developments in this field that provided important and interested results. One of such most recent approaches considers the modification of aminoglycosides so to reduce the ability of the drug to entry into hair cells via mechanotransducer (MET) channels (Fig 2A) and as such reducing its ototoxic effects.[1] In this work, nine derivatives of the aminoglycoside antibiotic sisomicin have been synthesized by modification of the parent drug at N1 position (ring II), at N3'' position (ring III) and at both N1 and N3". The modifications included acylation of the amine moiety(s) either by different simple acyl groups (e.g. acetate or benzoate) or by alkyl- and aryl sulfonyl groups (e.g. methylsulfonyl, arylsulfonyl). It was hypothesized that since the resulted N-acyl derivatives of sisomicin

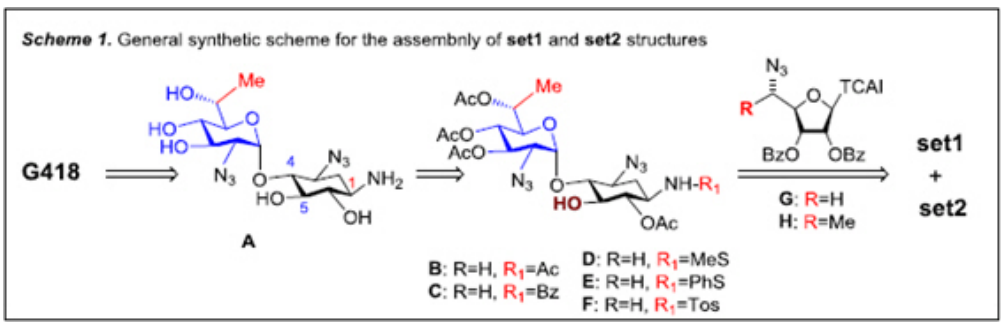
exhibit one less positive charge, the compounds can still bind to their ribosomal target with sufficient affinity to exert the required antibacterial activity, while in parallel their entry to the cochlear cells will be significantly reduced due to inhibition of MET channels. Interestingly, all 9 derivatives were displayed no or reduced ototoxicity and the lead compound N1MS was found 17 times less ototoxic and with significantly reduced penetration of hair cell MET channels in rat cochlear cultures (Fig 2). Moreover, systemic sisomicin treatment of mice resulted in 75% to 85% hair cell loss and profound hearing loss, whereas N1MS treatment preserved both hair cells and hearing. *These are indeed excellent observations!* Note that they did not test whether the observed reduced ototoxicity of N1MS is primarily due its reduced entry into the mitochondria, or may because the reduced inhibition of mitochondrial translation. Nevertheless the observed data with N1MS is very important and definitely provides support to the concept that the targeted modification of aminoglycoside so to inhibit its entry into the mitochondria through the mechanotransducer channels provides important new tool for the generation of nonototoxic aminoglycosides.

Based on these observations, the first question that I asked was: why we will not do the similar modifications on our NBs as well? After all, this tool can definitely be supplementary way to further decrease the ototoxicity potential of our NBs, which should be our most important priority. Of course, the question is how much damage such modification can cause to the readthrough potency of NBs? Note that 3 out 9 compounds synthesized and tested by Hurt et al. exhibited comparable anti *E. coli* activities to the parent compound sisomicin.[1] This is an excellent observation and encouraged us to pursue this strategy towards synthesis of new derivatives of NBs with diminished ototoxicity.



Initially we propose to synthesize the compounds of **set1** and **set2** structures (Fig. 3). The only difference between these two sets of compounds is the presence of chiral 5''-Me group in **set2** compounds while this is lack in **set1** compounds. The rationale in choosing these particular structures is that all these 10 different compounds can be easily accessed from the known intermediate compound **A** as illustrated in Scheme 1. Selective N-acylation of the compound **A** with different acylating groups followed by selective acetylation will afford a series of fife different acceptors **B-F**. Glycosylation of each of these acceptors separately by either the known trichloroacetimidate (TCAI) donor **G** or **H** followed by sequential two deprotecting steps will afford the target library of 10 different compounds of **set1** and **set2**. The final products will then be subjected for the comparative readthrough and toxicity tests as we performed in our earlier studies. Compounds of set1 are the N1-acyl derivatives of NB74 and the compounds of set2 are similar derivatives of NB124. Therefore, NB74 and NB124 will used as the parent compounds of the comparative studies of these sets of compounds. The compounds with good readthrough activity and low cytotoxicity will then be subjected for the initial cochleotoxicity tests in the laboratory of Prof. Jochen Schacht at the University of Michigan (?).

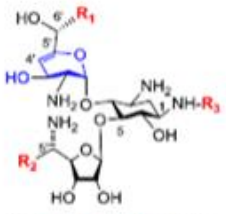




As the preliminary data in this direction (Master student is working on the project already!) we have prepared multigram quantities of compound A (Scheme 1) and successfully assembled selected examples of the acceptors B-F in small quantities for the tuning of the these crucial steps. Further coupling and deprotection steps are under current investigation.

Finally, since the lead compound N1MS (Fig. 2)[1] is the derivative of sisomicn that has very unique ring I (unsaturated ring), one can argue that structurally this ring may has some critical influence; the combination of ring-I structure with N1-acylation is critical for the efficient inhibition of MET channels by N1MS. This dilemma is supported by the fact that until now except sisomacin no other aminoglycosides of this class (4,6-disubstituted) or of the 4',5'-disubstituted class have been reported that their N1-modification could lead (or not) to the compounds with reduced ototoxicity. To test this hypothesis, we propose to assemble additional set of 3 compounds of **set3** (Fig 3). All these compounds exhibit similar unsaturated ring I of sisomicin (and of N1MS) and contain the most favorable N1-methylsulfonyl group as in the reported lead N1MS. Thus, the likelihood of **set3** compounds in exhibiting the desirable reduced ototoxicity is very high. Compound **11** can be easily accessed from the intermediate compound from the synthesis of our developed NB158 (Fig. 1). Similarly, the compounds **12** and **13** will be accessed from the intermediate pseudo-disaccharide compounds of the synthesis of NB159 and NB162, respectively.

Fig. 4. Designed **set3** structures.

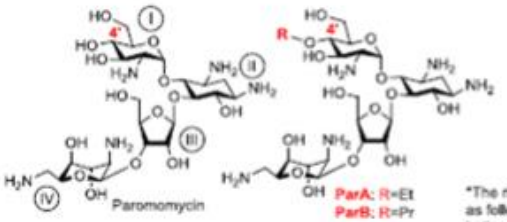


11: R_1=R_2=H; R_3=MeS
12: R_1=Me; R_2=H; R_3=MeS
13: R_1=Me; R_2=Me; R_3=MeS

Aim #2b – Modification of the developed NBs at C4'-position for the production of non-ototoxic lead compounds:

The second approach that recently been proved as a valid strategy towards developing new aminoglycoside antibiotics with reduced ototoxic potential is based on the works of Bottger and coworkers.[2,3] In this these works the authors demonstrate that simple alkylation of paromomycin at 4'-OH results new derivatives with similar or little reduced antibacterial activity but with significant reduction in their action on the mammalian cytoplasmic and mitochondrial ribosomes and subsequently with significant reduction in their ototoxicity potential. These works (and the follow-up publications) especially highlighted two new derivatives of paromomycin Par1 and Par2 (Fig. 5)[3] with excellent selectivity at the ribosomal target, promising antibacterial activity, and little, if any, ototoxicity upon chronic administration (note that in vivo ototoxicity of these lead compounds were tested by our collaborator J. Schacht who is also on the paper!). I would like to further note that even though they also resolved x-ray crystal structures of several new derivatives in complex with the bacterial ribosome, still they could not provide important structural information why these compounds exhibit such a large reduction in their ototoxicity potential. And the main reasons mentioned and tested were the selectivity increase of these compounds towards prokaryotic versus mammalian cytoplasmic and mitochondrial ribosomes. They determined the ribosomal damage index (Fig. 5) and found this damage are especially lower towards mitochondrial and cytoplasmic ribosomes for Par1 and Par2 in comparison to the parent paromomycin. Comparative in vivo ototoxicity test in guinea pigs showed that at 400 mg/kg dose compound Par1 has only little and Par2 no outer hair cell loss.

Fig. 5. Structures of paromomycin and lead compounds ParA and ParB with diminished ototoxicity.

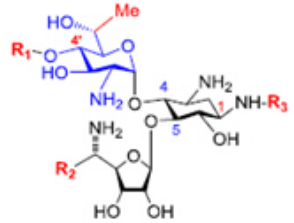


Ribosomal damage index*

	Mito (wt)	Cyto (rabbit)
Paro	5.0	120
ParA	0.8	16.5
ParB	1.5	14.0

*The ribosomal damage index is calculated as follows: 1/IC50 x misreading at IC50/misreading in the absence of the drug x 100.

Fig. 6. Designed **set4** structures.

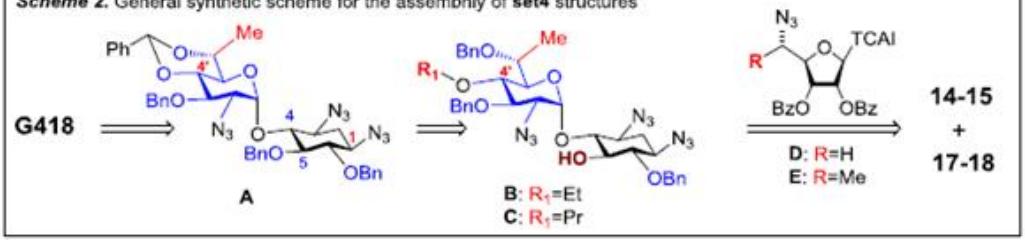


14: R_1=Et; R_2=H; R_3=H **17:** R_1=Et; R_2=Me; R_3=H
15: R_1=Pr; R_2=H; R_3=H **18:** R_1=Pr; R_2=Me; R_3=H
16: R_1=Bn; R_2=H; R_3=H **19:** R_1=Bn; R_2=Me; R_3=H

Based on these observations, we suggest testing similar modifications on our NBs with the aim to gain new derivatives with significantly reduced ototoxicity. Towards these ends we suggest to synthesize the new **set4** structures (Fig. 6). Initially, we will use the NB74 as the pseudo-trisaccharide scaffold and by introducing 4'-O-Ethyl, 4'-O-Propyl and 4'-O-Benzyl groups we will generate the target compounds **14**-**16** as potential leads with substantial read-through activity and reduced ototoxicity. The acceptors used for the preparation of these compounds will also serve us for the coupling with the second donor exhibiting the chiral methyl group to generate the desired second set of compounds, **17**-**19** (Fig. 6). The proposed general synthetic scheme towards the assembly of **set4** structures is illustrated in Scheme 2.

We will use G418 as starting material to assemble the intermediate disaccharide A (Scheme 2). The rational is to introduce here the 4',6'-benzylidene protection which can selectively opened by reductive opening to the 4'-OH intermediate. This intermediate then can be easily alkylated by attaching the desired 4'-ethyl and 4'-propyl alkyl groups selectively at 4'-position to afford the compounds B and C. Note that the intermediate A cannot be used for the synthesis of other, desired 4'-benzyl derivatives (compounds **16** and **19**, Fig. 6); since the other hydroxyls in A have already benzyl groups as protection, its selective removal from the 4' position cannot be done. Thus, for the preparation of **16** and **19** we should choose other groups that can be easily removed in the presence of benzyl ether! The acceptors B and C will then be separately subjected to the glycosylation step by two different donors D and E, followed by the de-protection steps to afford the desired structures **14**-**15** and **17**-**18**.

Scheme 2. General synthetic scheme for the assembnly of **set4** structures



The final products will then be subjected for the comparative readthrough and toxicity tests as we performed in our earlier studies. Compounds of **14**-**15** are 4'-alkyl derivatives of NB74 and the compounds **17**-**18** are similar derivatives of NB124. Therefore, NB74 and NB124 will be used as the parent compounds of the comparative studies of these sets of compounds. The compounds with good readthrough activity and low cytotoxicity will then be subjected for the initial cochleotoxicity tests in the laboratory of Prof. Jochen Schacht at the University of Michigan (?).

Finally, ***it is of note*** that while our previous data suggests that the ex-vivo tests of cochleotoxicity well correlated to the in vivo ototoxicity data, still this correlation should be considered as a preliminary observation and for the proper ototoxicity evaluation we will need in vivo studies to establish this issue appropriately. For this reason, the compounds that will show significant reduction in their initial cochleotoxicity tests, will further subjected for the in vivo tests.

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(2) Perez-Fernandez, D.; Shcherbakov, D.; Matt, T.; Leong, N. C.; Kudyba, I.; Duscha, S.; Boukari, H.; Patak, R.; Dubbaka, S. R.; Lang, K.; Meyer, M.; Akbergenov, R.; Freihofer, P.; Vaddi, S.; Thommes, P.; Ramakrishnan, V.; Vasella, A.; Böttger, E. C. *Nat. Commun*. **2014**, 5.

(3) Duscha S, Boukari H, Shcherbakov D, Salian S, Silva S, Kendall A, Kato T, Akbergenov R, Perez- Fernandez D, Bernet B, Vaddi S, Thommes P, Schacht J, Crich D, Vasella A, Böttger EC. Identification and evaluation of improved 4'-O-(alkyl) 4,5-disubstituted 2-deoxystreptamines as next-generation aminoglycoside antibiotics. *MBio.* **2014**, 5(5):e01827-14.

III. Proposed Budget (in US Dollars) and Time Frame

	The proposed task	Time Frame	Budget Requested	Remarks	Notes
Aim # 1					PI T. Baasov
	Synthesis of selected members from NB159-NB165.	6-12 months	$ 15,000	One postdoc/student dedicated.	
	Biological evaluations of all the new developed compounds.	6-12 months	$ 15,000	One postdoc/student dedicated.	
		Total Aim #1:	**$ 30,000**		
Aim # 2a					
	Synthesis of selected structures from **Set2-set3** series	8-12 months	$ 10,000	One postdoc/student dedicated.	
Aim # 2b					
	Synthesis of selected structures of **set4** series.	6-12 months	$ 10,000	One postdoc/student dedicated.	
		Total Aim #2:	**$ 20,000**		
		Grand total for the Aims # 1&2:	**$ 50,000**		

NOTE that the budget can only allow selected structures synthesis and evaluation and also does not include ex vivo studies (functional protein synthesis in MEFs for example) and in vivo studies required for the project completion and only can be done with additional funding of collaborators labs!

IV. Detailed Budget (in US Dollars)

Personnel:

	Role in project		% Time	Salary
1.	Lab. Assistant	Lab. Assistant	**50**	**12,000**
2.	Postdoctorant	Researcher	**50**	**12,000**
	Total:			**24,000**

Supplies:

1. Chemicals, absolute & deuterated solvents	18,000
2. Lab. equipment, glassware, plastic ware	2,000
3. Biochemicals	2,000
4. *In vitro* and *ex vivo* assay kits	2,000
5. Chromatography material for various purifications	1,000
6. NMR and Mass Spectrometry tests	1,000
Total:	26,000
Grand Total:	**$50,000**

Budget Justification:

The requests for laboratory assistant and postdoctorant for the duration of the grant period are in recognition of the amount of work required in this project. Considerable effort will be expended in the syntheses of various lead compounds discussed in the proposal, their structure determination and analysis, assays for their activity. The request for materials, supplies, and chemicals/biochemicals is an important part for a successful development and completion of the project.

V. Investigators' Curriculum Vitae

Surname: Baasov First name: Timor
Birthdate: January 3, 1954

(a) Education Background

From-To	Institution	Area of specialization	Degree
1981-1986	Weizmann Institute of Science	Chemistry	Ph. D.
1977-1979	Tel-Aviv University	Chemistry	M. Sc.
1975-1977	Tel-Aviv University	Chemistry	B. Sc.

Major research interest: Carbohydrate chemistry, Bioorganic and medicinal chemistry, Drug design and development, Rational design of substrate and inhibitors, Mechanistic enzymology.

(b) Employment

From-To	Institution	Research area	Title
2004-	Technion	Bioorganic Chemistry	Professor
3/1998-8/1998	The Scripps Research Institute, Cal	Bioorganic Chemistry	Visiting Prof.
1998-2003	Technion	Bioorganic Chemistry	Assoc. Prof.
1990-1998	Technion	Bioorganic Chemistry	Senior Lecturer
1988-1990	Technion	Bioorganic Chemistry	Lecturer
1986-1988	Harvard University	Bioorganic Chemistry	Post-Doct. Res.

VI. T. Baasov - List of Publications last three years (2012-2015)

1. D. Wang , V. Belakhov, J. Kandasamy, **T. Baasov**, S-C. Li, Y-T Li, D.M. Bedwell, K.M. Keeling. The designer aminoglycoside NB84 significantly reduces glycosaminoglycan accumulation associated with MPS I-H in the Idua-W392X mouse. *Molecular Genetics and Metabolism* **105**, 116-125 (2012).

2. T. Goldmann, N. Overlack, F. Möller, V. Belakhov, M. van Wyk, **T. Baasov**, U. Wolfrum, and K. Nagel-Wolfrum. A comparative evaluation of NB30, NB54 and PTC124 in translational read-through efficacy for treatment of an USH1C nonsense mutation. *EMBO Molecular Medicine*, **4**, 1-14, (2012).

3. J. Kandasamy, D. Atia-Glikin, E. Shulman, K. Shapira, M. Shavit, V. Belakhov **T. Baasov**. Increased Selectivity toward Cytoplasmic versus Mitochondrial Ribosome Confers Improved Efficiency of Synthetic Aminoglycosides in Fixing Damaged Genes: A Strategy for Treatment of Genetic Diseases Caused by Nonsense Mutations. *J. Med. Chem.* **55**(23), 10630-10643 (2012).

4. M. Schalev, J. Kandasamy, N. Skalka, V. Belakhov, R. Rosin-Arbesfeld, **T. Baasov**. Development of generic immunoassay for the detection of a series of aminoglycosides with 6'-OH group for the treatment of genetic diseases in biological samples. *Journal of pharmaceutical and biomedical analysis*. **75**, 33-40 (2013).

5. K.M. Keeling, D. Wang, Y. Dai, S. Murugesan, B. Chenna, J. Clark; V. Belakhov, J. Kandasamy, S.E. Velu, **T. Baasov**, D.M. Bedwell. Attenuation of Nonsense-Mediated mRNA Decay Enhances In Vivo Nonsense Suppression. *PLoS ONE* **8** (4), e60478 (2013).

6. M. Schalev, J. Kondo, D. Kopelyanskiy, C.L. Jaffe, N. Adir, **T. Baasov**. Identification of the molecular attributes required for Aminoglycoside activity against *Leishmania. PNAS* **110** (33), 13333-13338 (2013).

7. M. Kamei, K. Kasperski, M. Fuller, E. Parkinson-Lawrence, L. Karageorgos,, V. Belakhov, **T. Baasov**, J.J. Hopwood, D.J. Brooks. Aminoglycoside-Induced Premature Stop Codon Read-Through of Mucopolysaccharidosis Type I Patients Q70X and W402X Mutations in Cultured Cells. *Journal of Inherited Metabolic Disease Reports*. **13**, 139-147 (2014)

8. X. Xue, V. Mutyam, L.P. Tang, S. Biswas, M. Du, L. A. Jackson, Y. Dai, V. Belakhov, M. Shalev, F. Chen, J. Schacht, R. Bridges, **T. Baasov**, J. Hong, D. M. Bedwell, S.M. Rowe. Synthetic Aminoglycosides Efficiently Suppress CFTR Nonsense Mutations and Are Enhanced by Ivacaftor. *Am. J. Respir. Cell Mol. Biol.* **50** (4), 805- 816 (2014).

9. E. Shulman, V. Belakhov, G. Wei, A. Kendall, E. G. Meyron-Holtz, D. Ben-Shachar, J. Schacht, **T. Baasov**. Designer aminoglycosides that selectively inhibit cytoplasmic rather than mitochondrial ribosomes show decreased ototoxicity: a strategy for the treatment of genetic diseases. *J. Biol. Chem.* **289**(4), 2318-2330 (2014).

10. G. Gunn, Y. Dai, M. Du, V. Belakhov, J. Kandasamy, T.R. Schoeb, **T. Baasov**, D.M. Bedwell, K.M. Keeling. Long-term nonsense suppression therapy with NB84 moderates MPS IH disease progression. *Molec. Genet. Metabol.* **111**, 374-381 (2014).

11. M. Shalev, **T. Baasov**. When Proteins Start to Make Sense: Fine-tuning of Aminoglycosides for PTC Suppression Therapy. *Med. Chem. Commun.* **5**, 1092-1105 (2014). ***Invited Review Perspective Article***

12. M. Schalev, H. Rozenberg, B. Smolkin, A. Nasereddin, D. Kopelyanskiy, V. Belakhov, T. Schrepfer, J. Schacht, C. L. Jaffe, N. Adir, **T. Baasov**. Structural Basis for Selective Targeting of Leishmanial Ribosomes: Aminoglycoside Derivatives as Promising Therapeutics. *Nucleic Acids Research*, **43**(17), 8601-8613 (2015).

13. K.K. Wang, L.K. Stone, T.D. Lieberman, M. Shavit, **T. Baasov***, **R. Kishony***. A Hybrid Antibiotic Restricts Evolutionary Paths to Resistance. *Molecular Biology and Evolution* **2015** (accepted).

14. F. Meng, D. Srisai, X. Zhou, W. Cheng, S. Dong, V. Belakhov, Y. Xu, R.D. Palmiter, **T. Baasov**, Qi Wu. A Nonsense Suppression-Based Gene Targeting System Reveals Novel Insights in Neural Control of Feeding and Metabolism. **2015** (submitted).

Chapters in Books and other Publications

1. V. Mutyam, X. Xue, X. Jackson, L. Hong, S. Biswas, D. Bridges, **T. Baasov**, V. Belakhov, D. Bedwell, S. Rowe. Use of transepithelial conductance as a screening technique for identification of drugs that promote readthrough of premature stop codons. *Pediatric Pulmonology* 48, page 232 (supplement 36; meeting abstract). ISSN: 8755-6863 (2013).

2. K. Nagel-Wolfrum, **T. Baasov**, U. Wolfrum. Therapy strategies for Usher syndrome Type 1C in the retina. *Advances in experimental medicine and biology*. Vol. 801, pp. 741-747 (2014).

3. **T. Baasov**, M. Fridman. Foreword-The 17th European Carbohydrate Symposium-EuroCarb17. *Carbohydrate Research* **389**, 1 (2014). (Guest Editor of the special issue.)

4. S. Garneau-Tsodikova, **T. Baasov**. Editorial – Carbohydrates Themed Issue. *Med. Chem. Commun.*, **5**, 1010- 1013 (2014). (Guest Editor of the special issue.)

5. **T. Baasov**, Micha Fridman and Daniel Werz. Carbohydrates: Special Issue in Honor of the 2014 Wolf Prize Laureate in Chemistry, Professor Chi-Huey Wong. Guest Editors of the special issue. Editorial - *Isr. J. Chem.* **55**, 253 (2015).

Exhibit 10.12

EIGHTH ADDENDUM

TO THE RESEARCH AND LICENSE AGREEMENT

This Eighth Addendum to Research and License Agreement (the "**Eighth Addendum**") is made by and between The Technion Research & Development Foundation Ltd. ("**TRDF**") and Eloxx Pharmaceuticals Ltd. ("Licensee" or "Eloxx").

Whereas, TRDF and Eloxx are parties to a Research and License Agreement with an effective date of August 29, 2013 (the "**License Agreement**"), as amended on November 26, 2013, January 14, 2014, June 9, 2014, August 3, 2014, January 21, 2015, February 9, 2015, April 29", 2015, June 2, 2015, January 1, 2016 and March 6, 2016 (collectively, the "**Agreement**"); and

WHEREAS, the parties desire to continue the relationship contemplated by the Agreement and to further amend the Agreement as set forth herein;

NOW, THEREFORE, the parties hereby agree as follows:

1. Unless otherwise defined herein, capitalized terms used in this Eighth Addendum shall have the meanings assigned thereto in the Agreement.
2. Exhibit A to the Agreement shall be updated to include those patents and patent applications described in **Exhibit A** attached hereto.
3. Except as added herein, all other terms and conditions of the Agreement shall remain in full force and effect, as relevant to this Eighth Addendum.
4. This Eighth Addendum may be executed in counterparts, each of which shall be deemed an original and all of which together shall constitute one and the same instrument. Any signature page delivered by facsimile or electronic image transmission shall be binding to the same extent as an original signature page.

IN WITNESS WHEREOF, the parties hereby accept and agree to the terms and conditions of this First Addendum.

ELOXX PHARMACEUTICALS LTD.

By: /s/ Silvia Norman
Name: Silvia Norman
Title: CEO
Date: 7/16/2017

THE TECHNION RESEARCH & DEVELOPMENT FOUNDATION LTD.

By: /s/ Rita Bruckstein
Name: Rita Bruckstein
Title: Research Authority Director
Date: 7/12/2017

Exhibit A

Additional Patents and Patent Applications

AMINOGLYCOSIDE DERIVATIVES AND USES THEREOF IN TREATING GENETIC DISORDERS

Our Ref Client Ref	Country	Earliest Priority	Entry Date	Filing Date Application No.	Publication Date + No. Issue Date + Patent No.	Next Action	Status	Assignee Inventor
Ref 70047	USA PRO			05-June-2017 62/515,021		Foreign Filing Due 05-June-2018	Filed	Eloxx Pharmaceuticals Ltd. Timor BAASOV, Vera FIRZON, Valery BELAKHOV and Bat-Hen ZALMAN

Exhibit 10.13

NINTH ADDENDUM
TO THE RESEARCH AND LICENSE AGREEMENT

This Ninth Addendum to Research and License Agreement (the "**Ninth Addendum**") is made by and between the Technion Research and Development Foundation Ltd. ("**TRDF**") and Eloxx Pharmaceuticals Ltd. ("**Licensee**" or "**Eloxx**").

Whereas, TRDF and Eloxx are parties to a Research and License Agreement with an effective date of August 29th, 2013 (the "**License Agreement**"), as amended on November 26th, 2013, January 14th, 2014, June 9th, 2014, August 3rd, 2014, January 21st, 2015"), February 9th 2015, April 29th, 2015, June 2nd, 2015, January 1st, 2016, March 6th, 2016 and June __, 2017 (collectively, the "**Agreement**"); and

Whereas, according to Section 1.26 to the License Agreement, as amended, all previous Research Periods have ended and related Research Plans were all completed respectively;

Whereas, the parties desire to extend and continue the Research Period and the Research for a fourth year; and

Whereas, the parties desire to continue the relationship contemplated by the Agreement and therefore to further amend the Agreement as set forth herein;

NOW, THEREFORE, the parties hereby agree as follows:

1. Unless otherwise defined herein, capitalized terms used in this Seventh Addendum shall have the meaning assigned thereto in the Agreement.
2. The parties wish to extend the Research Period for a fourth year, commencing on May 1st 2017 for twelve (12) months until April 30th, 2018 ("**Fourth Research Period**"). The extension shall be on the same terms and conditions as contained in the Agreement unless otherwise agreed in this Seventh Addendum.
3. Exhibit D to the Agreement is hereby replaced with a new Exhibit D attached hereto ("**Fourth Research Plan**").
4. The parties wish to set the terms for the funding for the performance of the Fourth Research Plan during the Fourth Research Period, and replace section 2.2.1 of the License Agreement, as follows:
    a) Licensee shall fund the Research to be performed during the Fourth Research Period under the Fourth Research Plan in the total amount of fifty thousand US Dollars ($50,000) in accordance with the following schedule:
        1) First installment of twenty thousand US Dollars ($25,000) shall be paid upon signing this Ninth Addendum.
        2) Second installment of twenty thousand US Dollars ($25,000) shall be paid upon completion of the Fourth Research Plan and no later than April 30th, 2018.
    b) V.A.T as applicable on time of payment shall be added to each installment.
    c) TRDF shall issue a proper invoice for each installment.

5. Except as amended herein, all other terms and conditions of the Agreement shall remain in full force and effect.

ELOXX PHARMACEUTICALS LTD.

By: /s/ Silvia Noiman
Name: Dr. Silvia Noiman, CEO
Date: July 16, 2017

THE TECHNION RESEARCH & DEVELOPMENT FOUNDATION LTD.

By: /s/ Rita Bruckstein
Name: /s/ Rita Bruckstein
Date: 07-12-2017

Exhibit 10.15

MEMORANDUM OF UNDERSTANDING

This Memorandum of Understanding ("Agreement") is made by and between Silvia Noiman ("Noiman") and Eloxx Pharmaceuticals (the "Company") (collectively referred to as the "Parties" or individually referred to as a "Party").

WHEREAS, Noiman entered into a Consulting and Services Agreement with the Company dated October 15, 2013 ("First Consulting Agreement");

WHEREAS, Noiman entered into a Consulting and Services Agreement with the Company dated December 1, 2014 ("Second Consulting Agreement");

WHEREAS, Noiman entered into an Amendment to Consulting and Services Agreement with the Company dated January 11, 2017 ("Amendment");

WHEREAS, the Company and Noiman have entered into Stock Option Agreements for option grants dated April 2014, November 2014, January 2016, and July 2017 granting Noiman options to purchase shares of the Company's common stock (collectively, the "Option") subject to the terms and conditions of the Company's Share Ownership and Option Plan (2013) and the Stock Option Agreements (collectively the "Stock Agreements");

WHEREAS, the Company terminated it service relationship with Noiman, other than as a member of the Board of Directors, effective January 15, 2018, including but not limited to under the First Consulting Agreement, Second Consulting Agreement, and Amendment; and

NOW, THEREFORE, in consideration of the mutual promises made herein, the Company and Noiman hereby agree as follows:

1. Consideration. In consideration of Noiman' s execution of this Agreement and Noiman's fulfillment of all of its terms and conditions, the Company agrees as follows:

a. Payment. The Company agrees to pay Noiman a lump sum total of Nine Hundred Thousand New Israeli Shekels (900,000 NIS), provided within ten (10) business days after the Effective Date ofthis Agreement. Noiman shall issue a valid tax invoice and receipt to the Company upon receipt of the payment hereunder. Noiman shall be solely responsible to pay all taxes, levies, social benefits, insurance payments and any other payments required by law due in connection with this Agreement and payments hereunder.

b. Equity Incentive Grants. The Parties agree that they have reached an agreement pursuant to which it will be recommended to the Company's Board of Directors that the Company grant Noiman a fully vested option to purchase 141,389 shares of the Company's common stock and 141,389 fully vested shares of the Company's common stock as soon as practicable after the Company's adoption of its 2018 Equity Incentive Plan, with stock option grant to be priced as of the closing price on the date of grant thereof. Such awards shall be subject to this Agreement becoming effective and Noiman continuous service as a Director through such grant date.

2. Stock Option Vesting. Notwithstanding the termination of the consulting relationship between the Parties, including termination of the First Consulting Agreement, Second Consulting Agreement, and Amendment, the Parties agree that Noiman shall continue to vest in any existing Stock Option agreements during such time that Noiman is a Director. All other terms regarding Stock Options in the First, Second and Amendment shall remain unchanged.

3. Release of Claims. Noiman agrees to waive any notice of termination or payment in lieu thereof required under the First Consulting Agreement, Second Consulting Agreement, or Amendment, or any agreement with the Company. Noiman agrees that the foregoing consideration represents settlement in full of all outstanding obligations owed to Noiman by the Company and its current and former officers, directors, employees, agents, investors, attorneys, shareholders, administrators, affiliates, benefit plans, plan administrators, professional employer organization or co-employer, insurers, trustees, divisions, and subsidiaries, and predecessor and successor corporations and assigns (collectively, the "Releasees"). Noiman, on Noiman's own behalf and on behalf of Noiman's respective heirs, family members, executors, agents, and assigns, hereby and forever releases the Releasees from, and agrees not to sue concerning, or in any manner to institute, prosecute, or pursue, any claim, complaint,

charge, duty, obligation, demand, or cause of action relating to any matters of any kind, whether presently known or unknown, suspected or unsuspected, that Noiman may possess against any of the Releasees arising from any omissions, acts, facts, or damages that have occurred up until and including the Effective Date of this Agreement. Noiman agrees that the release set forth in this section shall be and remain in effect in all respects as a complete general release as to the matters released. This release does not extend to any obligations incurred under this Agreement. This release does not release claims that cannot be released as a matter of law. Noiman represents that Noiman has made no assignment or transfer of any right, claim, complaint, charge, duty, obligation, demand, cause of action, or other matter waived or released by this Section.

4. Effective Date. This Agreement will become effective on the date it has been signed by both Parties (the "Effective Date").

5. Governing Law. This Agreement shall be governed by the laws of the Commonwealth of Massachusetts, without regard for choice-of-law provisions. Employee consents to personal and exclusive jurisdiction and venue in the Commonwealth of Massachusetts.

6. Entire Agreement. This Agreement represents the entire agreement and understanding between the Company and Employee concerning the subject matter of this Agreement and Employee's employment with and separation from the Company and the events leading thereto and associated therewith, and supersedes and replaces any and all prior agreements and understandings concerning the subject matter of this Agreement and Employee's relationship with the Company, including the Amendment, with the exception of Sections 4, 5, 6, 8, and 9 of both the First Consulting Agreement and Second Consulting Agreement, and the Stock Agreements.

7. Voluntary Execution of Agreement. Noiman understands and agrees that Noiman executed this Agreement voluntarily, without any duress or undue influence on the part or behalf of the Company or any third party, with the full intent of releasing all of Noirnan' s claims against the Company and any of the other Releasees. Noiman acknowledges that:

(a) Noiman has read this Agreement;

(b) Noiman has been represented in the preparation, negotiation, and execution of this Agreement by legal counsel of Noiman's own choice or has elected not to retain legal counsel;

(c) Noiman understands the terms and consequences of this Agreement and of the releases it contains; and

(d) Noiman is fully aware of the legal and binding effect of this Agreement.

IN WITNESS WHEREOF, the Parties have executed this Agreement on the respective dates set forth below.

SILVIA NOIMAN, an individual

Dated: March 13, 2018

/s/ Silvia Noiman
Silvia Noiman

ELOXX PHARMACEUTICALS

Dated: March 13, 2018

By /s/ Robert Ward
Robert Ward
Chairman and CEO

EXECUTIVE EMPLOYMENT AGREEMENT

This EXECUTIVE EMPLOYMENT AGREEMENT (the "Agreement") between Eloxx Pharmaceuticals, Inc. (the "Company"), and Gregory Weaver (the "Executive") is dated as of March 12, 2018 and shall become effective on March 12, 2018 (the "Effective Date").

W I T N E S S E T H:

WHEREAS, the Company desires the Executive to provide employment services to the Company, and wishes to provide the Executive with certain compensation and benefits in return for such employment services; and

WHEREAS, the Executive wishes to be employed by the Company and to provide employment services to the Company in return for certain compensation and benefits;

NOW THEREFORE, in consideration of the foregoing, of the mutual promises contained herein and of other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereto hereby agree as follows:

1. **EMPLOYMENT TERM**. The Company hereby offers to employ the Executive, and the Executive hereby accepts employment by the Company, upon the terms and conditions set forth in this Agreement, during the period commencing on the Effective Date and ending on the date of the termination of the Executive's employment in accordance with Section 6 below (the "Employment Term"). The Executive shall be employed at will, meaning that either the Company or the Executive may terminate this Agreement and the Executive's employment at any time, for any reason or no reason, with or without cause, subject to the terms of this Agreement.

2. **POSITION & DUTIES**.

(a) Except as provided in Section 2(b) below, the Executive shall serve as the Chief Financial Officer of the Company and its US subsidiary, Eloxx Pharmaceuticals U.S. Sub, Inc. during the Employment Term. As Chief Financial Officer, the Executive shall have such duties, authorities and responsibilities as are commensurate with the position of Chief Financial Officer and such other duties and responsibilities as the Company's Chief Executive Officer shall designate that are consistent with the Executive's position as Chief Financial Officer.

(b) During the Employment Term, the Executive agrees to devote his full business time, attention and energies to the performance of all of the lawful duties, responsibilities and authority that may be assigned to him hereunder. Nothing contained in this Agreement will preclude the Executive from (i) devoting time to personal and family investments, (ii) serving as a director of any not-for-profit company, (iii) serving as a director for Atossa Genetics, Egalet Corporation, and any other for-profit company that is approved by the Board of Directors (the "Board") (such approval not to be unreasonably withheld) or (iv) from participating in charitable or industry associations, in each case, provided that such activities or services do not (x) materially interfere with the Executive's performance of duties hereunder or (y) violate the terms of the Confidentiality Agreement (as defined below).

(c) During the Employment Term, the Executive's principal place of employment shall be the Company's offices in Waltham, Massachusetts, subject to customary business travel consistent with the Executive's duties and responsibilities.

3. **BASE SALARY**. The Company agrees to pay the Executive a base salary (the "Base Salary") at an annual rate of US$345,000. The Base Salary will be payable bimonthly in accordance with the regular payroll practices of the Company. The Executive's Base Salary shall be subject to review by the Company's Chief Executive Officer at least annually and may be increased, but not decreased, from time to time by the Company's Chief Executive Officer. The base salary as determined herein from time to time shall constitute "Base Salary" for purposes of this Agreement.

4. **BONUSES**.

(a) ANNUAL BONUS. With respect to each full calendar year during the Employment Term, the Executive shall be eligible to earn an annual, performance-based bonus (an "Annual Bonus") with a target bonus value equal to forty percent (40%) of the Executive's Base Salary (the "Target Bonus") based upon the achievement of performance targets, which shall be established by the Board (or a committee thereof) in consultation with the Executive within the first 90 days of each calendar year during the Employment Term, with the actual amount of the Annual Bonus for a particular year determined by the Board (or a committee thereof) in its discretion. The Board (or a committee thereof) shall consider the Executive's performance in the entire 2018 calendar year without regard to the Effective Date when determining the Executive's Annual Bonus for the 2018 calendar year. Subject to Section 7 below, in order to be eligible for an Annual Bonus, the Executive must remain employed for the entire calendar year for which the performance targets will have been set. Any Annual Bonus earned by the Executive will be paid no later than March 15 of the calendar year immediately following the calendar year in which the Annual Bonus is being measured. The Executive's Target Bonus shall be subject to review by the Board (or a committee thereof) at least annually and may be increased, but not decreased, from time to time by the Board.

5. **EMPLOYEE BENEFITS**.

(a) BENEFIT PLANS. The Executive shall be entitled to participate in all employee benefit plans that the Company generally makes available to its senior executives (other than severance plans) from time to time, including any group health plans, dental plans, life, disability and AD&D insurances, a 401(k) plan, tuition reimbursement, recreation allowance, parking or public transportation and various types of paid time off, subject to the terms and conditions of such benefit plans. The Company shall adopt vision, health, dental and 401(k) plans no later than April 1, 2018. Until the Company does have such plans adopted, the Company will reimburse the Executive for 100% of the cost of COBRA insurance coverage from Executive's prior employer, as well as for costs of dental treatments otherwise covered by the Executive's current dental plan.

(b) VACATION. The Executive shall be entitled to twenty (20) days of paid vacation per year, in accordance with the Company's vacation policy; provided that the Executive shall be entitled to twenty-five (25) days of paid vacation per year after three (3) full calendar years of employment. Vacation may be taken at such times as the Executive elects with due regard to the needs of the Company.

(c) BUSINESS EXPENSES. The Company will reimburse the Executive for all reasonable business expenses incurred by the Executive in connection with the discharge of his duties for the Company, subject to the Company's expense reimbursement policy in effect from time to time.

(d) INDEMNIFICATION. The Company shall indemnify the Executive to the maximum extent that its officers, directors and employees are entitled to indemnification pursuant to the Company's Certificate of Incorporation and Bylaws for any acts or omissions by reason of being a director, officer or employee of the Company as of the Effective Date. At all times during the Employment Term, the Company shall maintain in effect a director and officers liability insurance policy with the Executive as a covered officer and director.

6. **TERMINATION**. The Executive's employment and the Employment Term shall terminate on the first of the following to occur:

(a) DISABILITY. Upon the 30th day following the Executive's receipt of notice of the Company's intention to terminate the Executive's employment due to Disability (as defined in this Section 6(a)); provided that, the Executive has not returned to full-time performance of his duties within 30 days after receipt of such notice. If the Company determines in good faith that the Executive's Disability has occurred during the term of this Agreement, it will give the Executive written notice of its intention to terminate his employment. For purposes of this Agreement, "Disability" shall mean the Executive's inability to substantially perform the essential duties of his job with or without reasonable accommodation on a full-time basis for 180 calendar days during any consecutive twelve-month period or for 90 consecutive days as a result of incapacity due to mental or physical illness.

(b) DEATH. Automatically on the date of death of the Executive.

(c) CAUSE. Immediately upon written notice by the Company to the Executive of a termination for Cause. "Cause" shall mean (i) the Executive's commission of an act of fraud, embezzlement or theft against the Company or its subsidiaries; (ii) the Executive's conviction of, or a plea of no contest to, a felony; (iii) willful nonperformance by the Executive (other than by reason of illness) of his material duties as an employee of the Company, which, to the extent it is curable by the Executive, is not cured within thirty (30) days after written notice thereof is given to the Executive by the Company; (iv) the Executive's material breach of this Agreement or any other material agreement between the Executive and the Company or any of its subsidiaries, including the Confidentiality Agreement, which, to the extent it is curable by the Executive, is not cured within thirty (30) days after written notice thereof is given to the Executive by the Company; or (v) the Executive's gross negligence, willful misconduct or any other act of willful disregard for the Company's or any of its subsidiaries' best interests, which, to the extent it is curable by the Executive, is not cured within thirty (30) days after written notice thereof is given to the Executive by the Company.

(d) WITHOUT CAUSE. Upon written notice by the Company to the Executive no earlier than eighteen (18) months after the Effective Date of an involuntary termination without Cause and other than due to death or Disability.

(e) GOOD REASON. "Good Reason" for the Executive to terminate the Executive's employment hereunder shall mean the occurrence of any of the following conditions during the Employment Term without the Executive's express written consent; provided that any resignation by the Executive due to any of the following conditions shall only be deemed for Good Reason if: (i) the Executive gives the Company written notice of the intent to terminate for Good Reason within sixty (60) days following the first occurrence of the condition(s) that the Executive believes constitutes Good Reason, which notice shall describe such condition(s); (ii) the Company fails to remedy, if remediable, such condition(s) within thirty (30) days following receipt of the written notice (the "Cure Period") of such condition(s) from the Executive; and (iii) the Executive actually resigns his employment within the first thirty (30) days after expiration of the Cure Period:

(1) any material reduction by the Company of the Executive's Base Salary or Target Bonus as initially set forth herein or as the same may be increased from time to time;

(2) any material diminution in the Executive's duties, title, responsibilities or authority;

(3) a requirement that the Executive report to a corporate officer or employee other than the Company's Chief Executive Officer, other than any such requirement following a Significant Event (as defined in the Company's 2013 Share Ownership and Option Plan);

(4) any material breach of this Agreement, including a breach of the Company's obligations under Section 4, 5, or 10(b); or

(5) a requirement that the Executive relocate to a principal place of employment more than seventy-five (75) miles from Waltham, Massachusetts.

(f) WITHOUT GOOD REASON. The Executive shall provide two (2) weeks' prior written notice (the "Transition Period") to the Company of the Executive's intended termination of employment without Good Reason ("Voluntary Termination"). During the Transition Period, the Executive shall assist and advise the Company in any transition of business, customers, prospects, projects and strategic planning, and the Company shall pay the pro rata portion of the Executive's Base Salary and benefits through the end of the Transition Period. The Company may, in its sole discretion, upon written notice to the Executive, make such termination of employment effective earlier than the expiration of the Transition Period ("Early Termination Right"), but it shall pay the pro rata portion of the Executive's Base Salary and benefits through the earlier of: the end of the Transition Period, or the date that the Executive accepts employment or a consulting engagement from a third party.

7. **CONSEQUENCES OF TERMINATION**. Any termination payments made and benefits provided under this Agreement to the Executive shall be in lieu of any termination

or severance payments or benefits for which the Executive may be eligible under any of the plans, policies or programs of the Company or its affiliates as may be in effect from time to time. Subject to satisfaction of each of the conditions set forth in Section 8, the following amounts and benefits shall be due to the Executive:

(a) DISABILITY. Upon employment termination due to Disability, the Company shall pay or provide the Executive: (i) any unpaid Base Salary through the date of termination and any accrued vacation; (ii) reimbursement for any unreimbursed expenses owed to Executive; and (iii) all other payments and benefits to which the Executive is entitled under the terms of any applicable compensation arrangement or benefit, equity or other plan or program, including but not limited to any applicable insurance benefits, payable on the next regularly scheduled Company payroll date following the date of termination or earlier if required by applicable law (collectively, "Accrued Amounts"). In addition, upon the Executive's termination due to Disability, the Company shall pay the amounts described in Sections 7(d)(3) and 7(d)(4) to the Executive.

(b) DEATH. In the event the Employment Term ends on account of the Executive's death, the Executive's estate (or to the extent a beneficiary has been designated in accordance with a program, the beneficiary under such program) shall be entitled to any Accrued Amounts, including but not limited to proceeds from any Company sponsored life insurance programs. In addition, upon the Executive's death, the Company shall pay the amounts described in Sections 7(d)(3) and 7(d)(4) to the Executive's estate.

(c) TERMINATION FOR CAUSE OR WITHOUT GOOD REASON. If the Executive's employment should be terminated (i) by the Company for Cause, or (ii) by the Executive without Good Reason, the Company shall pay to the Executive any Accrued Amounts only, and shall not be obligated to make any additional payments to the Executive.

(d) TERMINATION WITHOUT CAUSE OR FOR GOOD REASON. If the Executive's employment by the Company is terminated by the Company other than for Cause (and not due to Disability or death) or by the Executive for Good Reason, other than in circumstances described in Section 7(e), then the Company shall pay or provide the Executive with the Accrued Amounts and subject to compliance with Section 9:

(1) continued payment of the Executive's Base Salary as in effect immediately preceding the last day of the Employment Term for a period of twelve (12) months following the termination date (the "Salary Severance Period") in accordance with the Company's ordinary payroll practices (for purposes of calculating the Executive's severance benefits, the Executive's Base Salary shall be calculated based on the rate in effect prior to any material reduction in Base Salary that would give the Executive the right to resign for Good Reason (as provided in Section 6(e)(1))));

(2) if the Executive timely elects continued coverage under COBRA for himself and his covered dependents under the Company's group health plans following such termination, then the Company shall pay the COBRA premiums necessary to continue the Executive's and his covered dependents' health insurance coverage in effect on the termination date until the earliest of (i) twelve (12) months following the termination date (the "COBRA

Severance Period"); (ii) the date when the Executive becomes eligible for substantially equivalent health insurance coverage in connection with new employment or self-employment; or (iii) the date the Executive ceases to be eligible for COBRA continuation coverage for any reason, including plan termination (such period from the termination date through the earlier of (i)-(iii), the "COBRA Payment Period"). Notwithstanding the foregoing, if at any time the Company determines that its payment of COBRA premiums on the Executive's behalf would result in a violation of applicable law (including but not limited to the 2010 Patient Protection and Affordable Care Act, as amended by the 2010 Health Care and Education Reconciliation Act), then in lieu of paying COBRA premiums pursuant to this Section 7(d)(2), the Company shall pay the Executive on the last day of each remaining month of the COBRA Payment Period, a fully taxable cash payment equal to the COBRA premium for such month, subject to applicable tax withholding (such amount, the "Special Severance Payment"), such Special Severance Payment to be made without regard to the Executive's payment of COBRA premiums. Nothing in this Agreement shall deprive the Executive of his rights under COBRA or ERISA for benefits under plans and policies arising under his employment by the Company.

(3) in the event that the Executive's employment is terminated after December 31 of any performance year, but prior to the Annual Bonus payment date for such performance year, the Executive shall receive: (i) the amount of the Annual Bonus as determined by the Board in good faith for the performance year immediately prior to the year in which the Executive's termination occurs if the Company has not determined the amount of the Executive's Annual Bonus as of the date of the Executive's termination; or (ii) the amount of the Annual Bonus as already determined by the Board in good faith for the performance year immediately prior to the year in which the Executive's termination occurs if the Company has already determined the amount of the Executive's Annual Bonus as of the date of the Executive's termination, payable in either case as a lump sum at the same time annual bonuses are paid to the Company's executives generally, but no later than March 15 of the calendar year immediately following the calendar year in which the Annual Bonus is being measured;

(4) in the event that the Executive's employment is terminated: (i) on or before the date Annual Bonus performance goals are established for the performance year in which the Executive's termination occurs, the Executive shall receive a pro-rata portion of the Executive's Target Bonus for the performance year in which the Executive's termination occurs, with such pro-rata portion calculated based upon the number of days that the Executive was employed during such performance year divided by the total number of days in such performance year; or (ii) after the date Annual Bonus performance goals are established for the performance year in which the Executive's termination occurs (but on or before December 31 of such performance year), the Executive shall receive a pro-rata portion of the Executive's Target Bonus for the performance year in which the Executive's termination occurs, with such pro-rata portion calculated based upon the Executive's achievement of performance goals as determined by the Board in good faith, payable in either case as a lump sum payment on the Company's first ordinary payroll date occurring on or after the General Release effective date (namely, the date it can no longer be revoked) or as soon thereafter as is reasonable practicable thereafter; and

(5) twenty-five percent (25%) of the shares subject to all stock options, restricted stock units and other equity awards then held by the Executive shall vest and become exercisable or payable, as applicable. In addition, the time period that the Executive may have to exercise any stock options shall be extended for a period equal to the shorter of (i) nine (9) months or (ii) the remaining term of the award.

(e) TERMINATION WITHOUT CAUSE OR FOR GOOD REASON FOLLOWING A SIGNIFICANT EVENT. If the Executive's employment by the Company is terminated by the Company other than for Cause (and not due to Disability or death), or by the Executive for Good Reason, in either case on or within twenty-four (24) months immediately following a Significant Event, then the Company shall pay or provide the Executive with the Accrued Amounts and all of the benefits described in Section 7(d) above, subject to compliance with Section 9; provided that: (i) the Salary Severance Period defined in Section 7(d)(1) shall be increased to a total of eighteen (18) months following the termination date; (ii) the COBRA Severance Period defined in Section 7(d)(2) shall be increased to a total of eighteen (18) months following the termination date; (iii) in lieu of the pro-rata bonus described in Section 7(d)(4), the Company shall pay the Executive the full Target Bonus for the performance year in which the Executive's termination occurs, payable as a lump sum payment on the Company's first ordinary payroll date occurring on or after the General Release effective date (namely, the date it can no longer be revoked); and (iv) in lieu of the vesting acceleration described in Section 7(d)(5), all of the outstanding unvested shares subject to stock options, restricted stock units and other equity awards then held by the Executive shall become fully vested and become exercisable or payable, as applicable, and the time period that the Executive may have to exercise any stock options shall be extended for a period equal to the shorter of (i) twelve (12) months or (ii) the remaining term of the award.

8. **CONDITIONS**. Any payments or benefits made or provided pursuant to Section 7 (other than Accrued Amounts) are subject to the Executive's (or, in the event of the Executive's death, the beneficiary's or estate's, or in the event of the Executive's Disability, the guardian's):

(a) compliance with the provisions of Section 9 hereof;

(b) delivery to the Company of the executed Agreement and General Release (the "General Release"), which shall be in the form attached hereto as Appendix A (with such changes therein or additions thereto as needed under then applicable law to give effect to its intent and purpose) within 21 days following the date of termination of employment, and permitting the General Release to become effective in accordance with its terms; and

(c) delivery to the Company of a resignation from all offices, directorships and fiduciary positions with the Company, its affiliates and employee benefit plans, by no later than 90 days following termination of employment.

Notwithstanding the due date of any post-employment payments, any amounts due following a termination under this Agreement (other than Accrued Amounts) shall not be due until after the expiration of any revocation period applicable to the General Release without the Executive having revoked such General Release, and any such amounts shall be paid or commence being paid to the Executive on the Company's first ordinary payroll date occurring on or after the expiration of such revocation period without the occurrence of a revocation by the Executive (or such later date as may be required under Section 16 or the final sentence of this

Section 8). Nevertheless (and regardless of whether the General Release has been executed by the Executive), upon any termination of Executive's employment, Executive shall be entitled to receive any Accrued Amounts, payable after the date of termination in accordance with the Company's applicable plan, program, policy or payroll procedures. Notwithstanding anything to the contrary in this Agreement, if any severance pay or benefits are deferred compensation under Section 409A (as defined below), and the period during which the Executive may sign the General Release begins in one calendar year and ends in another, then the severance pay or benefit shall not be paid or the first payment shall not occur until the later calendar year.

9. **CONFIDENTIALITY AND POST-EMPLOYMENT OBLIGATIONS**. As a condition of employment, the Executive agrees to execute and abide by the Company's current form of Confidentiality and Non-Competition Agreement ("Confidentiality Agreement"), which may be amended by the parties from time to time without regard to this Agreement. The Confidentiality Agreement contains provisions that are intended by the parties to survive and do survive termination of this Agreement.

10. **ASSIGNMENT**.

(a) The Executive may not assign or delegate any rights or obligations hereunder without first obtaining the written consent of the Company.

(b) This Agreement shall be binding upon and inure to the benefit of the Company and its successors, assigns and legal representatives. The Company will require any acquiror or successor of the Company in any merger, consolidation, sale, or acquisition of the Company, or a similar transaction to assume the Company's obligations under this Agreement, and any failure to do so shall constitute a material breach of this Agreement.

11. **NOTICE**. For the purpose of this Agreement, notices and all other communications provided for in this Agreement shall be in writing and shall be deemed to have been duly given (a) on the date of delivery if delivered by hand, (b) on the date of transmission, if delivered by confirmed facsimile, (c) on the first business day following the date of deposit if delivered by guaranteed overnight delivery service, or (d) on the fourth business day following the date delivered or mailed by United States registered or certified mail, return receipt requested, postage prepaid, addressed as follows: If to the Executive: at the address (or to the facsimile number) shown on the records of the Company.

If to the Company:

Eloxx Pharmaceuticals, Inc.
950 Winter Street
Waltham, MA 02451

or to such other address as either party may have furnished to the other in writing in accordance herewith, except that notices of change of address shall be effective only upon receipt.

12. **SECTION HEADINGS; INCONSISTENCY**. The section headings used in this Agreement are included solely for convenience and shall not affect, or be used in connection with, the interpretation of this Agreement. If there is any inconsistency between this Agreement

and any other agreement (including but not limited to any option, stock, long-term incentive or other equity award agreement), plan, program, policy or practice (collectively, "Other Provision") of the Company the terms of this Agreement shall control over such Other Provision.

13. **SEVERABILITY**. The provisions of this Agreement shall be deemed severable and the invalidity of unenforceability of any provision shall not affect the validity or enforceability of the other provisions hereof.

14. **COUNTERPARTS**. This Agreement may be executed in counterparts, each of which shall be deemed to be an original but all of which together will constitute one and the same instruments. One or more counterparts of this Agreement may be delivered by facsimile, with the intention that delivery by such means shall have the same effect as delivery of an original counterpart thereof.

15. **MISCELLANEOUS**. No provision of this Agreement may be modified, waived or discharged unless such waiver, modification or discharge is agreed to in writing and signed by the Executive and such officer or director of the Company as may be designated or authorized by the Board. No waiver by either party hereto at any time of any breach by the other party hereto of, or compliance with, any condition or provision of this Agreement to be performed by such other party shall be deemed a waiver of similar or dissimilar provisions or conditions at the same or at any prior or subsequent time. This Agreement together with all exhibits hereto and the Confidentiality Agreement sets forth the entire agreement of the parties hereto in respect of the subject matter contained herein. No agreements or representations, oral or otherwise, express or implied, with respect to the subject matter hereof have been made by either party which are not expressly set forth in this Agreement. The validity, interpretation, construction and performance of this Agreement shall be governed by the laws of the Commonwealth of Massachusetts without regard to its conflicts of law principles.

16. **SECTION 409A**.

(a) Notwithstanding anything to the contrary herein, the following provisions apply to the extent severance benefits provided herein are subject to Section 409A of Code and the regulations and other guidance thereunder and any state law of similar effect (collectively "Section 409A"). Severance benefits payable upon a termination of employment shall not commence until Executive has a "separation from service" for purposes of Section 409A. Each installment of severance benefits is a separate "payment" for purposes of Treas. Reg. Section 1.409A-2(b)(2)(i), and the severance benefits are intended to satisfy the exemptions from application of Section 409A provided under Treasury Regulations Sections 1.409A-1(b)(4), 1.409A-1(b)(5) and 1.409A-1(b)(9). However, if such exemptions are not available and Executive is, upon separation from service, a "specified employee" for purposes of Section 409A, then, solely to the extent necessary to avoid adverse personal tax consequences under Section 409A, the timing of the severance benefits shall be delayed until the earlier of (i) six (6) months and one day after Executive's separation from service, or (ii) Executive's death. Any payment or benefit otherwise payable or to be provided in the six (6) month period following separation from service that is not so paid or provided by reason of this Section 16 shall be accumulated and paid or provided in a single lump sum, as soon as practicable (and in all events within 15 days) after the date that is six (6) months after Executive's separation from service (or, if earlier, as soon as practicable, and in all events within 15 days, after the date of Executive's death)

(b) It is intended that this Agreement shall comply with the requirements of Section 409A, and any ambiguity contained herein shall be interpreted in such manner so as to avoid adverse personal tax consequences under Section 409A. Notwithstanding the foregoing, the Company shall in no event be obligated to indemnify the Executive for any taxes or interest that may be assessed by the IRS pursuant to Section 409A of the Code on payments made pursuant to this Agreement.

17. **MITIGATION OF DAMAGES**. In no event shall the Executive be obliged to seek other employment or take any other action by way of mitigation of the severance benefits payable to the Executive under any of the provisions of this Agreement, nor shall the amount of any severance benefit hereunder be reduced by any compensation earned by the Executive as a result of employment by another employer, except as set forth in this Agreement.

18. **REPRESENTATIONS**. The Executive represents and warrants to the Company that the Executive has the legal right to enter into this Agreement and to perform all of the obligations on the Executive's part to be performed hereunder in accordance with its terms and that the Executive is not a party to any agreement or understanding, written or oral, which could prevent the Executive from entering into this Agreement or performing all of the Executive's obligations hereunder. The Executive further represents and warrants that he has been advised to consult with an attorney and that he has been represented by the attorney of his choosing during the negotiation of this Agreement (or chosen not to be so represented), that he has consulted with his attorney before executing this Agreement (or chosen not to consult an attorney), that he has carefully read and fully understand all of the provisions of this Agreement and that he is voluntarily entering into this Agreement.

19. **NON-DISPARAGEMENT**. Both during and after the Employment Term, the Executive and the Company (through its officers and directors) agree not to disparage the other party, and the other party's officers, directors, employees, shareholders, affiliates and agents, in any manner likely to be harmful to them or their business, business reputation or personal reputation; provided that both the Executive and the Company may respond accurately and fully to any question, inquiry or request for information when required by legal process and provided further that nothing in this Section 19 shall preclude any party from making truthful statements that are reasonably necessary or to enforce or defend the party's rights under this Agreement.

20. **WITHHOLDING**. The Company may withhold from any and all amounts payable under this Agreement such federal, state and local taxes as may be required to be withheld pursuant to any applicable law or regulation.

21. **SURVIVAL**. The respective obligations of, and benefits afforded to, the Company and the Executive which by their express terms or clear intent survive termination of the Executive's employment with the Company, including, without limitation, the provisions of Sections 6 through 23, inclusive, of this Agreement, will survive termination of the Executive's employment with the Company, and will remain in full force and effect according to their terms.

22. **AGREEMENT OF THE PARTIES**. The language used in this Agreement will be deemed to be the language chosen by the parties hereto to express their mutual intent. Neither the Executive nor the Company shall be entitled to any presumption in connection with any determination made hereunder in connection with any arbitration, judicial or administrative proceeding relating to or arising under this Agreement.

23. **DISPUTE RESOLUTION**. In the event of any controversy, dispute or claim between the parties under, arising out of or related to this Agreement (including but not limited to, claims relating to breach, termination of this Agreement, or the performance of a party under this Agreement) whether based on contract, tort, statute or other legal theory (collectively referred to hereinafter as "Disputes"), the parties shall follow the dispute resolution procedures set forth below. Any Dispute shall be finally settled by arbitration in accordance with the Employment Arbitration Rules & Procedures of JAMS ("JAMS") then in force, and that the arbitration hearings shall be held in Boston, Massachusetts. The parties agree to (i) appoint an arbitrator who is knowledgeable in employment and human resource matters and, to the extent possible, the industry in which the Company operates, and instruct the arbitrator to follow substantive rules of law; (ii) require the testimony to be transcribed; and (iii) require the award to be accompanied by findings of fact and a statement of reasons for the decision. The arbitrator shall have the authority to permit discovery, to the extent deemed appropriate by the arbitrator, upon request of a party, but such discovery process shall continue for no more than thirty (30) days. The arbitrator shall have no power or authority to add to or detract from the written agreement of the parties. If the parties cannot agree upon an arbitrator within ten (10) days after demand by either of them, either or both parties may request JAMS name a panel of five (5) arbitrators. The Company shall strike the names of two (2) off this list; then, the Executive shall strike two (2) of the remaining names; and the remaining name shall be the arbitrator. The Company and the Executive shall each pay for their own attorneys' fees and expenses and their pro rata share of the JAMS fees and expenses. Any award shall be final, binding and conclusive upon the parties and a judgment rendered thereon may be entered in any court having jurisdiction thereof. This Section shall not limit the right of any party to sue for injunctive relief for a breach of the obligations of this Agreement.

[*signature page follows*]

IN WITNESS WHEREOF, the parties hereto have executed this Agreement, effective as of the date first written above.

ELOXX PHARMACEUTICALS, INC.

By: /s/ Robert Ward
Robert Ward
Its: Chief Executive Officer and Director

EXECUTIVE

/s/ Gregory Weaver
Gregory Weaver

[Signature Page to Employment Agreement]

APPENDIX A

FORM OF RELEASE

AGREEMENT AND GENERAL RELEASE

Eloxx Pharmaceuticals, Inc. (the "Company") and Gregory Weaver ("Executive") agree:

1. Last Day of Employment. Executive's last day of employment with Employer was **[INSERT DATE]** (the "Termination Date"). In addition, effective as of the Termination Date, Executive ceased to serve as Chief Financial Officer of the Company and its affiliates and ceased to be eligible for any benefits or compensation from the Company and its affiliates other than as specifically provided in Section 7 of the Executive Employment Agreement between the Company and Executive dated as of March 12, 2018 (the "Employment Agreement"). Executive further acknowledges and agrees that from and after the date Executive executes this Agreement and General Release, Executive will not represent (and since the Termination Date the Executive has not represented) the Executive as being a director, employee, officer, trustee, agent or representative of the Company or its affiliates for any purpose. In addition, effective as of Termination Date, Executive resigns from all offices, directorships, trusteeships, committee memberships and fiduciary capacities held with, or on behalf of, the Company and its affiliates or any benefit plans of the Company and its affiliates. These resignations will become irrevocable as set forth in Section 3 below.

2. Consideration. The parties acknowledge that this Agreement and General Release is being executed in accordance with Section 8 of the Employment Agreement.

3. Revocation. Executive may revoke this Agreement and General Release for a period of seven (7) calendar days following the day Executive executes this Agreement and General Release. Any revocation within this period must be submitted in writing to the Company and state, "I hereby revoke my acceptance of our Agreement and General Release." The revocation must be personally delivered to the Chairman of the Board, Eloxx Pharmaceuticals Ltd., 950 Winter Street, Waltham, MA 02451, or his designee. This Agreement and General Release shall become effective and irrevocable on the eighth (8th) day after Executive executes it, unless earlier revoked by Executive in accordance with this Section 3 (the "Effective Date").

4. General Release of Claims. (A) Executive and the Executive's heirs, executors, administrators, successors and assigns (collectively referred to throughout this Agreement as "Employee") knowingly and voluntarily release and forever discharge the Company and its affiliates, subsidiaries, divisions, benefit plans, successors and assigns in such capacity, and the current, future and former employees, officers, directors, trustees and agents thereof (collectively referred to as "Employer") from any and all actions, causes of action, contributions, indemnities, duties, debts, sums of money, suits, controversies, restitutions, understandings, agreements, promises, claims regarding stock, stock options or other forms of equity compensation, commitments, damages, fees and liabilities, responsibilities and any and all claims, demands, executions and liabilities of whatsoever kind, nature or description, oral or written, known or unknown, matured or unmatured, suspected or unsuspected at the present time, in law or in

equity, whether known and unknown, against Employer, which the Employee has, has ever had or may have as of the date of Executive's execution of this Agreement and General Release, including, but not limited to, any alleged violation of:

- Title VII of the Civil Rights Act of 1964, as amended;
- The Civil Rights Act of 1991;
- Sections 1981 through 1988 of Title 42 of the United States Code, as amended;
- The Employee Retirement Income Security Act of 1974, as amended;
- The Immigration Reform and Control Act, as amended;
- The Americans with Disabilities Act of 1990, as amended;
- The Age Discrimination in Employment Act of 1967, as amended;
- The Older Workers Benefit Protection Act of 1990;
- The Worker Adjustment and Retraining Notification Act, as amended;
- The Occupational Safety and Health Act, as amended;
- The Family and Medical Leave Act of 1993;
- The Massachusetts Wage Act;
- Massachusetts anti-discrimination laws, M.G.L Chapter 151B- Any wage payment and collection, equal pay and other similar laws, acts and statutes of the Commonwealth of Massachusetts or the United States;
- Any other federal, state or local civil or human rights law or any other local, state or federal law, regulation or ordinance;
- Any public policy, contract, tort, or common law; or
- Any allegation for costs, fees, or other expenses including attorneys' fees incurred in these matters.

Notwithstanding anything herein to the contrary, the sole matters to which the Agreement and General Release do not apply are: (i) Employee's express rights or claims for accrued vested benefits under any employee benefit plan, policy or arrangement maintained by Employer or under COBRA; (ii) Employee's rights under the provisions of the Employment Agreement which are intended to survive termination of employment; (iii) Employee's rights as a stockholder; or (iv) any rights of the Executive to indemnification as a Director or Officer of the Company.

5. No Claims Permitted. Employee waives Executive's right to file any charge or complaint against Employer arising out of Executive's employment with or separation from Employer before any federal, state or local court or any state or local administrative agency, except where such waivers are prohibited by law (with the understanding that that this Agreement and General Release bars the Executive from recovering monetary relief from Employer in connection with any charges or complaints which are not waived hereunder).

Furthermore, nothing in this Agreement or General Release and Waiver of Claims prohibits Executive from reporting possible violations of federal law or regulation to any governmental agency or entity, including but not limited to the Department of Justice, the Securities and Exchange Commission, the Congress, and any agency Inspector General, or making other disclosures that are protected under the whistleblower provisions of federal law or regulation. Executive does not need the prior authorization of the Company to make any such reports or disclosures and Executive is not required to notify the Company that Executive has made such reports or disclosures.

6. Affirmations. Employee affirms Executive has not filed, has not caused to be filed, and is not presently a party to, any claim, complaint, or action against Employer in any forum. Employee further affirms that the Executive has been paid and/or has received all compensation, wages, bonuses, commissions, and/or benefits to which Executive may be entitled and no other compensation, wages, bonuses, commissions and/or benefits are due to Executive, except as provided in Section 7 of the Employment Agreement. Employee also affirms Executive has no known workplace injuries.

7. Cooperation; Return of Property. Employee agrees to reasonably cooperate with Employer and its counsel in connection with any investigation, administrative proceeding or litigation relating to any matter that occurred during Executive's employment in which Executive was involved or of which Executive has knowledge. Employer will reimburse the Employee for any reasonable out-of-pocket travel, delivery or similar expenses incurred in providing such service to Employer. Employee represents that Employee has returned to Employer all property belonging to Employer, including but not limited to any leased vehicle, laptop, cell phone, keys, access cards, phone cards and credit cards, provided that Executive may retain, and Employer shall cooperate in transferring, Executive's cell phone number and Executive's personal rolodex and other address books.

8. Governing Law and Interpretation. This Agreement and General Release shall be governed and conformed in accordance with the laws of the Commonwealth of Massachusetts without regard to its conflict of laws provisions. In the event Employee or Employer breaches any provision of this Agreement and General Release, Employee and Employer affirm either may institute an action to specifically enforce any term or terms of this Agreement and General Release. Should any provision of this Agreement and General Release be declared illegal or unenforceable by any court of competent jurisdiction and should the provision be incapable of being modified to be enforceable, such provision shall immediately become null and void, leaving the remainder of this Agreement and General Release in full force and effect. Nothing herein, however, shall operate to void or nullify any general release language contained in the Agreement and General Release.

9. No Admission of Wrongdoing. Employee agrees neither this Agreement and General Release nor the furnishing of the consideration for this Agreement and General Release shall be deemed or construed at any time for any purpose as an admission by Employer of any liability or unlawful conduct of any kind.

10. Non-Disparagement. Employee and Employer (through its officers and directors) agree not to disparage the other party, and the other party's officers, directors, employees, shareholders and agents, in any manner likely to be harmful to them or their business, business reputation or personal reputation; provided that both Employee and Employer may respond accurately and fully to any question, inquiry or request for information when required by legal process and provided further that nothing in this Section 10 shall preclude Employer or Employee from making truthful statements that are reasonably necessary or to enforce or defend the party's rights under this Agreement and General Release.

11. Amendment. This Agreement and General Release may not be modified, altered or changed except upon express written consent of both parties wherein specific reference is made to this Agreement and General Release.

12. Entire Agreement. This Agreement and General Release and the Confidentiality Agreement (as defined in the Employment Agreement) sets forth the entire agreement between the parties hereto and fully supersedes any prior agreements or understandings between the parties; provided, however, that notwithstanding anything in this Agreement and General Release, the provisions in the Employment Agreement which are intended to survive termination of the Employment Agreement, including but not limited to those contained in Section 10 thereof, shall survive and continue in full force and effect. Employee acknowledges Executive has not relied on any representations, promises, or agreements of any kind made to Executive in connection with Executive's decision to accept this Agreement and General Release.

13. ADEA. Employee understands and acknowledges that Employee is waiving and releasing any rights Executive may have under the Age Discrimination in Employment Act of 1967 ("ADEA"), and that this waiver and release is knowing and voluntary. Employee understands and agrees that this waiver and release does not apply to any rights or claims that may arise under the ADEA after the date Executive signs this Agreement and General Release. Employee understands and acknowledges that the consideration given for this waiver and release is in addition to anything of value to which Employee was already entitled. Employee further understands and acknowledges that Employee has been advised by this writing that nothing in this Agreement prevents or precludes Executive from challenging or seeking a determination in good faith of the validity of this waiver under the ADEA, nor does it impose any condition precedent, penalties, or costs for doing so, unless specifically authorized by federal law.

[*signature page follows*]

EMPLOYEE HAS BEEN ADVISED THAT EXECUTIVE HAS UP TO TWENTY-ONE (21) CALENDAR DAYS TO REVIEW THIS AGREEMENT AND GENERAL RELEASE AND HAS BEEN ADVISED IN WRITING TO CONSULT WITH AN ATTORNEY PRIOR TO EXECUTION OF THIS AGREEMENT AND GENERAL RELEASE.

EMPLOYEE AGREES ANY MODIFICATIONS, MATERIAL OR OTHERWISE, MADE TO THIS AGREEMENT AND GENERAL RELEASE DO NOT RESTART OR AFFECT IN ANY MANNER THE ORIGINAL TWENTY-ONE (21) CALENDAR DAY CONSIDERATION PERIOD. IN THE EVENT EMPLOYEE SIGNS THIS AGREEMENT AND GENERAL RELEASE AND RETURNS IT TO THE COMPANY IN LESS THAN THE TWENTY-ONE (21) DAY PERIOD IDENTIFIED ABOVE, EMPLOYEE HEREBY ACKNOWLEDGES THAT EMPLOYEE HAS FREELY AND VOLUNTARILY CHOSEN TO WAIVE THE TIME PERIOD ALLOTTED FOR CONSIDERING THIS AGREEMENT AND GENERAL RELEASE.

HAVING ELECTED TO EXECUTE THIS AGREEMENT AND GENERAL RELEASE, TO FULFILL THE PROMISES SET FORTH HEREIN, AND TO RECEIVE THE SUMS AND BENEFITS SET FORTH IN THE EMPLOYMENT AGREEMENT, EMPLOYEE FREELY AND KNOWINGLY, AND AFTER DUE CONSIDERATION, ENTERS INTO THIS AGREEMENT AND GENERAL RELEASE INTENDING TO WAIVE, SETTLE AND RELEASE ALL CLAIMS EXECUTIVE HAS OR MIGHT HAVE AGAINST EMPLOYER.

IN WITNESS WHEREOF, the parties hereto knowingly and voluntarily executed this Agreement and General Release as of the date set forth below:

ELOXX PHARMACEUTICALS, INC.

By: _____

Name: Robert E. Ward
Its: Chairman, CEO

Date:

EXECUTIVE

_____

Gregory Weaver

Date:

EXECUTIVE EMPLOYMENT AGREEMENT

This EXECUTIVE EMPLOYMENT AGREEMENT (the "Agreement") between Eloxx Pharmaceuticals, Inc. (the "Company"), and Pedro Huertas (the "Executive") is dated as of March 12, 2018 and shall become effective on March 12, 2018 (the "Effective Date").

W I T N E S S E T H:

WHEREAS, the Company desires the Executive to provide employment services to the Company, and wishes to provide the Executive with certain compensation and benefits in return for such employment services; and

WHEREAS, the Executive wishes to be employed by the Company and to provide employment services to the Company in return for certain compensation and benefits;

NOW THEREFORE, in consideration of the foregoing, of the mutual promises contained herein and of other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereto hereby agree as follows:

1. **EMPLOYMENT TERM**. The Company hereby offers to employ the Executive, and the Executive hereby accepts employment by the Company, upon the terms and conditions set forth in this Agreement, during the period commencing on the Effective Date and ending on the date of the termination of the Executive's employment in accordance with Section 7 below (the "Employment Term"). The Executive shall be employed at will, meaning that either the Company or the Executive may terminate this Agreement and the Executive's employment at any time, for any reason or no reason, with or without cause, subject to the terms of this Agreement.

2. **POSITION & DUTIES**.

(a) Except as provided in Section 2(b) below, the Executive shall serve as the Chief Medical Officer of the Company and its US subsidiary, Eloxx Pharmaceuticals U.S. Sub, Inc. during the Employment Term. As Chief Medical Officer, the Executive shall have such duties, authorities and responsibilities as are commensurate with the position of Chief Medical Officer and such other duties and responsibilities as the Company's Chief Executive Officer shall designate that are consistent with the Executive's position as Chief Medical Officer.

(b) During the Employment Term, the Executive agrees to devote his full business time, attention and energies to the performance of all of the lawful duties, responsibilities and authority that may be assigned to him hereunder. Nothing contained in this Agreement will preclude the Executive from (i) devoting time to personal and family investments, (ii) serving as a director of any not-for-profit company, (iii) serving as a director for any for-profit company that is approved by the Board of Directors (the "Board") (such approval not to be unreasonably withheld) or (iv) from participating in charitable or industry associations, in each case, provided that such activities or services do not (x) materially interfere with the Executive's performance of duties hereunder or (y) violate the terms of the Confidentiality Agreement (as defined below).

(c) During the Employment Term, the Executive's principal place of employment shall be the Company's offices in Waltham, Massachusetts, subject to customary business travel consistent with the Executive's duties and responsibilities.

3. **BASE SALARY**. The Company agrees to pay the Executive a base salary (the "Base Salary") at an annual rate of US$346,500. The Base Salary will be payable bimonthly in accordance with the regular payroll practices of the Company. The Executive's Base Salary shall be subject to review by the Company's Chief Executive Officer at least annually and may be increased, but not decreased, from time to time by the Company's Chief Executive Officer. The base salary as determined herein from time to time shall constitute "Base Salary" for purposes of this Agreement.

4. **BONUSES**.

(a) ANNUAL BONUS. With respect to each full calendar year during the Employment Term, the Executive shall be eligible to earn an annual, performance-based bonus (an "Annual Bonus") with a target bonus value equal to forty percent (40%) of the Executive's Base Salary (the "Target Bonus") based upon the achievement of performance targets, which shall be established by the Board (or a committee thereof) in consultation with the Executive within the first 90 days of each calendar year during the Employment Term, with the actual amount of the Annual Bonus for a particular year determined by the Board (or a committee thereof) in its discretion. The Board (or a committee thereof) shall consider the Executive's performance in the entire 2018 calendar year without regard to the Effective Date when determining the Executive's Annual Bonus for the 2018 calendar year. Subject to Section 8 below, in order to be eligible for an Annual Bonus, the Executive must remain employed for the entire calendar year for which the performance targets will have been set. Any Annual Bonus earned by the Executive will be paid no later than March 15 of the calendar year immediately following the calendar year in which the Annual Bonus is being measured. The Executive's Target Bonus shall be subject to review by the Board (or a committee thereof) at least annually and may be increased, but not decreased, from time to time by the Board.

5. **EQUITY COMPENSATION.**

The Company will grant to the Executive as soon as practicable after the Company's adoption of its 2018 Equity Incentive Plan (the "Grant Date") equity compensation awards under the 2018 Equity Incentive Plan (the "Plan") consisting of a stock option of 104,725 shares and an RSU award of 104,725 shares, to vest over four years with one-fourth (1/4) of the grant vesting on the first anniversary of the Grant Date (the "Cliff Vesting Date") and one-sixteenth (1/16) of the grant vesting on each successive quarterly anniversary of the Cliff Vesting Date. The stock option award contemplated by this Section will have an exercise price equal to the closing price on the Grant Date.

6. **EMPLOYEE BENEFITS**.

(a) BENEFIT PLANS. The Executive shall be entitled to participate in all employee benefit plans that the Company generally makes available to its senior executives (other than severance plans) from time to time, including any group health plans, dental plans,

life, disability and AD&D insurances, a 401(k) plan, tuition reimbursement, recreation allowance, parking or public transportation and various types of paid time off, subject to the terms and conditions of such benefit plans. The Company shall adopt vision, health, dental and 401(k) plans no later than April 1, 2018. Until the Company does have such plans adopted, the Company will reimburse the Executive for 100% of the cost of COBRA insurance coverage from Executive's prior employer, as well as for costs of dental treatments otherwise covered by the Executive's current dental plan.

(b) VACATION. The Executive shall be entitled to twenty (20) days of paid vacation per year, in accordance with the Company's vacation policy; provided that the Executive shall be entitled to twenty-five (25) days of paid vacation per year after three (3) full calendar years of employment. Vacation may be taken at such times as the Executive elects with due regard to the needs of the Company.

(c) BUSINESS EXPENSES. The Company will reimburse the Executive for all reasonable business expenses incurred by the Executive in connection with the discharge of his duties for the Company, subject to the Company's expense reimbursement policy in effect from time to time.

(d) INDEMNIFICATION. The Company shall indemnify the Executive to the maximum extent that its officers, directors and employees are entitled to indemnification pursuant to the Company's Certificate of Incorporation and Bylaws for any acts or omissions by reason of being a director, officer or employee of the Company as of the Effective Date. At all times during the Employment Term, the Company shall maintain in effect a director and officers liability insurance policy with the Executive as a covered officer and director.

7. **TERMINATION**. The Executive's employment and the Employment Term shall terminate on the first of the following to occur:

(a) DISABILITY. Upon the 30th day following the Executive's receipt of notice of the Company's intention to terminate the Executive's employment due to Disability (as defined in this Section 7(a)); provided that, the Executive has not returned to full-time performance of his duties within 30 days after receipt of such notice. If the Company determines in good faith that the Executive's Disability has occurred during the term of this Agreement, it will give the Executive written notice of its intention to terminate his employment. For purposes of this Agreement, "Disability" shall mean the Executive's inability to substantially perform the essential duties of his job with or without reasonable accommodation on a full-time basis for 180 calendar days during any consecutive twelve-month period or for 90 consecutive days as a result of incapacity due to mental or physical illness.

(b) DEATH. Automatically on the date of death of the Executive.

(c) CAUSE. Immediately upon written notice by the Company to the Executive of a termination for Cause. "Cause" shall mean (i) the Executive's commission of an act of fraud, embezzlement or theft against the Company or its subsidiaries; (ii) the Executive's conviction of, or a plea of no contest to, a felony; (iii) willful nonperformance by the Executive (other than by reason of illness) of his material duties as an employee of the Company, which, to

the extent it is curable by the Executive, is not cured within thirty (30) days after written notice thereof is given to the Executive by the Company; (iv) the Executive's material breach of this Agreement or any other material agreement between the Executive and the Company or any of its subsidiaries, including the Confidentiality Agreement, which, to the extent it is curable by the Executive, is not cured within thirty (30) days after written notice thereof is given to the Executive by the Company; or (v) the Executive's gross negligence, willful misconduct or any other act of willful disregard for the Company's or any of its subsidiaries' best interests, which, to the extent it is curable by the Executive, is not cured within thirty (30) days after written notice thereof is given to the Executive by the Company.

(d) WITHOUT CAUSE. Upon written notice by the Company to the Executive no earlier than eighteen (18) months after the Effective Date of an involuntary termination without Cause and other than due to death or Disability.

(e) GOOD REASON. "Good Reason" for the Executive to terminate the Executive's employment hereunder shall mean the occurrence of any of the following conditions during the Employment Term without the Executive's express written consent; provided that any resignation by the Executive due to any of the following conditions shall only be deemed for Good Reason if: (i) the Executive gives the Company written notice of the intent to terminate for Good Reason within sixty (60) days following the first occurrence of the condition(s) that the Executive believes constitutes Good Reason, which notice shall describe such condition(s); (ii) the Company fails to remedy, if remediable, such condition(s) within thirty (30) days following receipt of the written notice (the "Cure Period") of such condition(s) from the Executive; and (iii) the Executive actually resigns his employment within the first thirty (30) days after expiration of the Cure Period:

(1) any material reduction by the Company of the Executive's Base Salary or Target Bonus as initially set forth herein or as the same may be increased from time to time;

(2) any material diminution in the Executive's duties, title, responsibilities or authority;

(3) a requirement that the Executive report to a corporate officer or employee other than the Company's Chief Executive Officer, other than any such requirement following a Significant Event (as defined in the Company's 2013 Share Ownership and Option Plan);

(4) any material breach of this Agreement, including a breach of the Company's obligations under Section 4, 6 or 11(b); or

(5) a requirement that the Executive relocate to a principal place of employment more than seventy-five (75) miles from Waltham, Massachusetts.

(f) WITHOUT GOOD REASON. The Executive shall provide two (2) weeks' prior written notice (the "Transition Period") to the Company of the Executive's intended termination of employment without Good Reason ("Voluntary Termination"). During the Transition Period, the Executive shall assist and advise the Company in any transition of

business, customers, prospects, projects and strategic planning, and the Company shall pay the pro rata portion of the Executive's Base Salary and benefits through the end of the Transition Period. The Company may, in its sole discretion, upon written notice to the Executive, make such termination of employment effective earlier than the expiration of the Transition Period ("Early Termination Right"), but it shall pay the pro rata portion of the Executive's Base Salary and benefits through the earlier of: the end of the Transition Period, or the date that the Executive accepts employment or a consulting engagement from a third party.

8. **CONSEQUENCES OF TERMINATION**. Any termination payments made and benefits provided under this Agreement to the Executive shall be in lieu of any termination or severance payments or benefits for which the Executive may be eligible under any of the plans, policies or programs of the Company or its affiliates as may be in effect from time to time. Subject to satisfaction of each of the conditions set forth in Section 9, the following amounts and benefits shall be due to the Executive:

(a) DISABILITY. Upon employment termination due to Disability, the Company shall pay or provide the Executive: (i) any unpaid Base Salary through the date of termination and any accrued vacation; (ii) reimbursement for any unreimbursed expenses owed to Executive; and (iii) all other payments and benefits to which the Executive is entitled under the terms of any applicable compensation arrangement or benefit, equity or other plan or program, including but not limited to any applicable insurance benefits, payable on the next regularly scheduled Company payroll date following the date of termination or earlier if required by applicable law (collectively, "Accrued Amounts"). In addition, upon the Executive's termination due to Disability, the Company shall pay the amounts described in Sections 8(d)(3) and 8(d)(4) to the Executive.

(b) DEATH. In the event the Employment Term ends on account of the Executive's death, the Executive's estate (or to the extent a beneficiary has been designated in accordance with a program, the beneficiary under such program) shall be entitled to any Accrued Amounts, including but not limited to proceeds from any Company sponsored life insurance programs. In addition, upon the Executive's death, the Company shall pay the amounts described in Sections 8(d)(3) and 8(d)(4) to the Executive's estate.

(c) TERMINATION FOR CAUSE OR WITHOUT GOOD REASON. If the Executive's employment should be terminated (i) by the Company for Cause, or (ii) by the Executive without Good Reason, the Company shall pay to the Executive any Accrued Amounts only, and shall not be obligated to make any additional payments to the Executive.

(d) TERMINATION WITHOUT CAUSE OR FOR GOOD REASON. If the Executive's employment by the Company is terminated by the Company other than for Cause (and not due to Disability or death) or by the Executive for Good Reason, other than in circumstances described in Section 8(e), then the Company shall pay or provide the Executive with the Accrued Amounts and subject to compliance with Section 10:

(1) continued payment of the Executive's Base Salary as in effect immediately preceding the last day of the Employment Term for a period of twelve (12) months following the termination date (the "Salary Severance Period") in accordance with the

Company's ordinary payroll practices (for purposes of calculating the Executive's severance benefits, the Executive's Base Salary shall be calculated based on the rate in effect prior to any material reduction in Base Salary that would give the Executive the right to resign for Good Reason (as provided in Section 7(e)(1)));

(2) if the Executive timely elects continued coverage under COBRA for himself and his covered dependents under the Company's group health plans following such termination, then the Company shall pay the COBRA premiums necessary to continue the Executive's and his covered dependents' health insurance coverage in effect on the termination date until the earliest of (i) twelve (12) months following the termination date (the "COBRA Severance Period"); (ii) the date when the Executive becomes eligible for substantially equivalent health insurance coverage in connection with new employment or self-employment; or (iii) the date the Executive ceases to be eligible for COBRA continuation coverage for any reason, including plan termination (such period from the termination date through the earlier of (i)-(iii), the "COBRA Payment Period"). Notwithstanding the foregoing, if at any time the Company determines that its payment of COBRA premiums on the Executive's behalf would result in a violation of applicable law (including but not limited to the 2010 Patient Protection and Affordable Care Act, as amended by the 2010 Health Care and Education Reconciliation Act), then in lieu of paying COBRA premiums pursuant to this Section 8(d)(2), the Company shall pay the Executive on the last day of each remaining month of the COBRA Payment Period, a fully taxable cash payment equal to the COBRA premium for such month, subject to applicable tax withholding (such amount, the "Special Severance Payment"), such Special Severance Payment to be made without regard to the Executive's payment of COBRA premiums. Nothing in this Agreement shall deprive the Executive of his rights under COBRA or ERISA for benefits under plans and policies arising under his employment by the Company.

(3) in the event that the Executive's employment is terminated after December 31 of any performance year, but prior to the Annual Bonus payment date for such performance year, the Executive shall receive: (i) the amount of the Annual Bonus as determined by the Board in good faith for the performance year immediately prior to the year in which the Executive's termination occurs if the Company has not determined the amount of the Executive's Annual Bonus as of the date of the Executive's termination; or (ii) the amount of the Annual Bonus as already determined by the Board in good faith for the performance year immediately prior to the year in which the Executive's termination occurs if the Company has already determined the amount of the Executive's Annual Bonus as of the date of the Executive's termination, payable in either case as a lump sum at the same time annual bonuses are paid to the Company's executives generally, but no later than March 15 of the calendar year immediately following the calendar year in which the Annual Bonus is being measured;

(4) in the event that the Executive's employment is terminated: (i) on or before the date Annual Bonus performance goals are established for the performance year in which the Executive's termination occurs, the Executive shall receive a pro-rata portion of the Executive's Target Bonus for the performance year in which the Executive's termination occurs, with such pro-rata portion calculated based upon the number of days that the Executive was employed during such performance year divided by the total number of days in such performance year; or (ii) after the date Annual Bonus performance goals are established for the performance year in which the Executive's termination occurs (but on or before December 31 of

such performance year), the Executive shall receive a pro-rata portion of the Executive's Target Bonus for the performance year in which the Executive's termination occurs, with such pro-rata portion calculated based upon the Executive's achievement of performance goals as determined by the Board in good faith, payable in either case as a lump sum payment on the Company's first ordinary payroll date occurring on or after the General Release effective date (namely, the date it can no longer be revoked) or as soon thereafter as is reasonable practicable thereafter; and

(5) twenty-five percent (25%) of the shares subject to all stock options, restricted stock units and other equity awards then held by the Executive shall vest and become exercisable or payable, as applicable. In addition, the time period that the Executive may have to exercise any stock options shall be extended for a period equal to the shorter of (i) nine (9) months or (ii) the remaining term of the award.

(e) TERMINATION WITHOUT CAUSE OR FOR GOOD REASON FOLLOWING A SIGNIFICANT EVENT. If the Executive's employment by the Company is terminated by the Company other than for Cause (and not due to Disability or death), or by the Executive for Good Reason, in either case on or within twenty-four (24) months immediately following a Significant Event, then the Company shall pay or provide the Executive with the Accrued Amounts and all of the benefits described in Section 8(d) above, subject to compliance with Section 10; provided that: (i) the Salary Severance Period defined in Section 8(d)(1) shall be increased to a total of eighteen (18) months following the termination date; (ii) the COBRA Severance Period defined in Section 8(d)(2) shall be increased to a total of eighteen (18) months following the termination date; (iii) in lieu of the pro-rata bonus described in Section 8(d)(4), the Company shall pay the Executive the full Target Bonus for the performance year in which the Executive's termination occurs, payable as a lump sum payment on the Company's first ordinary payroll date occurring on or after the General Release effective date (namely, the date it can no longer be revoked), and (iv) in lieu of the vesting acceleration described in Section 8(d)(5), all of the outstanding unvested shares subject to stock options, restricted stock units and other equity awards then held by the Executive shall become fully vested and become exercisable or payable, as applicable, and the time period that the Executive may have to exercise any stock options shall be extended for a period equal to the shorter of (i) twelve (12) months or (ii) the remaining term of the award..

9. **CONDITIONS**. Any payments or benefits made or provided pursuant to Section 8 (other than Accrued Amounts) are subject to the Executive's (or, in the event of the Executive's death, the beneficiary's or estate's, or in the event of the Executive's Disability, the guardian's):

(a) compliance with the provisions of Section 10 hereof;

(b) delivery to the Company of the executed Agreement and General Release (the "General Release"), which shall be in the form attached hereto as Appendix A (with such changes therein or additions thereto as needed under then applicable law to give effect to its intent and purpose) within 21 days following the date of termination of employment, and permitting the General Release to become effective in accordance with its terms; and

(c) delivery to the Company of a resignation from all offices, directorships and fiduciary positions with the Company, its affiliates and employee benefit plans, by no later than 90 days following termination of employment.

Notwithstanding the due date of any post-employment payments, any amounts due following a termination under this Agreement (other than Accrued Amounts) shall not be due until after the expiration of any revocation period applicable to the General Release without the Executive having revoked such General Release, and any such amounts shall be paid or commence being paid to the Executive on the Company's first ordinary payroll date occurring on or after the expiration of such revocation period without the occurrence of a revocation by the Executive (or such later date as may be required under Section 17 or the final sentence of this Section 9). Nevertheless (and regardless of whether the General Release has been executed by the Executive), upon any termination of Executive's employment, Executive shall be entitled to receive any Accrued Amounts, payable after the date of termination in accordance with the Company's applicable plan, program, policy or payroll procedures. Notwithstanding anything to the contrary in this Agreement, if any severance pay or benefits are deferred compensation under Section 409A (as defined below), and the period during which the Executive may sign the General Release begins in one calendar year and ends in another, then the severance pay or benefit shall not be paid or the first payment shall not occur until the later calendar year.

10. **CONFIDENTIALITY AND POST-EMPLOYMENT OBLIGATIONS**. As a condition of employment, the Executive agrees to execute and abide by the Company's current form of Confidentiality and Non-Competition Agreement ("Confidentiality Agreement"), which may be amended by the parties from time to time without regard to this Agreement. The Confidentiality Agreement contains provisions that are intended by the parties to survive and do survive termination of this Agreement.

11. **ASSIGNMENT**.

(a) The Executive may not assign or delegate any rights or obligations hereunder without first obtaining the written consent of the Company.

(b) This Agreement shall be binding upon and inure to the benefit of the Company and its successors, assigns and legal representatives. The Company will require any acquiror or successor of the Company in any merger, consolidation, sale, or acquisition of the Company, or a similar transaction to assume the Company's obligations under this Agreement, and any failure to do so shall constitute a material breach of this Agreement.

12. **NOTICE**. For the purpose of this Agreement, notices and all other communications provided for in this Agreement shall be in writing and shall be deemed to have been duly given (a) on the date of delivery if delivered by hand, (b) on the date of transmission, if delivered by confirmed facsimile, (c) on the first business day following the date of deposit if delivered by guaranteed overnight delivery service, or (d) on the fourth business day following the date delivered or mailed by United States registered or certified mail, return receipt requested, postage prepaid, addressed as follows: If to the Executive: at the address (or to the facsimile number) shown on the records of the Company.

If to the Company:
Eloxx Pharmaceuticals, Inc.
950 Winter Street
Waltham, MA 02451

or to such other address as either party may have furnished to the other in writing in accordance herewith, except that notices of change of address shall be effective only upon receipt.

13. **SECTION HEADINGS; INCONSISTENCY**. The section headings used in this Agreement are included solely for convenience and shall not affect, or be used in connection with, the interpretation of this Agreement. If there is any inconsistency between this Agreement and any other agreement (including but not limited to any option, stock, long-term incentive or other equity award agreement), plan, program, policy or practice (collectively, "Other Provision") of the Company the terms of this Agreement shall control over such Other Provision.

14. **SEVERABILITY**. The provisions of this Agreement shall be deemed severable and the invalidity of unenforceability of any provision shall not affect the validity or enforceability of the other provisions hereof.

15. **COUNTERPARTS**. This Agreement may be executed in counterparts, each of which shall be deemed to be an original but all of which together will constitute one and the same instruments. One or more counterparts of this Agreement may be delivered by facsimile, with the intention that delivery by such means shall have the same effect as delivery of an original counterpart thereof.

16. **MISCELLANEOUS**. No provision of this Agreement may be modified, waived or discharged unless such waiver, modification or discharge is agreed to in writing and signed by the Executive and such officer or director of the Company as may be designated or authorized by the Board. No waiver by either party hereto at any time of any breach by the other party hereto of, or compliance with, any condition or provision of this Agreement to be performed by such other party shall be deemed a waiver of similar or dissimilar provisions or conditions at the same or at any prior or subsequent time. This Agreement together with all exhibits hereto and the Confidentiality Agreement sets forth the entire agreement of the parties hereto in respect of the subject matter contained herein. No agreements or representations, oral or otherwise, express or implied, with respect to the subject matter hereof have been made by either party which are not expressly set forth in this Agreement. The validity, interpretation, construction and performance of this Agreement shall be governed by the laws of the Commonwealth of Massachusetts without regard to its conflicts of law principles.

17. **SECTION 409A**.

(a) Notwithstanding anything to the contrary herein, the following provisions apply to the extent severance benefits provided herein are subject to Section 409A of Code and the regulations and other guidance thereunder and any state law of similar effect (collectively "Section 409A"). Severance benefits payable upon a termination of employment shall not commence until Executive has a "separation from service" for purposes of Section 409A. Each installment of severance benefits is a separate "payment" for purposes of Treas. Reg. Section 1.409A-2(b)(2)(i),

and the severance benefits are intended to satisfy the exemptions from application of Section 409A provided under Treasury Regulations Sections 1.409A-1(b)(4), 1.409A-1(b)(5) and 1.409A-1(b)(9). However, if such exemptions are not available and Executive is, upon separation from service, a "specified employee" for purposes of Section 409A, then, solely to the extent necessary to avoid adverse personal tax consequences under Section 409A, the timing of the severance benefits shall be delayed until the earlier of (i) six (6) months and one day after Executive's separation from service, or (ii) Executive's death. Any payment or benefit otherwise payable or to be provided in the six (6) month period following separation from service that is not so paid or provided by reason of this Section 17 shall be accumulated and paid or provided in a single lump sum, as soon as practicable (and in all events within 15 days) after the date that is six (6) months after Executive's separation from service (or, if earlier, as soon as practicable, and in all events within 15 days, after the date of Executive's death)

(b) It is intended that this Agreement shall comply with the requirements of Section 409A, and any ambiguity contained herein shall be interpreted in such manner so as to avoid adverse personal tax consequences under Section 409A. Notwithstanding the foregoing, the Company shall in no event be obligated to indemnify the Executive for any taxes or interest that may be assessed by the IRS pursuant to Section 409A of the Code on payments made pursuant to this Agreement.

18. **MITIGATION OF DAMAGES**. In no event shall the Executive be obliged to seek other employment or take any other action by way of mitigation of the severance benefits payable to the Executive under any of the provisions of this Agreement, nor shall the amount of any severance benefit hereunder be reduced by any compensation earned by the Executive as a result of employment by another employer, except as set forth in this Agreement.

19. **REPRESENTATIONS**. The Executive represents and warrants to the Company that the Executive has the legal right to enter into this Agreement and to perform all of the obligations on the Executive's part to be performed hereunder in accordance with its terms and that the Executive is not a party to any agreement or understanding, written or oral, which could prevent the Executive from entering into this Agreement or performing all of the Executive's obligations hereunder. The Executive further represents and warrants that he has been advised to consult with an attorney and that he has been represented by the attorney of his choosing during the negotiation of this Agreement (or chosen not to be so represented), that he has consulted with his attorney before executing this Agreement (or chosen not to consult an attorney), that he has carefully read and fully understand all of the provisions of this Agreement and that he is voluntarily entering into this Agreement.

20. **NON-DISPARAGEMENT**. Both during and after the Employment Term, the Executive and the Company (through its officers and directors) agree not to disparage the other party, and the other party's officers, directors, employees, shareholders, affiliates and agents, in any manner likely to be harmful to them or their business, business reputation or personal reputation; provided that both the Executive and the Company may respond accurately and fully to any question, inquiry or request for information when required by legal process and provided further that nothing in this Section 20 shall preclude any party from making truthful statements that are reasonably necessary or to enforce or defend the party's rights under this Agreement.

21. **WITHHOLDING**. The Company may withhold from any and all amounts payable under this Agreement such federal, state and local taxes as may be required to be withheld pursuant to any applicable law or regulation.

22. **SURVIVAL**. The respective obligations of, and benefits afforded to, the Company and the Executive which by their express terms or clear intent survive termination of the Executive's employment with the Company, including, without limitation, the provisions of Sections 7 through 24, inclusive, of this Agreement, will survive termination of the Executive's employment with the Company, and will remain in full force and effect according to their terms.

23. **AGREEMENT OF THE PARTIES**. The language used in this Agreement will be deemed to be the language chosen by the parties hereto to express their mutual intent. Neither the Executive nor the Company shall be entitled to any presumption in connection with any determination made hereunder in connection with any arbitration, judicial or administrative proceeding relating to or arising under this Agreement.

24. **DISPUTE RESOLUTION**. In the event of any controversy, dispute or claim between the parties under, arising out of or related to this Agreement (including but not limited to, claims relating to breach, termination of this Agreement, or the performance of a party under this Agreement) whether based on contract, tort, statute or other legal theory (collectively referred to hereinafter as "Disputes"), the parties shall follow the dispute resolution procedures set forth below. Any Dispute shall be finally settled by arbitration in accordance with the Employment Arbitration Rules & Procedures of JAMS ("JAMS") then in force, and that the arbitration hearings shall be held in Boston, Massachusetts. The parties agree to (i) appoint an arbitrator who is knowledgeable in employment and human resource matters and, to the extent possible, the industry in which the Company operates, and instruct the arbitrator to follow substantive rules of law; (ii) require the testimony to be transcribed; and (iii) require the award to be accompanied by findings of fact and a statement of reasons for the decision. The arbitrator shall have the authority to permit discovery, to the extent deemed appropriate by the arbitrator, upon request of a party, but such discovery process shall continue for no more than thirty (30) days. The arbitrator shall have no power or authority to add to or detract from the written agreement of the parties. If the parties cannot agree upon an arbitrator within ten (10) days after demand by either of them, either or both parties may request JAMS name a panel of five (5) arbitrators. The Company shall strike the names of two (2) off this list; then, the Executive shall strike two (2) of the remaining names; and the remaining name shall be the arbitrator. The Company and the Executive shall each pay for their own attorneys' fees and expenses and their pro rata share of the JAMS fees and expenses. Any award shall be final, binding and conclusive upon the parties and a judgment rendered thereon may be entered in any court having jurisdiction thereof. This Section shall not limit the right of any party to sue for injunctive relief for a breach of the obligations of this Agreement.

[*signature page follows*]

IN WITNESS WHEREOF, the parties hereto have executed this Agreement, effective as of the date first written above.

ELOXX PHARMACEUTICALS, INC.

By: /s/ Robert Ward
Robert Ward
Its: Chief Executive Officer and Director

EXECUTIVE

/s/ Pedro Huertas
Pedro Huertas

[Signature Page to Employment Agreement]

APPENDIX A

FORM OF RELEASE

AGREEMENT AND GENERAL RELEASE

Eloxx Pharmaceuticals, Inc. (the "Company") and Pedro Huertas ("Executive") agree:

1. Last Day of Employment. Executive's last day of employment with Employer was **[INSERT DATE]** (the "Termination Date"). In addition, effective as of the Termination Date, Executive ceased to serve as Chief Medical Officer of the Company and its affiliates and ceased to be eligible for any benefits or compensation from the Company and its affiliates other than as specifically provided in Section 7 of the Executive Employment Agreement between the Company and Executive dated as of March 12, 2018 (the "Employment Agreement"). Executive further acknowledges and agrees that from and after the date Executive executes this Agreement and General Release, Executive will not represent (and since the Termination Date the Executive has not represented) the Executive as being a director, employee, officer, trustee, agent or representative of the Company or its affiliates for any purpose. In addition, effective as of Termination Date, Executive resigns from all offices, directorships, trusteeships, committee memberships and fiduciary capacities held with, or on behalf of, the Company and its affiliates or any benefit plans of the Company and its affiliates. These resignations will become irrevocable as set forth in Section 3 below.

2. Consideration. The parties acknowledge that this Agreement and General Release is being executed in accordance with Section 8 of the Employment Agreement.

3. Revocation. Executive may revoke this Agreement and General Release for a period of seven (7) calendar days following the day Executive executes this Agreement and General Release. Any revocation within this period must be submitted in writing to the Company and state, "I hereby revoke my acceptance of our Agreement and General Release." The revocation must be personally delivered to the Chairman of the Board, Eloxx Pharmaceuticals Ltd., 950 Winter Street, Waltham, MA 02451, or his designee. This Agreement and General Release shall become effective and irrevocable on the eighth (8th) day after Executive executes it, unless earlier revoked by Executive in accordance with this Section 3 (the "Effective Date").

4. General Release of Claims. (A) Executive and the Executive's heirs, executors, administrators, successors and assigns (collectively referred to throughout this Agreement as "Employee") knowingly and voluntarily release and forever discharge the Company and its affiliates, subsidiaries, divisions, benefit plans, successors and assigns in such capacity, and the current, future and former employees, officers, directors, trustees and agents thereof (collectively referred to as "Employer") from any and all actions, causes of action, contributions, indemnities, duties, debts, sums of money, suits, controversies, restitutions, understandings, agreements, promises, claims regarding stock, stock options or other forms of equity compensation, commitments, damages, fees and liabilities, responsibilities and any and all claims, demands, executions and liabilities of whatsoever kind, nature or description, oral or written, known or unknown, matured or unmatured, suspected or unsuspected at the present time, in law or in

equity, whether known and unknown, against Employer, which the Employee has, has ever had or may have as of the date of Executive's execution of this Agreement and General Release, including, but not limited to, any alleged violation of:

- Title VII of the Civil Rights Act of 1964, as amended;
- The Civil Rights Act of 1991;
- Sections 1981 through 1988 of Title 42 of the United States Code, as amended;
- The Employee Retirement Income Security Act of 1974, as amended;
- The Immigration Reform and Control Act, as amended;
- The Americans with Disabilities Act of 1990, as amended;
- The Age Discrimination in Employment Act of 1967, as amended;
- The Older Workers Benefit Protection Act of 1990;
- The Worker Adjustment and Retraining Notification Act, as amended;
- The Occupational Safety and Health Act, as amended;
- The Family and Medical Leave Act of 1993;
- The Massachusetts Wage Act;
- Massachusetts anti-discrimination laws, M.G.L Chapter 151B- Any wage payment and collection, equal pay and other similar laws, acts and statutes of the Commonwealth of Massachusetts or the United States;
- Any other federal, state or local civil or human rights law or any other local, state or federal law, regulation or ordinance;
- Any public policy, contract, tort, or common law; or
- Any allegation for costs, fees, or other expenses including attorneys' fees incurred in these matters.

Notwithstanding anything herein to the contrary, the sole matters to which the Agreement and General Release do not apply are: (i) Employee's express rights or claims for accrued vested benefits under any employee benefit plan, policy or arrangement maintained by Employer or under COBRA; (ii) Employee's rights under the provisions of the Employment Agreement which are intended to survive termination of employment; or (iii) Employee's rights as a stockholder; or (iv) any rights of the Executive to indemnification as a Director or Officer of the Company.

5. No Claims Permitted. Employee waives Executive's right to file any charge or complaint against Employer arising out of Executive's employment with or separation from Employer before any federal, state or local court or any state or local administrative agency, except where such waivers are prohibited by law (with the understanding that that this Agreement and General Release bars the Executive from recovering monetary relief from Employer in connection with any charges or complaints which are not waived hereunder).

Furthermore, nothing in this Agreement or General Release and Waiver of Claims prohibits Executive from reporting possible violations of federal law or regulation to any governmental agency or entity, including but not limited to the Department of Justice, the Securities and Exchange Commission, the Congress, and any agency Inspector General, or making other disclosures that are protected under the whistleblower provisions of federal law or regulation. Executive does not need the prior authorization of the Company to make any such reports or disclosures and Executive is not required to notify the Company that Executive has made such reports or disclosures.

6. Affirmations. Employee affirms Executive has not filed, has not caused to be filed, and is not presently a party to, any claim, complaint, or action against Employer in any forum. Employee further affirms that the Executive has been paid and/or has received all compensation, wages, bonuses, commissions, and/or benefits to which Executive may be entitled and no other compensation, wages, bonuses, commissions and/or benefits are due to Executive, except as provided in Section 7 of the Employment Agreement. Employee also affirms Executive has no known workplace injuries.

7. Cooperation; Return of Property. Employee agrees to reasonably cooperate with Employer and its counsel in connection with any investigation, administrative proceeding or litigation relating to any matter that occurred during Executive's employment in which Executive was involved or of which Executive has knowledge. Employer will reimburse the Employee for any reasonable out-of-pocket travel, delivery or similar expenses incurred in providing such service to Employer. Employee represents that Employee has returned to Employer all property belonging to Employer, including but not limited to any leased vehicle, laptop, cell phone, keys, access cards, phone cards and credit cards, provided that Executive may retain, and Employer shall cooperate in transferring, Executive's cell phone number and Executive's personal rolodex and other address books.

8. Governing Law and Interpretation. This Agreement and General Release shall be governed and conformed in accordance with the laws of the Commonwealth of Massachusetts without regard to its conflict of laws provisions. In the event Employee or Employer breaches any provision of this Agreement and General Release, Employee and Employer affirm either may institute an action to specifically enforce any term or terms of this Agreement and General Release. Should any provision of this Agreement and General Release be declared illegal or unenforceable by any court of competent jurisdiction and should the provision be incapable of being modified to be enforceable, such provision shall immediately become null and void, leaving the remainder of this Agreement and General Release in full force and effect. Nothing herein, however, shall operate to void or nullify any general release language contained in the Agreement and General Release.

9. No Admission of Wrongdoing. Employee agrees neither this Agreement and General Release nor the furnishing of the consideration for this Agreement and General Release shall be deemed or construed at any time for any purpose as an admission by Employer of any liability or unlawful conduct of any kind.

10. Non-Disparagement. Employee and Employer (through its officers and directors) agree not to disparage the other party, and the other party's officers, directors, employees, shareholders and agents, in any manner likely to be harmful to them or their business, business reputation or personal reputation; provided that both Employee and Employer may respond accurately and fully to any question, inquiry or request for information when required by legal process and provided further that nothing in this Section 10 shall preclude Employer or Employee from making truthful statements that are reasonably necessary or to enforce or defend the party's rights under this Agreement and General Release.

11. Amendment. This Agreement and General Release may not be modified, altered or changed except upon express written consent of both parties wherein specific reference is made to this Agreement and General Release.

12. Entire Agreement. This Agreement and General Release and the Confidentiality Agreement (as defined in the Employment Agreement) sets forth the entire agreement between the parties hereto and fully supersedes any prior agreements or understandings between the parties; provided, however, that notwithstanding anything in this Agreement and General Release, the provisions in the Employment Agreement which are intended to survive termination of the Employment Agreement, including but not limited to those contained in Section 10 thereof, shall survive and continue in full force and effect. Employee acknowledges Executive has not relied on any representations, promises, or agreements of any kind made to Executive in connection with Executive's decision to accept this Agreement and General Release.

13. ADEA. Employee understands and acknowledges that Employee is waiving and releasing any rights Executive may have under the Age Discrimination in Employment Act of 1967 ("ADEA"), and that this waiver and release is knowing and voluntary. Employee understands and agrees that this waiver and release does not apply to any rights or claims that may arise under the ADEA after the date Executive signs this Agreement and General Release. Employee understands and acknowledges that the consideration given for this waiver and release is in addition to anything of value to which Employee was already entitled. Employee further understands and acknowledges that Employee has been advised by this writing that nothing in this Agreement prevents or precludes Executive from challenging or seeking a determination in good faith of the validity of this waiver under the ADEA, nor does it impose any condition precedent, penalties, or costs for doing so, unless specifically authorized by federal law.

[*signature page follows*]

EMPLOYEE HAS BEEN ADVISED THAT EXECUTIVE HAS UP TO TWENTY-ONE (21) CALENDAR DAYS TO REVIEW THIS AGREEMENT AND GENERAL RELEASE AND HAS BEEN ADVISED IN WRITING TO CONSULT WITH AN ATTORNEY PRIOR TO EXECUTION OF THIS AGREEMENT AND GENERAL RELEASE.

EMPLOYEE AGREES ANY MODIFICATIONS, MATERIAL OR OTHERWISE, MADE TO THIS AGREEMENT AND GENERAL RELEASE DO NOT RESTART OR AFFECT IN ANY MANNER THE ORIGINAL TWENTY-ONE (21) CALENDAR DAY CONSIDERATION PERIOD. IN THE EVENT EMPLOYEE SIGNS THIS AGREEMENT AND GENERAL RELEASE AND RETURNS IT TO THE COMPANY IN LESS THAN THE TWENTY-ONE (21) DAY PERIOD IDENTIFIED ABOVE, EMPLOYEE HEREBY ACKNOWLEDGES THAT EMPLOYEE HAS FREELY AND VOLUNTARILY CHOSEN TO WAIVE THE TIME PERIOD ALLOTTED FOR CONSIDERING THIS AGREEMENT AND GENERAL RELEASE.

HAVING ELECTED TO EXECUTE THIS AGREEMENT AND GENERAL RELEASE, TO FULFILL THE PROMISES SET FORTH HEREIN, AND TO RECEIVE THE SUMS AND BENEFITS SET FORTH IN THE EMPLOYMENT AGREEMENT, EMPLOYEE FREELY AND KNOWINGLY, AND AFTER DUE CONSIDERATION, ENTERS INTO THIS AGREEMENT AND GENERAL RELEASE INTENDING TO WAIVE, SETTLE AND RELEASE ALL CLAIMS EXECUTIVE HAS OR MIGHT HAVE AGAINST EMPLOYER.

IN WITNESS WHEREOF, the parties hereto knowingly and voluntarily executed this Agreement and General Release as of the date set forth below:

ELOXX PHARMACEUTICALS, INC.

By: _____
Name: Robert E. Ward
Its: Chairman & CEO

Date:

EXECUTIVE

_____
Pedro Huertas

Date:

ELOXX PHARMACEUTICALS LTD.

SHARE OWNERSHIP AND OPTION PLAN
(2013)

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APPENDICES

Appendix A: Grantee’s Notice to the Trustee as to Exercise of the Option (Section 11.3).

Appendix B: Notice to the Company of Exercise of the Option by the Trustee (Section11.5).

Appendix C: Proxy and Power of Attorney (Section 12.2).

1. **PREAMBLE**

1.1. This plan, as amended from time to time, shall be known as the "Eloxx Pharmaceuticals Share Ownership and Option Plan (2013)" (the "**Plan**"). The purpose and intent of the Plan is to provide incentives to employees, directors, officers, service providers, consultants and/or advisors of the Company, the parent and/or of subsidiaries and/or of affiliated companies of the Company (each a "**Related Company**" and collectively, "**Related Companies**") by providing them with the opportunity to purchase shares of the Company.

The Plan is designed to comply with Section 102 of the Israeli Income Tax Ordinance (New Version), 1961, as amended from time to time, or any provision which may amend or replace it (the "**Ordinance**" and "**Section 102**") and the rules, regulations and orders or procedures promulgated thereunder from time to time, as amended or replaced from time to time (the "**Rules**") and to enable the Company and grantees hereunder to benefit from Section 102 and the Rules and also to enable the Company to grant options and issue shares outside the context of Section 102. The Company, however, does not warrant that the Plan will be recognized by the income tax authorities or that future changes will not be made to the provisions of the law, regulations or the Rules, which are promulgated from time to time, or that any exemption or benefit currently available pursuant to Section 102 will not be abolished.

The Plan is further designed to enable the provision of incentives as set forth herein to grantees in jurisdictions other than the State of Israel, with respect to which the Board of Directors of the Company (the "**Board**"), in its sole discretion, shall determine the necessary changes to be made to the Plan and set forth the relevant conditions in the Agreements (as defined in Section 9 below) with the grantees in order to comply with the requirements of the tax regimes in any such other jurisdictions and its determination regarding these matters shall be final and binding.

1.2. Should any provision of Section 102, regulations thereunder or the Rules which apply to employees or any such other grantees as applicable under the provisions of Section 102 and the Rules, be amended, such amendment shall be deemed included in the Plan with respect to options granted or shares issued in the context of Section 102. Where a conflict arises between any section of the Plan, the Agreement or their application, and the provisions of any tax law, rule or regulations, including without limitation the Ordinance and/or the Rules, whether relied upon for tax relief or otherwise, the latter shall prevail, and the Board in its sole discretion shall determine the necessary changes to be made to the Plan and its determination regarding this matter shall be final and binding.

1.3. In the event the Company's shares should be registered for trading on the Tel-Aviv Stock Exchange Ltd. or on any other stock exchange, whether in Israel or abroad, the options and/or shares allotted in accordance with the Plan may be made conditional to any requirement or instruction of the stock exchange authorities or of any other relevant authority acting pursuant to applicable law as shall exist from time to time. In such case, by means of a Board resolution, the Plan and any agreements prepared pursuant hereto, may be amended as necessary to meet such requirements. In the event of a contradiction between any such amendment and the Plan and/or any agreement's provisions, the amendment shall prevail.

2. **ADMINISTRATION OF THE PLAN**

2.1. The Plan shall be administered by the Board and/or by any committee of the Board so designated by the Board. Any subsequent references herein to the Board shall also mean any such committee if appointed and, unless the powers of the committee have been specifically limited by law or otherwise, such committee shall have all of the powers of the Board granted herein. Subject to Sections 5 and 17 and applicable law and without derogating from the generality of the foregoing, the Board shall have plenary authority to determine: (i) the terms and conditions (which need not be identical) of all grant of options (including, without limitation, the terms and conditions of the issuance of shares pursuant to the exercise thereof), including, without limitation, the purchase price of the shares covered by each option, (ii) the method of payment of the exercise price (whether by cash, check, promissory note, consideration received by the Company by cashless exercise, or any combination of the foregoing), (iii) the individuals to whom, and the time or times at which, options shall be granted, (iv) the number of shares to be subject to each option, (v) whether or not an option shall be granted pursuant to Section 102, and if so, whether such option be granted to a trustee under the Ordinance and the election of the "Ordinary Income Route" according to Section 102(b)(1) of the Ordinance or the "Capital Gains Route" according to Section 102(b)(2) of the Ordinance or otherwise (options granted either under the Ordinary Income Route or under the Capital Gains Route shall be referred to herein as "Approved 102 Options"), or without a trustee according to Section 102(c) of the Ordinance (the "Unapproved 102 Options"), (vi) when an option can be exercised and whether in whole or in installments, (vii) and to make any other elections with respect to the Plan pursuant to applicable law.

Subject to Section 17, the Board shall have plenary authority to construe and interpret the Plan, to prescribe, amend and rescind the rules and regulations relating to it and to make all other determinations deemed necessary or advisable for the administration of the Plan. All determinations and decisions of the Board pursuant to the provisions of the Plan and all related orders and resolutions of the Board shall be final, conclusive and binding on all persons, including the Company, its shareholders, grantees and their estates and beneficiaries.

2.2. Any directive or notice signed by a member of the Board authorized therefore by the Board shall constitute conclusive proof and authority for every act or decision of the Company.

2.3. No director or officer of the Company shall be personally liable or obligated to any grantee as a result of any decision made and/or action taken with respect to the Plan or its interpretation or execution.

3. **SHARES SUBJECT TO THE PLAN**

The shares subject to the Plan shall be Ordinary Shares of the Company, par value NIS 0.01 each (the "**Ordinary Shares**"). The maximum number of shares that may be issued under the Plan is 197,500 Ordinary Shares, as such number and class of shares may be adjusted in accordance with Section 17. Such shares may be in whole or in part, as the Board shall from time to time determine and subject to applicable law, authorized and un-issued Ordinary Shares or issued and fully paid Ordinary Shares which shall have been purchased by the trustee hereunder with funds provided by the Company or reacquired by the Company, subject to applicable law. If any option granted under the

Plan shall expire, terminate or be canceled for any reason without having been exercised in full, such shares subject thereto shall again be available for the purposes of the Plan. Upon termination of the Plan, any such shares which may remain un-issued and which are not subject to outstanding options shall cease to be reserved for the purposes of the Plan.

4. DESIGNATION OF PARTICIPANTS

4.1. The persons eligible for participation in the Plan as grantees shall include any employee, director, service provider, consultant and/or advisors of the Company or any Related Company or any other person or entity so designated by the Board, provided that for the purpose of the Israeli tax law, Israeli Employees (as defined herein) may only be granted options under Section 102 of the Ordinance; and Israeli Non-Employees (as defined below) may only be granted options under Section 3(i) of the Ordinance.

For the purpose of this Section:

"**Israeli Employee**" shall mean a person who is employed by the Company or its Related Company, which is an "employing company" within the meaning of Section 102(a) of the Ordinance, including an individual who is serving as a director or an office holder, but excluding Controlling Shareholder, who is an Israeli resident or deemed to be an Israeli resident for the payment of tax.

"**Controlling Shareholder**" shall have the meaning ascribed to it in Section 32(9) of the Ordinance.

"**Israeli Non-Employees**" shall mean a consultant, adviser, service provider, Controlling Shareholder or any other person who is not an Israeli Employee, who is an Israeli resident or deemed to be an Israeli resident for the payment of tax.

4.2. The grant of an option hereunder shall neither entitle the grantee to participate nor disqualify the grantee from participating in, any other grant of options pursuant to the Plan or any other option or share plan of the Company or any Related Company.

4.3. Anything in the Plan to the contrary notwithstanding, all grants of options to directors and office holders shall be authorized and implemented in accordance with the provisions of the Israeli Companies Law 5759-1999 or any successor act or regulation, as in effect from time to time.

5. OPTION EXERCISE PRICES

5.1. The consideration to be paid by a grantee for each share purchased by exercising an option (the "**Option Exercise Price**") shall be as determined by the Board or set forth in the grantee's Agreement, provided that the Option Exercise Price shall not be less than the nominal value of the shares subject to the option.

5.2. The Option Exercise Price shall be payable upon the exercise of the option in a form satisfactory to the Board, including without limitation, by cash or check or any other method of payment all as shall be determined by the Board. The Board shall have the authority to postpone the date of payment on such terms as it may determine.

6. **EXCLUSIVITY OF THE PLAN**

Unless otherwise determined by the Board in any particular instance or as part of the Agreement, each grantee hereunder will be required to declare and agree that all prior agreements, arrangements and/or understandings with respect to shares of the Company or options to purchase shares of the Company which have not actually been issued or granted prior to execution of the Agreement shall be null and void and that only the provisions of the Plan and/or the Agreement shall apply.

Notwithstanding the above, the adoption of this Plan, by itself, shall not be construed as amending, modifying or rescinding any incentive arrangement previously approved by the Board (if applicable) or as creating any limitations on the power of the Board to adopt such other incentive arrangements as it may deem desirable, including, without limitation, the granting of options otherwise than under this Plan, and such arrangements may be either applicable generally or only in specific cases.

7. **DESIGNATION OF OPTIONS PURSUANT TO SECTION 102**

7.1. The Company may designate options granted to Israeli Employees pursuant to Section 102 as Unapproved 102 Options or Approved 102 Options.

7.2. The grant of Approved 102 Options shall be made under this Plan adopted by the Board, and shall be conditioned upon the approval of this Plan by the ITA.

7.3. Approved 102 Option may either be classified as Capital Gain Option ("**CGO**") or Ordinary Income Option ("**OIO**").

7.4. Approved 102 Option elected and designated by the Company to qualify under the capital gain tax treatment in accordance with the provisions of Section 102(b)(2) shall be referred to herein as **CGO**.

7.5. Approved 102 Option elected and designated by the Company to qualify under the ordinary income tax treatment in accordance with the provisions of Section 102(b)(1) shall be referred to herein as **OIO**.

7.6. The Company's election of the type of Approved 102 Options as CGO or OIO granted to Israeli Employees (the "**Election**"), shall be appropriately filed with the ITA before the date of grant of an Approved 102 Option. Such Election shall become effective beginning the first date of grant of an Approved 102 Option under this Plan and shall remain in effect at least until the end of the year following the year during which the Company first granted Approved 102 Options. The Election shall obligate the Company to grant *only* the type of Approved 102 Option it has elected, and shall apply to all grantees who were granted Approved 102 Options during the period indicated herein, all in accordance with the provisions of Section 102(g) of the Ordinance. For the avoidance of doubt, such Election shall not prevent the Company from granting Unapproved 102 Options or any other options simultaneously.

7.7. All Approved 102 Options must be held in trust by a Trustee, as described in Section 8 below.

7.8. For the avoidance of doubt, the designation of Unapproved 102 Options and Approved 102 Options shall be subject to the terms and conditions set forth in Section 102 of the Ordinance and the regulations promulgated thereunder.

7.9. With regards to Approved 102 Options, the provisions of the Plan and/or the Agreement (as defined herein) shall be subject to the provisions of Section 102 and the Tax Assessing Officer's permit, and the said provisions and permit shall

be deemed an integral part of the Plan and of the Agreement. Any provision of Section 102 and/or the said permit which is necessary in order to receive and/or to keep any tax benefit pursuant to Section 102, which is not expressly specified in the Plan or the Agreement, shall be considered binding upon the Company and the grantees.

8. **GRANT OF THE OPTIONS AND ISSUANCE OF THE SHARES TO THE TRUSTEE**

8.1. Shares issued upon exercise of an option shall be issued to the grantee or to the Trustee (as such term is defined below), in the name of the grantee and on his behalf, subject to the sole discretion of the Board. In the event that the Board grants an option to be held by the grantee directly, and unless determined otherwise with respect to a specific grant, then without derogating from any other rights or obligations conveyed to the grantee according to the Plan all rights and obligations conveyed to the Trustee according to this Plan shall be awarded to the said grantee.

8.2. The Board shall appoint a Trustee for the purposes of this Plan (the "**Trustee**"). In case of a Trustee nominated under Section 102, the nomination of such Trustee shall be subject to the approval of the Israeli Income Tax Authorities (the "**ITA**") in accordance with the provisions of Section 102(a) of the Ordinance. The Trustee shall have all the powers provided by law, including, without limitation, the Ordinance, Section 102 and the Rules, the trust agreement with the Company and the Plan and shall act pursuant to the provisions thereof, as they shall apply from time to time. The Board shall be entitled to replace the Trustee and/or to nominate another person to serve as a Trustee in lieu of the existing Trustee at its sole discretion, subject to applicable law, and that the new Trustee shall have the same powers and authority which this Plan grants the Trustee.

8.3. Unless otherwise determined by the Board, all option awards including, without limitation, the shares issued pursuant thereto, and all rights deriving from or in connection therewith, including, without limitation, any bonus shares (including stock dividends) issued in connection therewith, shall be issued by the Company in the name of the Trustee on behalf of the grantee and the share certificates representing any shares issued pursuant to options exercised hereunder, shall be issued by the Company in the name of the Trustee in trust for the designated grantee and shall be deposited with the Trustee, held by him and registered in his name in the register of shareholders of the Company for such period as determined by the Board but, in the case of Approved 102 Options, not less than the period set forth therein or otherwise required, or approved, with respect thereto pursuant to Israeli law, regulations promulgated thereunder, the Ordinance, Section 102 or the Rules, as shall be in effect from time to time (the "**Restriction Period**") and the same tax route pursuant to Section 102 shall apply thereto. Furthermore, Approved 102 Options granted or shares issued pursuant to such Approved 102 Options shall not be sold or transferred until the end of the Restriction Period, unless otherwise allowed or determined by the Israeli tax authorities. Notwithstanding the above, if any such sale or transfer occurs during the Restriction Period, the sanctions under Section 102 of the Ordinance and under the Rules or regulation or orders or procedures promulgated thereunder shall apply to and shall be borne by such grantee.

Notwithstanding anything to the contrary, the Trustee shall not release any shares allocated or issued upon exercise of Approved 102 Options prior to the full payment of the grantee's tax liabilities arising from Approved 102 Options which were granted to him and/or any shares allocated or issued upon exercise of such options

8.4. Without derogating from the provisions of Sections 8.3 above or 8.7 below, and unless otherwise determined by the Board generally or in any particular instance, the shares issued with respect to any options granted hereunder and all rights deriving from or in connection therewith including, without limitation, any bonus shares (including stock dividend) issued in connection therewith, will be held by the Trustee and registered in his name until the consummation of the initial public offering of the Company's shares, pursuant to an effective registration statement, prospectus or similar document in Israel or such other jurisdiction as is determined by the Board (the "**IPO**"), after which time the grantee for whom they are being held may request their registration in his name and transfer to him, subject to the provisions of Section 102 and the Rules and regulations thereunder, if applicable, and the Plan, all as shall be in effect from time to time (e.g., payment of taxes, etc.). After the consummation of the IPO, Approved 102 Options will be held by the Trustee and registered in his name in trust for the designated grantee, for not less than the Restriction Period or the period approved with respect thereto pursuant to Israeli law, as shall be applicable from time to time as referred to in Section 8.3 above.

8.5. Unless otherwise determined by the Board, options granted hereunder shall not confer upon the grantee any of the rights of a shareholder of the Company, for as long as they have not been exercised and, once exercised, for as long as the shares have not been issued, transferred and registered in the grantee's name in the Company's shareholder register.

8.6. For as long as any shares are held by the Trustee or registered in his name or for as long as the certificates representing any shares are held by the Trustee, the Trustee alone shall be entitled to receive every notice to which a shareholder is entitled, or to demand any information and any financial and/or other report to which a shareholder is entitled from the Company, and only he or whomever he shall designate pursuant to the Proxy and Power of Attorney referred to in Section 12.2 below and attached as **Appendix C** hereto (the "**Proxy**"), shall be entitled to exercise every other right of the shareholders vis-a-vis the Company, including, without limitation, the right to participate and vote (or abstain) on all matters at all shareholders' meetings (whether ordinary or extraordinary) and the right to sign any resolution in writing in the name of the shareholders, if and when applicable. Without derogating from the above, with respect to shares issued upon exercise of Approved 102 Options, such shares shall be voted in accordance with the provisions of Section 102 and the Rules, regulations or orders promulgated thereunder.

8.7. Subject to the provisions of the Articles of Association of the Company, as amended form time to time (the "**Articles**") and applicable law, shares registered in the Trustee's name shall be represented at all meetings of shareholders of the Company and, until consummation of the IPO, shall either abstain or be voted by the Proxy in the same manner and proportion as the other shares of the Company represented at such meeting, at the Proxy's discretion,

and following the consummation of an IPO, in accordance with the instructions of the grantees on whose behalf they are held and in the absence of such instructions they shall abstain.

8.8. Nothing in the aforegoing provisions shall derogate from the power of the Board to grant options or to allot shares to the Trustee otherwise than under the provisions of Section 102 and the Rules or to allot shares or grant options to grantees directly otherwise than through the Trustee or on terms which differ from those specified above or to approve the transfer of shares from the Trustee to the name of any grantee(s) upon such conditions as shall be determined by the Board.

9. **OPTION OR SHARE PURCHASE AGREEMENT; TERMINATION OF ENGAGEMENT**

Unless otherwise determined by the Board, every grantee shall be required to sign an option or share purchase agreement or other document as shall be determined by the Board, in the form approved by the Board from time to time (the "**Agreement**").

The Agreement need not be identical with respect to each grantee. The following terms, however, shall apply to all options, and, mutatis mutandis, shares, unless otherwise determined by the Board or set forth in the grantee's Agreement:

9.1. The Option Exercise Price shall be paid by the grantee to the Company no later than the date of exercise of the option.

9.2. The grantee, whether as a holder of an option, or following the exercise of an option, as a shareholder of the Company, and whether the shares issued to the grantee are registered in his name or otherwise, shall have no right of first refusal to purchase shares of the Company which may be offered for sale by shareholders of the Company, and shall have no pre-emptive rights to purchase shares which are being allotted or shall in the future be allotted by the Company, to the extent any such rights otherwise exist.

9.3. The option and/or the right to the option and/or to the shares are personal and except insofar as is specified in this Plan, and, where applicable, subject to Section 102 and the Rules, may not be transferred, assigned, pledged, withheld, attached or otherwise charged either voluntarily or pursuant to any law, except by way of transfer pursuant to the laws of inheritance or as otherwise determined by the Board, and no power of attorney or deed of transfer, whether the same has immediate effect or shall take effect on a future date, shall be given with respect thereto. During the lifetime of the grantee the option may only be exercised by the designated grantee or, if granted to the Trustee, by the Trustee on behalf of the designated grantee. A note as to the provisions of this sub-section or a legend may appear on any document which grants the option and in particular in the Agreement, and also on any share certificate.

9.4. The right to exercise the option is granted to the Trustee on behalf of the grantee and shall be subject to a vesting schedule, and may be further subject to any performance goals and measurements as may be determined by the Board. Vesting shall be in installments, gradually over a period of 4 (four) years from the date of grant of the option or such other period or periods as determined by the Board. Unless otherwise determined, at the conclusion of each period for the exercise of the option as determined in the Agreement ("**Vesting Periods**"), the option may, from time to time, be exercised in

relation to all the shares allocated for that period in such manner that upon the first anniversary of the grant of the Option the Trustee shall, in the absence of a contrary determination in the Agreement, be entitled to exercise on behalf of the grantee and at his request 1/4 (quarter) of the options and additional 1/16 at the end of each subsequent quarter over the course of the following three (3) years, provided that, unless otherwise determined by the Board or set forth in the respective Agreement, upon each of such vesting dates the grantee continues to be employed by, or provide services to, or serve as a director or officer of the Company or a Related Company on a continual basis from the date of the grant thereof.

In addition, during each of the Vesting Periods, the option may be exercised in relation to all or part of the shares allocated for any previous Vesting Period in which the option was not fully exercised, provided, subject to the provisions of Section 7.7 hereof, that at the time of the exercise of the option the grantee has continued to be employed by, or provide services to or serve as a director or officer of the Company or a Related Company on a continual basis from the date of the grant thereof and until the date of their exercise. After the end of the Vesting Periods and during the balance of the option period, the option may be exercised, from time to time, in relation to all or part of the shares which have not at that time been exercised and which remain subject to the option, subject to the provisions of Section 9.6 hereof and to any condition in the Agreement, including, without limitation, with respect to a minimum number of shares with respect to which the option may be exercised and any provision which determines the number of times that the Trustee may send the Company notice of exercise on behalf of the grantee in respect of the option. Without derogating from any discretionary authority granted to the Board under the Plan, the Board shall be entitled at any time to shorten the vesting schedule or any Vesting Period.

9.5. The Board may determine at its sole discretion, that any grantee shall be entitled to receive the options or the shares, through the Trustee, pursuant to the provisions of this Plan or, subject to the provisions of Section 102, as applicable, directly in the name of the grantee, immediately upon execution of the Agreement or on such other date or dates as the Company has undertaken towards such grantee. The Board shall be entitled, subject to applicable law, to determine that where the grantee does not comply with the conditions determined by the Board or the Agreement or ceases to be an employee of or to provide services to serve as an officer or director of the Company or a Related Company, the Company or a Related Company shall have the right to repurchase the shares from the grantee for the higher of: (i) nominal or (ii) any other consideration paid by the grantee, subject to applicable law. The Board may set additional conditions to this right of repurchase, including the provision of appropriate arrangements for the monies which shall be available to the Trustee or a Related Company or others for the purpose of the repurchase and conditions with respect to the voting rights of the grantee, rights of first refusal or pre-emptive rights to purchase shares in the Company, to the extent such rights exist, the grantee's right to receive reports or information from the Company, and the grantee's right to a dividend, all, in respect of the shares which are subject to a right of reacquisition as aforesaid. For as long as the aforegoing conditions of the Board (including, without limitation, a minimum period of employment, other engagement or appointment as a condition for the lapse of the right to reacquisition) have not

been complied with, or have not lapsed, as applicable, the grantee shall not be entitled to sell or charge or transfer in any other manner the shares which are subject to the right of reacquisition. As security for the compliance with this undertaking the share certificate will be deposited with the Trustee who will release the same to the grantee only after the grantee becomes entitled to the shares and the same are not subject to any other restrictive condition.

9.6. Termination of Engagement

9.6.1 Unless otherwise determined by the Board and/or set forth ingrantee's Agreement, if the engagement of a grantee is terminated orif he ceases to serve as an officer or director of the Company or aRelated Company (as the case may be) prior to the complete exerciseof an option, (a) by reason of death or disability (as determined bythe Board in its absolute discretion), the option shall remainexercisable for a period of one (1) year following such termination(but only to the extent exercisable at termination of engagement or appointment, as the case may be, and not beyond the scheduled expiration date); (b) by reason of retirement, pursuant to applicablelaw with the approval of the Board, the option shall remainexercisable for a period of one hundred and eight (180) daysfollowing such termination (but only to the extent exercisable at termination of engagement or appointment, as the case may be, andnot beyond the scheduled expiration date); and (c) for any otherreason other than for Cause, the option shall remain exercisable for a period of ninety (90) days following the earlier of such terminationor notice of termination (but only to the extent exercisable at theearlier of termination or notice of termination of engagement or appointment, as the case may be, and not beyond the scheduled expiration date); or (d) for Cause (as such term is defined below), asshall be determined by the Board, all options held by or on behalf ofsuch grantee shall immediately expire upon the earlier of such termination or notice of termination.

For purposes hereof, the term "**Cause**" shall mean any of (i) amaterial breach by the grantee of the grantee's obligations under any agreement with the Company or any Related Company; (ii) the commission by the grantee of an act of fraud or embezzlementagainst the Company or any Related Company or the willful takingof action injurious to the business or prospects of the Company orany Related Company; (iii) the conviction of the grantee of a felony; and (iv) the grantee's involvement in an act or omission whichconstitutes breach of trust between the grantee and the Company or any Related Company.

The Board may determine whether any given leave of absence constitutes a termination of employment engagement or appointment,as applicable. Options awarded under this Plan shall not be affectedby any change of employment or engagement, as applicable, so longas the grantee continues to be an employee, director, officer, service provider, consultant and/or advisor of the Company or a Related Company (as the case may be).

9.6.2 With respect to Unapproved 102 Options, if the grantee ceases to be engaged by the Company or any Related Company, the grantee shall

extend to the Company and/or its Related Company a security or guarantee for the payment of tax due at the time of sale of shares, allin accordance with the provisions of Section 102 and the Rules,regulation or orders promulgated thereunder.

9.6.3 Notwithstanding the foregoing, the Board may, in its absolutediscretion but subject to Section 11.1, extend the period of exerciseof an option by a grantee or grantees for such time as it shalldetermine either with or without conditions.

10. **ACCELERATION OF AN OPTION**

Unless otherwise determined by the Board or set forth in the grantee's Agreement:

10.1. Immediately prior to (a) the consummation of a Significant Event (as defined below) or (b) the adoption of any plan or proposal for the liquidation or dissolution of the Company, then, notwithstanding any contrary Vesting Periods in any Agreement or in this Plan, and unless in each case the applicable Agreement provides otherwise, one-quarter (1/4) of the outstanding options held by or for the benefit of any grantee and which have not yet vested shall be accelerated and become immediately vested and exercisable.

10.2. Each of the following shall be a "**Significant Event**": (a) any consolidation or merger of the Company in which the Company is not the continuing or surviving corporation, other than a transaction in which the holders of Ordinary Shares (on an as converted basis) immediately prior thereto have the same, or substantially similar, proportionate ownership of ordinary shares (on an as converted basis) of the surviving corporation immediately after the transaction and a transaction in which the holders of Ordinary Shares (on an as converted basis) immediately prior thereto own a majority of the voting power of the surviving corporation; or (b) any sale, exchange or other transfer (in one transaction or a series of related transactions) of all or substantially all the assets or all or substantially all of the outstanding and issued shares of the Company.

11. **TERM OF OPTIONS; EXERCISE**

11.1. The term of each option shall be for such period as the Board shall determine, but not more than 10 (ten) years from the date of grant thereof or such shorter period as is prescribed in Section 9.6 hereof.

11.2. Unless otherwise determined by the Board, in the event of: (i) the proposed liquidation or dissolution of the Company; or (ii) a Significant Event; then (A) all outstanding options held by or for the benefit of any grantee and which have vested as of such time (including, without limitation, any options accelerated pursuant to Section 10 above) but have not been exercised, will terminate and expire immediately prior to the consummation or closing of such proposed action, transaction or event, and (B) all outstanding options which are not vested as of such time will terminate and expire immediately prior to the consummation or closing of such proposed action, transaction or event. Without derogating from any other right or authority of the Board hereunder, the Board may, in connection with any proposed liquidation or dissolution, or in connection with any Significant Event as aforesaid, determine any other date and time upon which any outstanding option will terminate and expire.

11.3. A grantee who desires that the Trustee exercise an option granted to the Trustee on his behalf shall so instruct the Trustee in writing in the form

annexed hereto as **Appendix A** or in such other form as shall be approved by the Board from time to time. The notice shall be accompanied by payment of the full Option Exercise Price of such shares as provided in the Agreement.

11.4. As a condition for the exercise of the option, the grantee shall pay, or otherwise make arrangements to the Company's satisfaction, for the payment of the tax and other obligatory payments applicable to him (including all sums payable arising out of or in connection with the Company's obligation to deduct tax and other obligatory payments at source) pursuant to applicable law and the provisions of the Plan.

11.5. Upon receipt of all the requisite documents, approvals and payments from the grantee, including sufficient proof of payment or other arrangement with respect to the payment of any applicable taxes in form satisfactory to the Company and the Trustee, the Trustee shall deliver a notice to the Company in the form annexed hereto as **Appendix B** or in such other form as shall be approved by the Board, whereupon the Company shall allot the shares in the name of the Trustee.

11.6. A grantee who desires to exercise an option granted directly to him (and not through the Trustee), subject to the approval of the Board, shall so notify the Company in writing in such form as shall be prescribed by the Board from time to time. As a condition for the exercise of the option, the grantee shall pay or otherwise make arrangements, to the Company's satisfaction, for the payment of the tax and other obligatory payments applicable to him (including all sums payable by the Company arising out of its obligation to deduct tax and other obligatory payments at source) pursuant to applicable law and the provisions of the Plan. Upon receipt of all the requisite documents, approvals and payments from the grantee, including sufficient proof of payment or other arrangement with respect to the payment of any applicable taxes in form satisfactory to the Company, the Company shall allot the shares in the name of the grantee.

11.7. Without limiting the foregoing, the Board may, with the consent of the grantee, from time to time cancel all or any portion of any option then subject to exercise, and the Company's obligation in respect of such option may be discharged by: (i) payment to the grantee or to the Trustee on behalf of the grantee of an amount in cash equal to the excess, if any, of the Fair Market Value of the relevant shares at the date of such cancellation subject to the portion of the option so canceled over the aggregate Option Exercise Price of such shares; (ii) the issuance or transfer to the grantee or to the Trustee on behalf of the grantee of shares of the Company with a Fair Market Value at the date of such transfer equal to any such excess; or (iii) a combination of cash and shares with a combined value equal to any such excess, all as determined by the Board in its sole discretion.

For purposes hereof, the "**Fair Market Value**" of the Ordinary Shares shall mean, as of any date, the last reported sale price, on that date, of the Ordinary Shares of the Company on the principal securities exchange on which such shares are then traded, or, in the event that no sales of such shares took place on such date, the last reported sale price of such shares on such principal securities exchange on the most recent prior date on which a sale of shares took place; provided, however, that if such shares are not publicly traded on the date as of which Fair Market Value is to be determined, "Fair Market Value" of the Ordinary Shares shall mean the value as determined in good faith

by the Board, in its sole discretion, and provided, further, that with respect to an option or share granted pursuant to Section 102, then the Fair Market Value shall be determined in accordance with the provisions of Section 102.

12. **ADDITIONAL DOCUMENTS**

12.1. Until the consummation of the IPO, and whether the option or shares are granted or issued in the name of the Trustee or otherwise, the Company shall have the right to demand from the grantee at any time that the same shall provide, and the grantee shall provide, any certificate, declaration or other document which the Company and/or the Trustee shall consider to be necessary or desirable pursuant to any law, whether local or foreign, including any undertaking on the part of the grantee not to sell his shares during any period which shall be required by an underwriter or investment bank or advisor of the Company for the purpose of any share issue whether private or public and including any certificate or agreement which the Company shall require, if any, from the grantees or any certificate, declaration or other document the obtaining of which shall be deemed by the Board and/or the Trustee to be appropriate or necessary for the purpose of raising capital for the Company, of merging the Company with another company (whether the Company is the surviving entity or not), or of reorganization of the Company, including, in the event of a consolidation or merger of the Company or any sale, lease, exchange or other transfer of all or substantially all of the assets or shares of the Company the sale or exchange, as the case may be, of any shares the grantee (or the Trustee on his behalf) may have purchased hereunder all as shall be deemed necessary or desirable by the Board and/or the Trustee.

12.2. Without derogating from the generality of the aforesaid and in order to guarantee the aforesaid, and because the rights of the Company and the other shareholders are dependent thereon, the grantee shall, upon signing the Agreement and as a condition to the grant of any options hereunder, execute the Proxy and Power of Attorney attached hereto as **Appendix C**, or in such other form as shall be approved by the Board, irrevocably empowering the Trustee and/or the Proxy, until consummation of the IPO, to sign any document and take any action in his name as aforesaid, and the grantee shall have no complaint or claim against the Trustee and/or the Proxy in respect of any such signature or action, or in respect of any determination of the Trustee pursuant hereto or to Section 10.1 above. The grantee will authenticate his signature in the presence of a notary if he shall be asked to do so by the Company, in order to give full validity to the power of attorney.

13. **TAXATION**

13.1. General

Subject to applicable law, the grantee shall be liable for all taxes, duties, fines and other payments which may be imposed by the tax authorities (whether in Israel or abroad) and for every obligatory payment of whatever source in respect of the options, the shares (including, without limitation, upon the grant of options, the exercise of the options, the sale of the shares or the registration of the shares in the grantee's name) or dividends or any other benefit in respect thereof and/or for all charges which shall accrue to the grantee, the Company, any Related Company and/or to the Trustee in connection with the Plan, the Options and/or the shares, or any act or omission of the grantee or the Company in connection therewith or pursuant to any determination of the applicable tax or other authorities.

13.2. Deduction at Source

The Company (including any Related Company) and/or the Trustee shall have the right to withhold or require the grantee to pay an amount in cash or to retain or sell without notice Ordinary Shares in value sufficient to cover any tax or obligatory payment required by a governmental entity administrative authority to be withheld or otherwise deducted and paid with respect to the options or the Shares subject thereto (including, without limitation, upon their grant, exercise or sale or the registration of the Ordinary Shares in the grantee's name) or with respect to dividends or any other benefits in respect thereof ("**Withholding Tax**"), and to make payment (or to reimburse itself or himself for payment made) to the appropriate tax or other authority of an amount in cash equal to the amount of such Withholding Tax. Notwithstanding the foregoing, the grantee shall be entitled to satisfy the obligation to pay any Withholding Tax, in whole or in part, by providing the Company and/or the Trustee with funds sufficient to enable the Company and/or the Trustee to pay such Withholding Tax.

13.3. Certificate of Authorization of Assessing Officer

The Company (including any Related Company) or the Trustee shall at any time be entitled to apply to the assessing officer, and in the case of a grantee abroad, to any foreign tax authority, for receipt of their certificate of authorization as to the amount of tax which the Company or any Related Company or the grantee or the Trustee is to pay to the tax authorities resulting from granting the options or allotting the shares, or regarding any other question with respect to the application of the Plan.

14. **DIVIDENDS**

The Ordinary Shares issued as a result of the exercise of the options shall participate equally with the Company's other Ordinary Shares in every dividend which shall be declared and distributed subject to the following provisions:

14.1. A cash dividend shall be distributed only to persons registered in the register of shareholders as shareholders on the record date fixed for the distribution of the dividend.

14.2. A dividend with regard to shares which are registered in the name of the Trustee shall be paid to the Trustee, subject to any lawful deduction of tax, whether such rate is at the usual rate applicable to a dividend or at a higher rate. The Trustee shall transfer the dividend to the grantee in accordance with instructions that he shall receive from the Company. Alternatively, the Company shall be entitled to pay the dividend directly to the grantee subject to the deduction of the applicable tax and when applicable subject to the provisions of Section 102 and the Rules, regulations or orders promulgated thereunder.

14.3. Without derogating from the provisions of Section 14.2 hereof, the Company or the Trustee shall be entitled to set off and deduct at source from any dividend any sum that the grantee owes to the Company (including any

Related Company) or the Trustee, whether under the Plan or otherwise, and/or any sum that the grantee owes to the tax or other authorities.

15. **RIGHTS AND/OR BENEFITS ARISING OUT OF THE EMPLOYEE/ EMPLOYER OR OTHER RELATIONSHIP AND THE ABSENCE OF AN OBLIGATION TO ENGAGE**

15.1. Other than with respect to social security payments if required to be made by the Company or a Related Company as a result of its choice of the tax treatment of the options pursuant to Section 102, no income or gain which shall be credited to or which purports to be credited to the grantee as a result of the Plan, shall in any manner be taken into account in the calculation of the basis of the grantee's entitlements from the Company or any Related Company or in the calculation of any social welfare right or other rights or benefits arising out of the employee/employer relationship between the parties or any other engagement by the Company of the grantee. If, pursuant to any law, the Company or any Related Company shall be obliged for the purposes of calculation of the said items to take into account income or gain actually or theoretically credited to the grantee, the grantee shall indemnify the Company or any Related Company, against any expense caused to it in this regard.

15.2. Nothing in the Plan shall be interpreted as obliging the Company or any Related Company to employ or otherwise engage the grantee and nothing in the Plan or any option granted pursuant thereto shall confer upon any grantee any right to continue in the employment (or other engagement or appointment, as applicable) of the Company or any Related Company or restrict the right of the Company or any Related Company to terminate such employment (or other engagement or appointment, as applicable) at any time. The grantee shall have no claim whatsoever against the Company or any Related Company as a result of the termination of his employment (or other engagement or appointment, as applicable), including, without limitation, any claim that such termination causes any options to expire or otherwise terminate and/or prevents the grantee from exercising the options and/or from receiving or retaining any shares pursuant to any agreement between him and the Company, or results in any loss due to an early imposition, or earlier than anticipated imposition, of tax or other liability pursuant to applicable law.

16. **ADJUSTMENTS UPON CHANGES IN CAPITALIZATION**

Notwithstanding any other provisions of the Plan, the Board shall take such actions, if any, as it deems appropriate for the adjustment of the number and class of shares subject to each unexercised or unvested option and in the option prices in the event of an IPO, changes in the outstanding share capital of the Company by reason of any stock dividend (bonus shares), stock split, recapitalization, combination, exchange of shares, merger, consolidation, liquidation, split-up, split-off, spin-off or other similar change in capitalization. Upon the occurrence of any such event, the Board may make any adjustments it deems appropriate, including in the aggregate number and class of shares available under the Plan, and the Board's determination in this regard shall be conclusive.

17. **TERM, TERMINATION AND AMENDMENT**

Unless the Plan shall theretofore have been terminated as hereinafter provided, the Plan shall terminate on, and no option shall be granted after, the tenth (10^{th}) anniversary of the date the Plan is adopted by the Board. The Board may at any time terminate, modify or amend the Plan in such respects as it shall deem advisable. Notwithstanding, any amendment with respect to the maximum number of shares that may be issued under the Plan shall be made solely by the Shareholders of the Company. Options granted prior to termination of the Plan may, subject to the terms of the Plan and any Agreement, be exercised thereafter. Unless otherwise provided for herein or in the Agreement, any amendment or modification of the Plan shall be deemed included in the Plan with respect to options granted or shares issued hereunder from time to time, provided, that, except as otherwise provided for herein, no amendment or modification of the Plan may, without the consent of the grantee to whom any option shall theretofore have been granted, adversely affect the rights of such grantee under such option.

18. **EFFECTIVENESS OF THE PLAN**

The Plan shall become effective as of the date determined by the Board.

19. **RELEASE OF THE TRUSTEE AND THE PROXY FROM LIABILITY AND INDEMNIFICATION**

In no event shall the Trustee or the Proxy be liable to the Company and/or any grantee under the Plan and/or any third party (including without prejudice to the generality of the aforegoing, to the income tax authorities and any other governmental or administrative authority), or to a purchaser of shares from any grantee with respect to any act or omission which has been or will be carried out in relation to the Plan, its execution and any matter connected thereto or arising therefrom. The Company will not, and the grantee will be required to covenant upon signing the Agreement that he will not, make any claim against the Trustee or the Proxy in any manner whatsoever and on any ground whatsoever and they expressly agree that if the Trustee or the Proxy are sued by them, then the Trustee or the Proxy shall be entitled by virtue of this Section alone to apply to the court for dismissal of the action against them with costs. The Company covenants and agrees that if an action is commenced by any third party against the Trustee or the Proxy they shall be entitled, without any objection on the Company's part to join the Company as a third party to any action and a judgment against them will be paid by the Company.

The Company covenants and the grantee will be required to covenant to indemnify the Trustee and/or the Proxy against any liability in relation to any claim and/or demand made against the Trustee and/or the Proxy by any person whatsoever, including the tax authorities, in relation to their acts or omissions in connection with the Plan.

20. **GOVERNING LAW**

The Plan and all instruments issued thereunder shall be governed by and construed in accordance with the laws of the State of Israel.

ELOXX PHARMACEUTICALS LTD.

Appendix A

to Eloxx Pharmaceuticals Ltd. Share Ownership and Option Plan (2013)

(Section 11.3)

NOTICE OF EXERCISE

Date: _____

The Trustee under the Eloxx Pharmaceuticals Ltd. Share Ownership and Option Plan (2013) (the "Plan")

Dear Sirs,

Re: **Notice of Exercise**

I hereby wish to inform you that it is my desire that of the Option which was granted to you on _____ to acquire _____ (_____) Ordinary Shares of Eloxx Pharmaceuticals Ltd. (the "**Company**") on my behalf, you exercise and acquire on my behalf _____ (_____) of the Ordinary Shares subject to the said Option at a price of NIS _____ per share, all in accordance with the Plan.

Attached to this Notice is a check in the amount of NIS _____ (NIS _____), as payment for the abovementioned shares.

I am aware that all the shares shall be allotted to you, registered in your name and that you shall hold all share certificates representing such shares.

Likewise, I am aware of and agree to all other provisions of the Plan and applicable law.

Yours sincerely,

_____

Signature

_____

Name

ELOXX PHARMACEUTICALS LTD.

Appendix B

to Eloxx Pharmaceuticals Ltd. Share Ownership and Option Plan (2013) (the "**Plan**")

(Section 11.5)

NOTICE OF EXERCISE

Date: _____

Dear Sirs,

Re: Notice of Exercise

Please be advised that I hereby exercise _____ (_____) of the Ordinary Shares subject to the Option which was granted to me on behalf of _____ on _____ to acquire _____ (_____) Ordinary Shares of Eloxx Pharmaceuticals Ltd., at a price of NIS ____ per share, all in accordance with the Plan.

Attached to this Notice is a check in the amount of NIS _____ (NIS _____) as payment for the abovementioned shares.

Yours sincerely,

_____

The Trustee

ELOXX PHARMACEUTICALS LTD.

Appendix C

to Eloxx Pharmaceuticals Ltd. Share Ownership and Option Plan (2013)

(Section 12.2)

IRREVOCABLE PROXY AND POWER OF ATTORNEY

I, the undersigned, , hereby appoint Mr. or whomever shall replace him as trustee pursuant to the Eloxx Pharmacetucials Ltd. (the "**Company**") Share Ownership and Option Plan (2013) or whomever they shall designate (the "**Trustee**" and the "**Plan**", respectively) as my proxy to participate and vote (or abstain) for me and on my behalf as he, at his sole discretion, shall deem appropriate, on all matters at all meetings of shareholders (whether ordinary, extraordinary or otherwise), of the Company, on behalf of all the shares and/or options of the Company held by the Trustee on my behalf, if and when applicable, and hereby authorize and grant a power of attorney to the Trustee as follows:

I hereby authorize and grant power of attorney to the Trustee for as long as any shares and/or options which were allotted or granted on my behalf are held by the Trustee or registered in his/her name, or for as long as the certificates representing any shares are held by the Trustee, to exercise every right, power and authority with respect to the shares and/or options and to sign in my name and on my behalf any document (including any agreement, including a merger agreement of the Company or an agreement for the purchase or sale of assets or shares (including the shares of the Company held on my behalf) and any and all documentation accompanying any such agreements, such as, but not limited to, decisions, requests, instruments, receipts and the like), and any affidavit or approval with respect to the shares and/or options or to the rights which they represent in the Company in as much as the Trustee shall deem it necessary or desirable to do so. In addition and without derogating from the generality of the foregoing, I hereby authorize and grant power of attorney to the Trustee to sign any document as aforesaid and any affidavit or approval (such as any waiver of rights of first refusal to acquire shares which are offered for sale by other shareholders of the Company and/or any preemptive rights to acquire any shares being allotted by the Company, in as much as such rights shall exist pursuant to the Company's Articles of Association as shall be in existence from time to time) and/or to make and execute any undertaking in my name and on my behalf if the Trustee shall, at his/her sole discretion, deem that the document, affidavit or approval is necessary or desirable for purposes of any placement of securities of the Company, whether private or public (including lock-up arrangements and undertakings), whether in Israel or abroad, for purposes of a merger of the Company with another entity, whether the Company is the surviving entity or not, for purposes of any reorganization or recapitalization of the Company or for purposes of any purchase or sale of assets or shares of the Company.

This Proxy and Power of Attorney shall be interpreted in the widest possible sense, in reliance upon the Plan and upon the goals and intentions thereof.

This Proxy and Power of Attorney shall expire and cease to be of force and effect immediately after the consummation of an IPO (as such term is defined in the Plan) and shall be irrevocable until such time as the rights of the Company and the Company's

shareholders are dependent hereon. The expiration of this Power of Attorney shall in no manner effect the validity of any document (as aforesaid), affidavit or approval which has been signed or given as aforesaid prior to the expiration hereof and in accordance herewith.

IN WITNESS WHEREOF, I have executed this Proxy and Power of Attorney on the day of , 20 .

_____

_____

Name:

Exhibit 10.25

ELOXX PHARMACEUTICALS, INC.

SHARE OWNERSHIP AND OPTION PLAN (2013)

U.S. OPTION AGREEMENT, DATED [ ]

By and between

Eloxx Pharmaceuticals, Inc.
A Delaware corporation
(the "**Company**")

of the first part

and

[ ]

(the "**Optionee**")

of the second part

Unless otherwise define herein, the terms defined in the Plan and in the U.S. Appendix shall have the same defined meanings in this Option Agreement (the "**Option Agreement**").

I. NOTICE OF OPTION GRANT

Name: [ ]

Address: [ ]

The undersigned Optionee has been granted an Option to purchase Shares subject to the terms and conditions of the Plan, the U.S. Appendix and this Option Agreement, as follows:

Date of Grant:	
Purchase price per Share:	US$[ ]
Total Number of Options Granted:	[ ]
Total Purchase Price:	up to US$ [ ]
Type of Option:	X Option intended to qualify as an incentive stock option ("ISO") within the meaning of Section 422 of the Internal Revenue Code of 1986, as amended (the "Code"). [ ] Option not intended to qualify as an Incentive Stock Option (the "NQSO").
Term/Expiration Date:	Ten (10) years from Date of Grant, unless terminated earlier in accordance with Section 5.2 of the Appendix.

Vesting Dates:

The Options shall be exercisable in numbers of whole shares of the Company's Common Stock (the "Shares"), subject to Optionee's continuing to be an Employee, according to the following Vesting Period:

[The Option shall vest over a period of four (4) years, whereby 25% of the Shares shall vest upon [ ], and an additional 1/16 of the Shares shall vest at the end of each subsequent quarter, over the course of three (3) years.]

In the event that the Grantee's employment with the Company is terminated, then the provisions of Section 9.6 of the Plan shall apply.

Notwithstanding anything to the contrary herein, in the Plan or in the U.S Appendix, all unvested Shares underlying the Option shall be accelerated and become fully vested and exercisable in the event of a Special Event (as defined below). The Option shall remain exercisable for a period of 90 days following such Special Event, and unless exercised within such 90 day period, the Option shall expire, be null and void and have no effect whatsoever, automatically, absolutely and irrevocably.

"Special Event" shall mean termination of Optionee's engagement with the Subsidiary (as defined below) within 12 months following a Change of Control Event (i) by Optionee for Good Reason (as such is defined below); or (ii) by Subsidiary without Cause (as such is defined in the Plan).

"Change of Control Event" shall mean any of the following (i) merger or consolidation of the Company with another entity where the voting securities of the Company outstanding immediately before the transaction constitute less than a majority of the voting power of the voting securities of the Company or the surviving entity outstanding immediately after such transaction; or (ii) the sale or disposition of all or substantially all of the Company's assets.

"Good Reason" shall mean (i) change of Optionee's position with the Company or its subsidiaries or its successor that materially reduces Optionee's title, duties or level of responsibility; or (ii) the relocation of Optionee's primary work location to greater than 50 miles away from Optionees then current primary work location in the USA.

II. AGREEMENT

1. Grant of Option

(a) Subject to the terms and conditions set forth herein and in the Plan, the Company hereby grants to the Optionee named in the Notice of Option Grant above (the "Optionee"), an option (the "Option") to purchase the number of Shares set forth in the Notice of Option Grant (the "Notice of Grant''), at the Purchase Price per Share set forth in the Notice of Grant (the ''Purchase Price").

(b) In accordance with the Plan, unless specifically stated otherwise herein, in the event of a conflict between the terms and conditions of the Plan and this Option Agreement, the terms and conditions of the Plan shall prevail.

(c) In the case of an ISO, the Option shall not be considered an ISO to the extent that the Fair Market Value of the Shares, which may be purchased on exercise of the Option for the first time during any calendar year (under all plans of the

Company and any Parent or Subsidiary of the Company), exceeds $100,000. For purposes of this Section 1(c), ISOs shall be taken into account in the order in which they were granted. The Fair Market Value of the Shares shall be determined as of the time the Option with respect to such Shares is granted.

(d) The Optionee is aware that: (i) the Company intends to issue additional shares and options in the future to various entities and individuals, as the Company in its sole and absolute discretion shall determine; and (ii) the Company may increase its share capital by new securities in such amount and compensation (if at all) as it finds suitable; and the Optionee hereby waives fully, absolutely and irrevocably on any claim and/or demand it has or may have regarding such issuance or increase.

(e) The Optionee further represents that he is familiar with the Company's business and financial condition, and has acquired sufficient information regarding the Company in order to reach an informed and knowledgeable decision to participate in the Option Plan and to be granted the Options.

2. <u>Exercise of Option</u>

(a) **Right to Exercise**. This Option shall be exercisable at any time from the Date of Grant and prior to the Expiration Date of the Term in accordance with the Vesting Periods set forth in the Notice of Grant and subject to the applicable provisions of the Plan and this Option Agreement.

(b) **Method of Exercise**. This Option shall be exercisable by delivery of an exercise notice in the form attached as Exhibit B hereto (the "Exercise Notice"), and other documentation containing such other representations and agreements as may be required from time to time by the Company. The Exercise Notice shall be accompanied by (1) payment of the aggregate Purchase Price for the number of Shares to be purchased and (2) payment (by any method of payment noted in Section 3) of the aggregate withholding and other taxes due from the Optionee with respect to the exercise of the Option, if applicable.

This Option shall be deemed to be exercised upon receipt by the Company of such fully executed Exercise Notice accompanied by the aggregate Purchase Price and withholding and other taxes due from the Optionee with respect to the applicable Shares, if applicable.

No Shares shall be issued pursuant to the exercise of an Option unless such issuance and such exercise comply with applicable laws. If any law or regulation requires the Company to take any action with respect to the Shares specified in such notice before the issuance thereof, then the date of their issuance shall be extended for the period necessary to take such action. Assuming such compliance, for income tax purposes the Shares shall be considered transferred to the Optionee on the date on which the Option is exercised with respect to such Shares.

(c) The Options may be exercised only to Exercise whole Shares, and in no case may a fraction of a Share be issued. If any fractional Shares would be deliverable upon exercise, such fraction shall be rounded up or down, to the nearest whole number. Half of a share will be rounded down.

(d) **Voting Rights**. Pursuant to the terms set forth in the Plan (unless the Company, at its sole and absolute discretion, which shall not be subject to any reasonable grounds standard, may decide otherwise), until the consummation of an IPO, any Share issued upon exercise of Options (and any other securities of the Company issued with respect thereto) shall be voted by an irrevocable proxy (the "Proxy"), pursuant to the directions of the Board, such Proxy to be in favor of the person or persons designated by the Board and to provide for the power of such designated person(s) to act, instead of the Optionee and on its behalf, with respect to any and all aspects of the Optionee's shareholdings in the Company. The form of Proxy is attached hereto as Exhibit C. Such person or persons designated by the Board shall be indemnified and held harmless by the Company against any costs and expenses (including counsel fees) reasonably incurred by him/her, or any liability (including any sum paid in settlement of a claim with the prior written approval of the Company) arising out of any act or omission to act in connection with the voting of such Proxy, unless arising out of such person's gross negligence, fraud or malice, all to the extent permitted by applicable law. Such indemnification shall be in addition to any rights of indemnification such person(s) may have as a director, shareholder or otherwise under the Company's Articles of Association, any agreement, insurance policy or otherwise.

3. **Method of Payment**

Payment of the aggregate Purchase Price shall be made in U.S. dollars, by any of the following, as shall be determined by the Administrator in its sole discretion (other than (4)): (1) cash, (2) check, (3) if approved by the Board at the time of exercise, and if the options are NQSOs, the retention of Shares otherwise issuable to the Optionee on exercise in an amount not to exceed the minimum amount of tax required to be withheld, or (4) a combination thereof if agreed to by the Optionee. The Purchase Price shall be denominated in the currency determined by the Company.

4. Non-Transferability of Options and Shares

(a) Options may not be transferred in any manner otherwise than by will, pursuant to a domestic relations order, or by the laws of descent or distribution and may be exercised during the lifetime of Optionee only by Optionee. The terms of the Plan and this Option Agreement shall be binding upon the executors, administrators, heirs, successors and assigns of Optionee.

(b) Without derogating from the Company's Articles of Association, as amended (the "Articles"), Shares shall not be sold or transferred directly or indirectly to a competitor of the Company. The Board shall determine, in its sole and absolute discretion, whether a certain transfer of Shares is not allowed according to this Section.

(c) Until an IPO, the sale or the transfer of the Shares issued under this Option Agreement and following the exercise of the Option, shall be subject for all intents and purposes to the provisions set forth in the Plan, the Company's Articles, and any documents and agreements of the shareholders in the Company,

including but not limited to, in connection with, preemptive rights, right of first refusal, bring along right, tag along right, and different preference and priority rights (such as veto rights, voting rights, registration rights, liquidation preference rights, dividends preference rights, participation preference rights, etc.).

5. Term of Option

This Option may be exercised only during the period commencing on the Date of Grant and terminating on the Expiration Date of the Term (the "Term") set out in the Notice of Grant, unless terminated earlier in accordance with the provisions of the Option Agreement or the Plan, and may be exercised during such Term only in accordance with the Plan and the terms of this Option Agreement. In the case of an ISO granted to a Ten (10) Percent Shareholder the term of the Option shall be no more than five (5) years from the date of grant.

6. Tax Consequences

Any tax liabilities of the Optionee arising from the grant or exercise of any Option or from the disposition of the Shares or from any other event or act (whether of the Optionee or of the Company) hereunder, shall be borne solely by the Optionee and the Optionee waives fully, absolutely and irrevocably on any right or claim in this respect. The Company shall withhold taxes according to the requirements under the applicable laws, rules, and regulations, including withholding taxes at source. The Optionee may not exercise this option unless the tax withholding obligations of the Company and/or its Subsidiaries are satisfied. Accordingly, the Optionee may not be able to exercise this option when desired even though the option is vested, and the Company will have no obligation to issue a certificate for such Shares or release such Shares from any escrow provided for herein, if applicable, unless such obligations are satisfied.

At the time the Optionee exercises any Option, in whole or in part, and at any time thereafter as requested by the Company, the Optionee hereby authorizes withholding from payroll and any other amounts payable to the Optionee, and otherwise agrees to make adequate provision for (including by means of a "same day sale" pursuant to a program developed under Regulation T as promulgated by the Federal Reserve Board to the extent permitted by the Company), any sums required to satisfy the federal, state, local and foreign tax withholding obligations of the Company or an Affiliate, if any, which arise in connection with the exercise of the Option. If this Option is a NQSO, then upon the Optionee's request and subject to approval by the Company, and compliance with any applicable legal conditions or restrictions, the Company may withhold from fully vested Shares otherwise issuable to the Optionee upon the exercise of this option a number of whole Shares having a fair market value, determined by the Company as of the date of such exercise, not in excess of the maximum amount of tax required to be withheld by law (or such lower amount as may be necessary to avoid classification of the option as a liability for financial accounting purposes). Shares shall be withheld solely from fully vested Shares determined as of the date of exercise that are otherwise issuable upon such exercise.

Furthermore, such Optionee shall agree to compensate and indemnify the Company, and/or the Company's shareholders and/or directors and/or officers if applicable, and hold them harmless against and from any and all liability for any such tax or interest or

penalty thereon of the Optionee, including without limitation, liabilities relating to the Optionee's necessity to withhold, or to have withheld, any such tax from any payment made to the Optionee, provided that they acted in due care. Except as otherwise required by law, the Company shall not be obligated to honor the exercise of any Option by or on behalf of an Optionee until all tax consequences (if any) arising from the exercise of such Options are resolved in a manner reasonably acceptable to the Company.

7. Governing Law; Severability

This Agreement shall be governed by, and interpreted in accordance with, the laws of the State of Delaware, U.S.A., notwithstanding the conflicts of laws principles of any jurisdiction, except, to the extent applicable, that the provisions applicable to the Ordinary Shares and/or the exercise of rights by virtue of any equity holding in the Company shall be governed by and construed according to the laws of the State of Israel.

8. Severability

The provisions of this Option Agreement or Notice of Grant should be enforced to the fullest extent permissible under the law and public policies applied in each jurisdiction in which enforcement is sought. Accordingly, in the event that any provision of this Option Agreement Notice of Grant would be held in any jurisdiction to be invalid and/or prohibited and/or unenforceable for any reason, such provision, as to such jurisdiction, shall be ineffective, without affecting the validity and/or enforceability of the remainder of this Option Agreement Notice of Grant in that jurisdiction and/or the validity and/or enforceability of this Option Agreement or Notice of Grant, including the said provision, in any other jurisdiction.

Notwithstanding, the foregoing, if such provision could be more narrowly drawn so as not be invalid, prohibited or unenforceable in such jurisdiction, it shall, as to such jurisdiction, be so narrowly drawn, without invalidating the remaining provisions of this Option Agreement or Notice of Grant including the said provision, in any other jurisdiction.

9. Entire Agreement

The Plan is incorporated herein by reference. The Plan and this Option Agreement constitute the entire agreement of the parties with respect to the subject matter hereof and supersede in their entirety all prior undertakings and agreements of the Company and Optionee with respect to the subject matter hereof, and may not be modified adversely to the Optionee's interest except by means of a writing signed by the Company and Optionee.

10. No Guarantee of Continued Service

Optionee acknowledges and agrees that the vesting of shares pursuant to the Vesting Period hereof is earned only by continuing as an Employee or Services Provider at the will of the Company. Optionee further acknowledges and agrees that this Agreement, the transactions contemplated hereunder and the Vesting Period set forth herein do not constitute an express or implied promise of continued engagement as an Employee or Services Provider and shall not interfere in any way with Optionee's right or the Company's right to terminate Optionee's relationship as an Employee or Services Provider at any time, with or without Cause.

11. Confidentiality

The Optionee agrees and acknowledges that the terms and conditions of this Option Agreement, including without limitation the number of Shares for which Options have been granted, are confidential. The Optionee agrees that he will not disclose these terms and conditions to any third party, except to the Optionee's financial or legal advisors, tax advisors or family members, unless such disclosure is required by law.

By affixing his signature hereunder, Optionee acknowledges receipt of a copy of the Plan and represents that Optionee is familiar with the terms and provisions thereof, and hereby accepts this Option subject to all of the terms and provisions thereof. Optionee has reviewed the Plan and this Option Agreement in their entirety, has had an opportunity to obtain the advice of counsel prior to executing this Option Agreement and fully understands all provisions of the Option Agreement. Optionee hereby agrees to accept as binding, conclusive and final all decisions or interpretations of the Administrator upon any questions arising under the Plan or this Option. Optionee further agrees to notify the Company upon any change in the residence address indicated below.

[ ]	**ELOXX PHARMACEUTICALS LTD.**
Signature	**By**

EXHIBIT B

ELOXX PHARMACEUTICALS LTD.

SHARE OWNERSHIP AND OPTION PLAN

EXERCISE NOTICE

To: Eloxx Pharmaceuticals Ltd.

1. **Exercise of Option**. Effective as of today, I, [ ], the undersigned ("Optionee") hereby elects to exercise Optionee's option to purchase Shares under and pursuant to the Share Ownership and Option Plan (the "Plan") and the Option Agreement dated (the "Option Agreement").

2. **Delivery of Payment**. Optionee herewith delivers to the Company the full Purchase Price for the Shares, as set forth in the Option Agreement and the payment of the aggregate withholding or other taxes in connection with such exercise.

3. **Rights as Shareholder**. Until the issuance of the Shares (as evidenced by the appropriate entry on the books of the Company or of a duly authorized transfer agent of the Company), no right to receive dividends or any other rights as a shareholder shall exist with respect to the Optioned Shares, notwithstanding the exercise of the Option. The Shares shall be issued to Optionee as soon as practicable after the Option is exercised. No adjustment shall be made for a dividend or other right for which the record date is prior to the date of issuance except as provided in the Plan.

4. **Tax Consultation**. Optionee understands that he/she may suffer adverse tax consequences as a result of Optionee's Exercise or disposition of the Shares. Optionee represents that he/she has consulted with tax consultants that Optionee deems advisable in connection with the purchase or disposition of the Shares and that Optionee is not relying on the Company or any Parent or Subsidiary or Employee or Services Provider thereof for any tax advice.

5. **Additional Representations**. The Optionee hereby acknowledges that he has been informed that nothing herein shall obligate the Company to register its shares or any portion of its shares on a stock exchange.

6. **Successors and Assigns**. The Company may assign any of its rights under this Agreement to single or multiple assignees, and this Agreement shall inure to the benefit of the successors and assigns of the Company. Subject to the restrictions on transfer herein set forth, this Agreement shall be binding upon Optionee and his or her heirs, executors, successors and assigns.

Signed by the Company and Optionee.

Submitted by:	Accepted by:
OPTIONEE	ELOXX PHAMACEUTICALS LTD.
Signature	By
Print Name	Title
Address:	Address:

EXHIBIT C

PROXY

The undersigned, as record holder of securities of Eloxx Pharmaceuticals Ltd.("Company"), hereby irrevocably appoints the Company's Chairman of the Board of Directors and/or its successors and assigns, as my proxy, instead of myself and on my behalf, with respect to any and all rights and aspects of my options, shares or other securities in the Company (collectively, the "Shares"), including, without limiting the foregoing generality, (i) receiving any notices the Company may deliver to its shareholders, pursuant to the Company's Articles of Association, as amended, any shareholders agreement, applicable law or otherwise, (ii) attending all meetings of the shareholders of the Company and voting such Shares at any meeting of the shareholders of the Company (and at any postponements or adjournments thereof) and waiving all minimum notice requirements for such meetings of shareholders, (iii) executing any consents or dissents in writing without a meeting of the shareholders of the Company to any corporate action thereof, (iv) waiving any preemptive right, right of first refusal, right of first offer, co-sale right or any other similar right or restriction to which I will be entitled by virtue of the Shares, (v) giving or withholding consent or agreement to any matter which requires my consent or agreement in my capacity as a shareholder of the Company (whether such is required under the Articles of Association of the Company, as amended, any agreement to which I am a party as a shareholder or otherwise), and/or (vi) joining in making a request to convene a general meeting or class meeting of the shareholders of the Company or to otherwise exercise any and all powers and authorities vested within me in my capacity as a shareholder of the Company (in each of the foregoing cases, to the fullest extent that I will be entitled to act so, and in the same manner and with the same effect as if the undersigned were personally present at any such meeting or voting such Shares or personally acting on any matters submitted to shareholders for approval or consent).

This proxy is made pursuant the Eloxx Pharmaceuticals Ltd. Share Ownership and Option Plan ("Plan").

The Shares shall be voted by the proxy holder in the same manner as the votes of the majority of other shareholders of the Company present and voting at the applicable meeting.

This proxy is irrevocable as it may affect rights of third parties. The proxy holder will have the full power of substitution and revocation. All authority herein conferred shall survive the death or incapacity of the undersigned and any obligation of the undersigned hereunder shall be binding upon the heirs, personal representatives, successors and assigns of the undersigned.

The irrevocable proxy will remain in full force and effect until the consummation of an IPO(as defined in the Plan), upon which it will terminate automatically or be superseded by mutual agreement.

This proxy shall be signed exactly as the shareholder's name appears on his share certificate. Joint shareholders must each sign this proxy. If signed by an attorney in fact, the Power of Attorney must be attached.

Such person or persons designated by the Board shall be indemnified and held harmless by the Company against any costs and expenses (including counsel fees) reasonably incurred by him/her, or any liability (including any sum paid in settlement of a claim with the prior written approval of the Company) arising out of any act or omission to act in connection with the voting of such Proxy, unless arising out of such person's gross negligence, fraud or malice, all to the extent permitted by applicable law. Such indemnification shall be in addition to any rights of indemnification such person(s) may have as a director, shareholder or otherwise under the Company's Articles of Association, any agreement, insurance policy or otherwise.

Name & Signature	Date

ELOXX PHARMACEUTICALS, INC.

PERFORMANCE
STOCK OPTION GRANT NOTICE
(INDUCEMENT GRANT OUTSIDE OF THE
AMENDED AND RESTATED
SEVION THERAPEUTICS, INC. 2008 INCENTIVE COMPENSATION PLAN)

As an inducement material to Participant's entering into employment with Eloxx Pharmaceuticals, Inc.[1] (the "***Corporation***"), the Corporation hereby grants to Optionee an option to purchase the number of shares of the Corporation's Common Stock set forth below. This option is granted outside of the Corporation's Amended and Restated 2008 Incentive Compensation Plan (the "***Plan***"), but is subject to all of the terms and conditions as set forth in this Grant Notice, in the Stock Option Agreement, the Plan (as if it had been granted under the Plan) and the Notice of Exercise, all of which are attached hereto and incorporated herein in their entirety. Capitalized terms not explicitly defined herein but defined in the Plan or the Stock Option Agreement will have the same definitions as in the Plan or the Stock Option Agreement. If there is any conflict between the terms in this Grant Notice and the Plan, the terms of the Plan will control.

Optionee:	Robert Ward
Grant Date:	December 26, 2017
Number of Shares Subject to Option:	22,427
Exercise Price (Per Share):	$8.00
Total Exercise Price:	$179,416
Expiration Date:	December 25, 2027

Type of Grant: ☒ Non-Statutory Option

Exercise Schedule: Same as Vesting Schedule

Vesting Schedule: This option shall vest upon the Corporation's first successful completion of a Phase 2b study with respect to any indication (as determined by the Board in its reasonable discretion), subject to Optionee's continued Service through such date.

In addition, this option (or a portion thereof) may be eligible for accelerated vesting if and to the extent provided in the Optionee's individual employment or service agreement with the Corporation, including Sections 5(b) and 8 thereof**.**

Payment: By one or a combination of the following items (described in the Stock Option Agreement):

☒ By cash, check, bank draft or money order payable to the Corporation

☐ Pursuant to a Regulation T Program if the shares are publicly traded

☐ By delivery of already-owned shares if the shares are publicly traded

[1] Formerly, Sevion Therapeutics, Inc.

☐ If and only to the extent this option is a Non-Statutory Option, and subject to the Corporation's consent at the time of exercise, by a "net exercise" arrangement

Additional Terms/Acknowledgements: Optionee acknowledges receipt of, and understands and agrees to, this Grant Notice, the Stock Option Agreement and the Plan. Optionee acknowledges and agrees that this Grant Notice and the Stock Option Agreement may not be modified, amended or revised except as provided in the Plan. Optionee further acknowledges that as of the Grant Date, this Grant Notice, the Stock Option Agreement, and the Plan set forth the entire understanding between Optionee and the Corporation regarding this option award and supersede all prior oral and written agreements, promises and/or representations on that subject with the exception of, if applicable, (i) equity awards previously granted and delivered to Optionee, (ii) any compensation recovery policy that is adopted by the Corporation or is otherwise required by applicable law and (iii) any written employment agreement, severance agreement, offer letter or other written agreement entered into between the Corporation and Optionee specifying the terms that should govern this specific option. By accepting this option, Optionee consents to receive such documents by electronic delivery and to participate in the Plan through an on-line or electronic system established and maintained by the Corporation or another third party designated by the Corporation.

ELOXX PHARMACEUTICALS, INC.

By: /s/ Gregory Weaver
Signature
Title: Chief Financial Officer
Date: March 5, 2018

OPTIONEE:

/s/ Robert E. Ward
Signature
Date: March 5, 2018

ATTACHMENTS: Stock Option Agreement, Sevion Therapeutics, Inc. Amended and Restated 2008 Incentive Compensation Plan and Notice of Exercise

ELOXX PHARMACEUTICALS, INC.

STOCK OPTION AGREEMENT

RECITALS

A. This option has been granted to Optionee outside of, but subject to the terms and conditions of the Plan as if it has been granted under the Plan. The option is granted in compliance with NASDAQ Listing Rule 5634(c)(4) as a material inducement to you entering into employment with the Corporation. For the avoidance of doubt, the shares of Common Stock underlying this option shall not reduce and shall have no impact on the number of shares available for grant under the Plan.

B. The Board has adopted the Plan for the purpose of retaining the services of selected employees who provide services to the Corporation (or any Parent or Subsidiary).

C. Optionee is to render valuable services to the Corporation (or a Parent or Subsidiary), and the Committee has approved the grant of an option to Optionee pursuant to this Agreement.

D. All capitalized terms in this Agreement shall have the meaning assigned to them in the attached Appendix.

NOW, THEREFORE, it is hereby agreed as follows:

1. **Grant of Option**. The Corporation hereby grants to Optionee, as of the Grant Date, an option to purchase up to the number of Option Shares specified in the Grant Notice. The Option Shares shall be purchasable from time to time during the option term specified in Paragraph 2 at the Exercise Price.

2. **Option Term**. This option shall have a maximum term of ten (10) years measured from the Grant Date and shall accordingly expire at the close of business on the Expiration Date, unless sooner terminated in accordance with Paragraph 5 of this Agreement or the provisions of the Plan.

3. **Limited Transferability**. This option shall be neither transferable nor assignable by Optionee other than by will or the laws of inheritance following Optionee's death and may be exercised, during Optionee's lifetime, only by Optionee.

4. **Dates of Exercise**. This option shall become exercisable for the Option Shares in one or more installments in accordance with the Exercise Schedule set forth in the Grant Notice. As the option becomes exercisable for such installments, those installments shall accumulate, and the option shall remain exercisable for the accumulated installments until the Expiration Date or sooner termination of the option term under Paragraph 5 or 6.

5. **Termination of Service**. The option term specified in Paragraph 2 shall terminate (and this option shall cease to be outstanding) prior to the Expiration Date should any of the following provisions become applicable:

(a) Should Optionee cease to remain in Service with the Corporation (or any Parent or Subsidiary) for any reason (other than death, Permanent Disability or Misconduct) while this option is outstanding, then Optionee shall have a three (3)-month period measured from the date of such cessation of Service during which to exercise this option, but in no event shall this option be exercisable at any time after the Expiration Date.

(b) Should Optionee die while this option is outstanding, then this option may be exercised by (i) the personal representative of Optionee's estate or (ii) the person or persons to whom the option is transferred pursuant to Optionee's will or the laws of inheritance following Optionee's death. Any such right to exercise this option shall lapse, and this option shall cease to be outstanding, upon the earlier of (i) the expiration of the twelve (12)-month period measured from the date of Optionee's death or (ii) the Expiration Date.

(c) Should Optionee cease to remain in Service by reason of Permanent Disability while this option is outstanding, then Optionee shall have a twelve (12)-month period measured from the date of such cessation of Service during which to exercise this option. In no event shall this option be exercisable at any time after the Expiration Date.

(d) During the limited period of post-employment exercisability, this option may not be exercised in the aggregate for more than the number of Option Shares for which this option is, at the time of Optionee's termination of Service, exercisable pursuant to the Exercise Schedule specified in the Grant Notice or the provisions of the Plan. This option shall not become exercisable for any additional Option Shares, whether pursuant to the normal Exercise Schedule specified in the Grant Notice or the provisions of the Plan, following Optionee's termination of Service, except to the extent (if any) specifically authorized by the Plan Administrator pursuant to an express written agreement with Optionee. Upon the expiration of such limited exercise period or (if earlier) upon the Expiration Date, this option shall terminate and cease to be outstanding for any exercisable Option Shares for which the option has not otherwise been exercised.

(e) Should Optionee's Service with the Corporation (or any Parent or Subsidiary) be terminated for Misconduct or should Optionee otherwise engage in any Misconduct while this option is outstanding, then this option shall terminate immediately and cease to remain outstanding.

6. **Change in Control**.

(a) This option to the extent outstanding at the time of a Change in Control but not otherwise fully exercisable, shall automatically accelerate so that such option shall, immediately prior to the effective date of that Change in Control, become exercisable for all the shares of Common Stock at the time subject to this option and may be exercised for any or all of those shares as fully vested shares of Common Stock. However, this option shall not become exercisable on an accelerated basis if and to the extent this option is, in connection with the Change in Control, to be assumed by the successor corporation (or parent thereof) or otherwise continued in full force and effect pursuant to the terms of the Change in Control transaction or such option is replaced with a cash retention program of the successor corporation that preserves the spread existing at the time of the Change in Control on the shares of Common Stock as to which the option is not otherwise exercisable and provides for the subsequent vesting and payment of that spread in accordance with the same Exercise Schedule applicable to those shares.

(b) Immediately following the consummation of the Change in Control, this option shall terminate and cease to be outstanding, except to the extent this option is assumed by the successor corporation (or parent thereof) in connection with the Change in Control or is otherwise continued in full force and effect pursuant to the terms of the Change in Control transaction.

(c) If this option is assumed in connection with a Change in Control or is otherwise continued in full force and effect, then this option shall be appropriately adjusted, immediately after such Change in Control, to apply to the number and class of securities which would have been issuable to Optionee in consummation of such Change in Control had the option been exercised immediately prior to such Change in Control, and appropriate adjustments shall also be made to the Exercise Price, provided the

aggregate Exercise Price shall remain the same. To the extent the actual holders of the Corporation's outstanding Common Stock receive cash consideration for their Common Stock in consummation of the Change in Control transaction, the successor corporation may, in connection with the assumption or continuation of this option and subject to the Plan Administrator's approval, substitute one or more shares of its own common stock with a fair market value equivalent to the cash consideration paid per share of Common Stock in such Change in Control transaction, provided such common stock is readily traded on an established U.S. securities exchange or market.

(d) This Agreement shall not in any way affect the right of the Corporation to adjust, reclassify, reorganize or otherwise change its capital or business structure or to merge, consolidate, dissolve, liquidate or sell or transfer all or any part of its business or assets.

7. **Adjustment in Option Shares**. Should any change be made to the Common Stock by reason of any stock split, stock dividend, recapitalization, combination of shares, exchange of shares, spin-off transaction or other change affecting the outstanding Common Stock as a class without the Corporation's receipt of consideration or should the value of outstanding shares of Common stock be substantially reduced as a result of a spin-off transaction or an extraordinary dividend or distribution or should there occur any merger, consolidation or other reorganization (other than a Change in Control), then equitable adjustments shall be made to (i) the total number and/or class of securities subject to this option and (ii) the Exercise Price in such manner as the Committee deems appropriate.

8. **Stockholder Rights**. The holder of this option shall not have any stockholder rights with respect to the Option Shares until such person shall have exercised the option, paid the Exercise Price and become a holder of record of the purchased shares.

9. **Manner of Exercising Option**.

(a) In order to exercise this option with respect to all or any part of the Option Shares for which this option is at the time exercisable, Optionee (or any other person or persons exercising the option) must take the following actions:

(i) Execute and deliver to the Corporation a Notice of Exercise for the Option Shares for which the option is exercised or comply with such other procedures as the Corporation may establish for notifying the Corporation of the exercise of this option for one or more Option Shares.

(ii) Pay the aggregate Exercise Price for the purchased shares in one or more of the following forms:

(A) cash or check made payable to the Corporation;

(B) shares of Common Stock (whether delivered in the form of actual stock certificates or through attestation of ownership) held for the requisite period (if any) necessary to avoid any resulting charge to the Corporation's earnings for financial reporting purposes and valued at Fair Market Value on the Exercise Date;

(C) through a special sale and remittance procedure pursuant to which Optionee (or any other person or persons exercising the option) shall concurrently provide irrevocable instructions (i) to a brokerage firm (reasonably satisfactory to the Corporation for purposes of administering such procedure in accordance with the Corporation's pre-clearance/pre-notification policies) to effect the immediate sale of the purchased shares and remit to the Corporation, out of the sale proceeds available on the settlement date, sufficient funds to cover the aggregate Exercise Price payable for the purchased shares

plus all applicable income and employment taxes required to be withheld by the Corporation by reason of such exercise and (ii) to the Corporation to deliver the certificates for the purchased shares directly to such brokerage firm on such settlement date in order to complete the sale; and

(D) If this option is a Non-Statutory Option, subject to the consent of the Corporation at the Exercise Date, by a "net exercise" arrangement pursuant to which the Corporation will reduce the number of shares of Common Stock issued upon exercise of the option by the largest whole number of shares with a Fair Market Value that does not exceed the aggregate exercise price. Optionee must pay any remaining balance of the aggregate exercise price not satisfied by the "net exercise" in cash or other permitted form of payment. Shares of Common Stock will no longer be outstanding under the option and will not be exercisable thereafter if those shares (i) are used to pay the exercise price pursuant to the "net exercise," (ii) are delivered to Optionee as a result of such exercise, and (iii) are withheld to satisfy Optionee's tax withholding obligations.

Except to the extent the sale and remittance procedure is utilized in connection with the option exercise, payment of the Exercise Price must accompany the Notice of Exercise (or other notification procedure) delivered to the Corporation in connection with the option exercise.

(iii) Furnish to the Corporation appropriate documentation that the person or persons exercising the option (if other than Optionee) have the right to exercise this option.

(iv) Make appropriate arrangements with the Corporation (or Parent or Subsidiary employing Optionee) for the satisfaction of all applicable income and employment tax withholding requirements applicable to the option exercise.

(b) As soon as practical after the Exercise Date, the Corporation shall issue to or on behalf of Optionee (or any other person or persons exercising this option) a certificate for the purchased Option Shares, with the appropriate legends affixed thereto.

(c) In no event may this option be exercised for any fractional shares.

10. **Compliance with Laws and Regulations.**

(a) The exercise of this option and the issuance of the Option Shares upon such exercise shall be subject to compliance by the Corporation and Optionee with all applicable requirements of law relating thereto and with all applicable regulations of any stock exchange (or the Nasdaq National Market, if applicable) on which the Common Stock may be listed for trading at the time of such exercise and issuance.

(b) The inability of the Corporation to obtain approval from any regulatory body having authority deemed by the Corporation to be necessary to the lawful issuance and sale of any Common Stock pursuant to this option shall relieve the Corporation of any liability with respect to the non-issuance or sale of the Common Stock as to which such approval shall not have been obtained. The Corporation, however, shall use its best efforts to obtain all such approvals.

11. **Successors and Assigns**. Except to the extent otherwise provided in Paragraph 3, the provisions of this Agreement shall inure to the benefit of, and be binding upon, the Corporation and its successors and assigns and Optionee, Optionee's assigns, the legal representatives, heirs and legatees of Optionee's estate.

12. **Notices**. Any notice required to be given or delivered to the Corporation under the terms of this Agreement shall be in writing and addressed to the Corporation at its principal corporate offices. Any notice required to be given or delivered to Optionee shall be in writing and addressed to Optionee at the address indicated below Optionee's signature line on the Grant Notice. All notices shall be deemed effective upon personal delivery or upon deposit in the U.S. mail, postage prepaid and properly addressed to the party to be notified.

13. **Construction**. This Agreement and the option evidenced hereby are made and granted pursuant to the Plan and are in all respects limited by and subject to the terms of the Plan. All decisions of the Committee with respect to any question or issue arising under the Plan or this Agreement shall be conclusive and binding on all persons having an interest in this option.

14. **Governing Law**. The interpretation, performance and enforcement of this Agreement shall be governed by the laws of the State of Delaware without resort to that State's conflict-of-laws rules.

15. **Excess Shares**. If the Option Shares covered by this Agreement exceed, as of the Grant Date, the number of shares of Common Stock which may without stockholder approval be issued under the Plan, then this option shall be void with respect to those excess shares, unless stockholder approval of an amendment sufficiently increasing the number of shares of Common Stock issuable under the Plan is obtained in accordance with the provisions of the Plan. In no event shall the Option be exercisable with respect to any of the excess Option Shares unless and until such stockholder approval is obtained.

16. **Additional Terms Applicable to an Incentive Option**. In the event this option is designated an Incentive Option in the Grant Notice, the following terms and conditions shall also apply to the grant:

(a) This option shall cease to qualify for favorable tax treatment as an Incentive Option if (and to the extent) this option is exercised for one or more Option Shares: (A) more than three (3) months after the date Optionee ceases to be an employee for any reason other than death or Permanent Disability or (B) more than twelve (12) months after the date Optionee ceases to be an employee by reason of Permanent Disability.

(b) No installment under this option shall qualify for favorable tax treatment as an Incentive Option if (and to the extent) the aggregate Fair Market Value (determined at the Grant Date) of the Common Stock for which such installment first becomes exercisable hereunder would, when added to the aggregate value (determined as of the respective date or dates of grant) of the Common Stock or other securities for which this option or any other Incentive Options granted to Optionee prior to the Grant Date (whether under the Plan or any other option plan of the Corporation or any Parent or Subsidiary) first become exercisable during the same calendar year, exceed One Hundred Thousand Dollars ($100,000) in the aggregate. Should such One Hundred Thousand Dollar ($100,000) limitation be exceeded in any calendar year, this option shall nevertheless become exercisable for the excess shares in such calendar year as a Non-Statutory Option.

(c) Should Optionee hold, in addition to this option, one or more other options to purchase Common Stock which become exercisable for the first time in the same calendar year as this option, then for purposes of the foregoing limitations on the exercisability of such options as Incentive Options, this option and each of those other options shall be deemed to become first exercisable in that calendar year, on the basis of the chronological order in which such options were granted, except to the extent otherwise provided under applicable law or regulation.

17. **Withholding Obligations**.

(a) At the time Optionee exercises this option, in whole or in part, and at any time thereafter as requested by the Corporation, Optionee hereby authorizes withholding from payroll and any other amounts payable to Optionee, and otherwise agrees to make adequate provision for (including by means of a "same day sale" pursuant to a program developed under Regulation T as promulgated by the Federal Reserve Board to the extent permitted by the Corporation), any sums required to satisfy the federal, state, local and foreign tax withholding obligations of the Corporation or an Affiliate, if any, which arise in connection with the exercise of the option.

(b) If this option is a Non-Statutory Option, then upon Optionee's request and subject to approval by the Corporation, and compliance with any applicable legal conditions or restrictions, the Corporation may withhold from fully vested shares of Common Stock otherwise issuable to Optionee upon the exercise of this option a number of whole shares of Common Stock having a Fair Market Value, determined by the Corporation as of the Exercise Date, not in excess of the maximum amount of tax required to be withheld by law (or such lower amount as may be necessary to avoid classification of the option as a liability for financial accounting purposes). Shares of Common Stock shall be withheld solely from fully vested shares of Common Stock determined as of the Exercise date that are otherwise issuable upon such exercise. Any adverse consequences to Optionee arising in connection with such share withholding procedure shall be Optionee's sole responsibility.

(c) Optionee may not exercise this option unless the tax withholding obligations of the Corporation and/or any Affiliate are satisfied. Accordingly, Optionee may not be able to exercise this option when desired even though the option is vested, and the Corporation will have no obligation to issue a certificate for such shares of Common Stock or release such shares of Common Stock from any escrow provided for herein, if applicable, unless such obligations are satisfied.

18. **Tax Consequences**. Optionee agrees that the Corporation does not have a duty to design or administer the Plan or its other compensation programs in a manner that minimizes Optionee's tax liabilities. Optionee will not make any claim against the Corporation, or any of its Officers, Directors, Employees or Affiliates related to tax liabilities arising from this option or other compensation. In particular, Optionee acknowledge that this option is exempt from Section 409A of the Code only if the exercise price per share specified in the Grant Notice is at least equal to the "fair market value" per share of the Common Stock on the Grant Date and there is no other impermissible deferral of compensation associated with the option.

19. **Effect on Other Employee Benefit Plans**. The value of this option will not be included as compensation, earnings, salaries, or other similar terms used when calculating Optionees benefits under any employee benefit plan sponsored by the Corporation or any Affiliate, except as such plan otherwise expressly provides. The Corporation expressly reserves its rights to amend, modify, or terminate any of the Corporation's or any Affiliate's employee benefit plans or programs.

APPENDIX

The following definitions shall be in effect under the Agreement:

A. **Agreement** shall mean this Stock Option Agreement.

B. **Board** shall mean the Corporation's Board of Directors.

C. **Change in Control** shall mean a change in ownership or control of the Corporation effected through any of the following transactions:

(i) a merger, consolidation or other reorganization approved by the Corporation's stockholders, unless securities representing more than fifty percent (50%) of the total combined voting power of the voting securities of the successor corporation are immediately thereafter beneficially owned, directly or indirectly and in substantially the same proportion, by the persons who beneficially owned the Corporation's outstanding voting securities immediately prior to such transaction;

(ii) a sale, transfer or other disposition of all or substantially all of the Corporation's assets;

(iii) the closing of any transaction or series of related transactions pursuant to which any person or any group of persons comprising a "group" within the meaning of Rule 13d-5(b)(1) of the 1934 Act (other than the Corporation or a person that, prior to such transaction or series of related transactions, directly or indirectly controls, is controlled by or is under common control with, the Corporation) becomes directly or indirectly (whether as a result of a single acquisition or by reason of one or more acquisitions within the twelve (12)-month period ending with the most recent acquisition) the beneficial owner (within the meaning of Rule 13d-3 of the 1934 Act) of securities possessing (or convertible into or exercisable for securities possessing) fifty percent (50%) or more of the total combined voting power of the Corporation's securities (as measured in terms of the power to vote with respect to the election of Board members) outstanding immediately after the consummation of such transaction or series of related transactions, whether such transaction involves a direct issuance from the Corporation or the acquisition of outstanding securities held by one or more of the Corporation's existing stockholders; or

(iv) a change in the composition of the Board over a period of twelve (12) consecutive months or less such that a majority of the Board members ceases, by reason of one or more contested elections for Board membership, to be comprised of individuals who either (A) have been Board members continuously since the beginning of such period or (B) have been elected or nominated for election as Board members during such period by at least a majority of the Board members described in clause (A) who were still in office at the time the Board approved such election or nomination.

D. **Code** shall mean the Internal Revenue Code of 1986, as amended.

E. **Committee** shall mean the committee of the Board acting in its capacity as administrator of the Plan.

F. **Common Stock** shall mean shares of the Corporation's common stock.

G. **Corporation** shall mean Eloxx Pharmaceuticals, a Delaware corporation, the successor to Sevion Therapeutics, Inc., a Delaware corporation, and any successor corporation to all or substantially all of the assets or voting stock of Eloxx Pharmaceuticals, Inc. which shall by appropriate action adopt the Plan.

H. **Exercise Date** shall mean the date on which the option shall have been exercised in accordance with Paragraph 9 of the Agreement.

I. **Exercise Price** shall mean the exercise price per Option Share as specified in the Grant Notice.

J. **Exercise Schedule** shall mean the schedule set forth in the Grant Notice pursuant to which the option is to become exercisable for the Option Shares in one or more installments over the Optionee's period of Service.

K. **Expiration Date** shall mean the date on which the option expires as specified in the Grant Notice.

L. **Fair Market Value** per share of Common Stock on any relevant date shall be the closing selling price per share of Common Stock at the close of regular hours trading (i.e., before after-hours trading begins) on date on question on the Stock Exchange serving as the primary market for the Common Stock, as such price is reported by the National Association of Securities Dealers (if primarily traded on the Nasdaq Global or Global Select Market) or as officially quoted in the composite tape of transactions on any other Stock Exchange on which the Common Stock is then primarily traded. If there is no closing selling price for the Common Stock on the date in question, then the Fair Market Value shall be the closing selling price on the last preceding date for which such quotation exists.

M. **Grant Date** shall mean the date of grant of the option as specified in the Grant Notice.

N. **Grant Notice** shall mean the Notice of Grant of Stock Option accompanying the Agreement, pursuant to which Optionee has been informed of the basic terms of the option evidenced hereby.

O. **Incentive Option** shall mean an option which satisfies the requirements of Code Section 422.

P. **Misconduct** shall mean the commission of any act of fraud, embezzlement or dishonesty by Optionee, any unauthorized use or disclosure by Optionee of confidential information or trade secrets of the Corporation (or any Parent or Subsidiary), or any other intentional misconduct by Optionee adversely affecting the business or affairs of the Corporation (or any Parent or Subsidiary) in a material manner. The foregoing definition shall not in any way preclude or restrict the right of the Corporation (or any Parent or Subsidiary) to discharge or dismiss Optionee or any other person in the service of the Corporation (or any Parent or Subsidiary) for any other acts or omissions, but such other acts or omissions shall not be deemed, for purposes of the Plan or this Agreement, to constitute grounds for termination for Misconduct.

Q. **1934 Act** shall mean the Securities Exchange Act of 1934, as amended.

R. **Non-Statutory Option** shall mean an option not intended to satisfy the requirements of Code Section 422.

S. **Notice of Exercise** shall mean the notice of option exercise in the form prescribed by the Corporation.

T. **Option Shares** shall mean the number of shares of Common Stock subject to the option as specified in the Grant Notice.

U. **Optionee** shall mean the person to whom the option is granted as specified in the Grant Notice.

V. **Parent** shall mean any corporation (other than the Corporation) in an unbroken chain of corporations ending with the Corporation, provided each corporation in the unbroken chain (other than the Corporation) owns, at the time of the determination, stock possessing fifty percent (50%) or more of the total combined voting power of all classes of stock in one of the other corporations in such chain.

W. **Permanent Disability** shall mean the inability of Optionee to engage in any substantial gainful activity by reason of any medically determinable physical or mental impairment which is expected to result in death or to be of continuous duration of twelve (12) months or more.

X. **Plan** shall mean the Corporation's Amended and Restated 2008 Incentive Compensation Plan.

Y. **Plan Administrator** shall mean either the Board or a committee of the Board or individual authorized to act as administrator of the Plan.

Z. **Stock Exchange** shall mean the American Stock Exchange, the Nasdaq Global or Global Select Market or the New York Stock Exchange.

AA. **Subsidiary** shall mean any corporation (other than the Corporation) in an unbroken chain of corporations beginning with the Corporation, provided each corporation (other than the last corporation) in the unbroken chain owns, at the time of the determination, stock possessing fifty percent (50%) or more of the total combined voting power of all classes of stock in one of the other corporations in such chain.

ELOXX PHARMACEUTICALS, INC.

RESTRICTED STOCK UNIT GRANT NOTICE
(INDUCEMENT GRANT OUTSIDE OF THE
AMENDED AND RESTATED
SEVION THERAPEUTICS, INC. 2008 INCENTIVE COMPENSATION PLAN)

As an inducement material to Participant's entering into employment with Eloxx Pharmaceuticals, Inc. (the "***Corporation***"), the Corporation hereby awards to the individual named below (the "***Participant***") a Restricted Stock Unit Award for the number of shares of the Corporation's Common Stock ("***Restricted Stock Units***") set forth below (the "***Award***"). The Award is granted outside of the Corporation's Amended and Restated 2008 Incentive Compensation Plan (the "***Plan***") but is subject to all of the terms and conditions as set forth in this notice of grant (this "***Restricted Stock Unit Grant Notice***") and in the Plan (as if it had been granted under the Plan) and the Restricted Stock Unit Agreement (the "***Award Agreement***"), both of which are attached hereto and incorporated herein in their entirety. Capitalized terms not otherwise defined herein shall have the meanings set forth in the Plan or the Award Agreement. In the event of any conflict between the terms in the Award and the Plan, the terms of the Plan shall control.

Participant:	Robert Ward
Date of Grant:	December 26, 2017
Vesting Commencement Date:	December 26, 2017
Number of Restricted Stock Units/Shares:	640,785

Vesting Schedule: One-third of the Restricted Stock Units shall vest on the first anniversary of the Vesting Commencement Date and in 12 equal quarterly installments on each quarterly anniversary of such date with such last installment vesting on the fourth anniversary of the Vesting Commencement Date, subject to Participant's continued Service through such date.

In addition, the Restricted Stock Units may be eligible for accelerated vesting if and to the extent provided in the Participant's individual employment or service agreement with the Corporation, including Sections 5(b) and 8 thereof.

Issuance Schedule: Subject to any adjustment pursuant to Article One, Section V.G. of the Plan, one share of Common Stock will be issued for each Restricted Stock Unit that vests at the time set forth in Section 6 of the Award Agreement.

Additional Terms/Acknowledgements: Participant acknowledges receipt of, and understands and agrees to, this Restricted Stock Unit Grant Notice, the Award Agreement and the Plan. Participant further acknowledges that as of the Date of Grant, this Restricted Stock Unit Grant Notice, the Award Agreement and the Plan set forth the entire understanding between Participant and the Corporation regarding the acquisition of the Common Stock pursuant to the Award specified above and supersede all prior oral and written agreements on the terms of this Award with the exception, if applicable, of (i) the written employment agreement or offer letter entered into between the Company and Participant specifying the

terms that should govern this specific Award and (ii) any compensation recovery or "clawback" policy that is adopted by the Corporation or is otherwise required by applicable law.

By accepting this Award, Participant acknowledges having received and read the Restricted Stock Unit Grant Notice, the Award Agreement and the Plan and agrees to all of the terms and conditions set forth in these documents. By accepting this Award, Participant consents to receive Plan documents by electronic delivery and to participate in the Plan through an on-line or electronic system established and maintained by the Corporation or another third party designated by the Corporation.

ELOXX PHARMACEUTICALS, INC.

By: /s/ Gregory Weaver
Signature
Title: Chief Financial Officer
Date: March 5, 2018

PARTICIPANT

/s/ Robert E. Ward
Signature
Date: March 5, 2018

ATTACHMENTS: Award Agreement and 2008 Incentive Compensation Plan (as amended and restated effective December 15, 2014)

ELOXX PHARMACEUTICALS, INC.

INDUCEMENT GRANT OUTSIDE OF THE
AMENDED AND RESTATED
SEVION THERAPEUTICS, INC. 2008 INCENTIVE COMPENSATION PLAN
RESTRICTED STOCK UNIT AGREEMENT

Pursuant to the Restricted Stock Unit Grant Notice (the "***Grant Notice***") and this Restricted Stock Unit Agreement (the "***Award Agreement***") and in consideration of your services, Eloxx Pharmaceuticals, Inc. (the "***Corporation***") has awarded you ("***Participant***") a Restricted Stock Unit Award (the "***Award***") for the number of Restricted Stock Units/shares indicated in the Grant Notice. The Award is granted in compliance with NASDAQ Listing Rule 5634(c)(4) as a material inducement to you entering into employment with the Corporation. The Award is granted outside of, but subject to the terms of, the Corporation's 2008 Incentive Compensation Plan (as amended and restated effective December 15, 2014, the "***Plan***") and other relevant Plan provisions as if the Award had been granted as a Restricted Stock Unit Award under Article Two, Section IV of the Plan, provided that for the avoidance of doubt, the shares of Common Stock issued under the Award shall not reduce and shall have no impact on the number of shares available for grant under the Plan. Capitalized terms not explicitly defined in this Award Agreement or the Grant Notice shall have the same meanings given to them in the Plan. The terms of your Award, in addition to those set forth in the Grant Notice, are as follows.

1. GRANT OF THE AWARD. This Award represents the right to be issued on a future date one share of Common Stock for each Restricted Stock Unit that vests on the applicable vesting date(s) (subject to any adjustment under Section 3 below) as indicated in the Grant Notice. As of the Date of Grant, the Corporation will credit to a bookkeeping account maintained by the Corporation for your benefit (the "***Account***") the number of Restricted Stock Units/shares of Common Stock subject to the Award.

2. VESTING. Subject to the limitations contained herein and in your Employment Agreement, your Award will vest, if at all, in accordance with the vesting schedule provided in the Grant Notice, provided that vesting will cease upon the termination of your Service. Except as otherwise provided in the Grant Notice, upon such termination of your Service, the Restricted Stock Units/shares of Common Stock credited to the Account that were not vested on the date of such termination will be forfeited at no cost to the Corporation and you will have no further right, title or interest in or to such underlying shares of Common Stock.

3. NUMBER OF SHARES. The number of Restricted Stock Units/shares subject to your Award may be adjusted from time to time for events described in Article One, Section V.G. of the Plan. Any additional Restricted Stock Units, shares, cash or other property that becomes subject to the Award pursuant to this Section 3, if any, shall be subject, in a manner determined by the Plan Administrator, to the same forfeiture restrictions, restrictions on transferability, and time and manner of delivery as applicable to the other Restricted Stock Units and shares covered by your Award. Notwithstanding the provisions of this Section 3, no fractional shares or rights for fractional shares of Common Stock shall be created pursuant to this Section 3. Any fraction of a share will be rounded down to the nearest whole share.

4. SECURITIES LAW COMPLIANCE. You may not be issued any Common Stock under your Award unless the shares of Common Stock underlying the Restricted Stock Units are either (i) then registered under the Securities Act, or (ii) the Corporation has determined that such issuance would be exempt from the registration requirements of the Securities Act. Your Award must also comply with other applicable laws and regulations governing the Award, and you shall not receive such Common Stock if

the Corporation determines that such receipt would not be in material compliance with such laws and regulations.

5. TRANSFER RESTRICTIONS. Prior to the time that shares of Common Stock have been delivered to you, you may not transfer, pledge, sell or otherwise dispose of this Award or the shares issuable in respect of your Award, except as expressly provided in this Section 5. For example, you may not use shares that may be issued in respect of your Restricted Stock Units as security for a loan. The restrictions on transfer set forth herein will lapse upon delivery to you of shares in respect of your vested Restricted Stock Units. Notwithstanding the foregoing, by delivering written notice to the Corporation, in a form satisfactory to the Corporation, you may designate a third party who, in the event of your death, shall thereafter be entitled to receive any distribution of Common Stock to which you were entitled at the time of your death pursuant to this Award Agreement. In the absence of such a designation, your legal representative will be entitled to receive, on behalf of your estate, such Common Stock or other consideration.

(a) Death. Your Award is transferable by will and by the laws of descent and distribution. At your death, vesting of your Award will cease and your executor or administrator of your estate shall be entitled to receive, on behalf of your estate, any Common Stock or other consideration that vested but was not issued before your death.

(b) Domestic Relations Orders. Upon receiving written permission from the Plan Administrator or its duly authorized designee, and provided that you and the designated transferee enter into transfer and other agreements required by the Corporation, you may transfer your right to receive the distribution of Common Stock or other consideration hereunder, pursuant to a domestic relations order or marital settlement agreement that contains the information required by the Corporation to effectuate the transfer. You are encouraged to discuss the proposed terms of any division of this Award with the Corporation General Counsel prior to finalizing the domestic relations order or marital settlement agreement to verify that you may make such transfer, and if so, to help ensure the required information is contained within the domestic relations order or marital settlement agreement.

6. DATE OF ISSUANCE.

(a) The issuance of shares in respect of the Restricted Stock Units is intended to comply with Treasury Regulations Section 1.409A-1(b)(4) and will be construed and administered in such a manner. Subject to the satisfaction of the withholding obligations set forth in this Award Agreement, in the event one or more Restricted Stock Units vests, the Corporation shall issue to you one share of Common Stock for each Restricted Stock Unit that vests on the applicable vesting date(s) described in the Grant Notice (subject to any adjustment under Section 3 above). The issuance date determined by this paragraph is referred to as the "***Original Issuance Date***".

(b) If the Original Issuance Date falls on a date that is not a business day, delivery shall instead occur on the next following business day.

(i) the Original Issuance Date does not occur (1) during an "open window period" applicable to you, as determined by the Corporation in accordance with the Corporation's then-effective policy on trading in Corporation securities, or (2) on a date when you are otherwise permitted to sell shares of Common Stock on an established stock exchange or stock market, *and*

(ii) either (1) Withholding Taxes do not apply, or (2) the Corporation decides, prior to the Original Issuance Date, (A) not to satisfy the Withholding Taxes by withholding

shares of Common Stock from the shares otherwise due, on the Original Issuance Date, to you under this Award, and (B) not to permit you to pay your Withholding Taxes in cash,

then the shares that would otherwise be issued to you on the Original Issuance Date will not be delivered on such Original Issuance Date and will instead be delivered on the first business day when you are not prohibited from selling shares of the Corporation's Common Stock in the open public market, but in no event later than December 31 of the calendar year in which the Original Issuance Date occurs (that is, the last day of your taxable year in which the Original Issuance Date occurs), or, if and only if permitted in a manner that complies with Treasury Regulations Section 1.409A-1(b)(4), no later than the date that is the 15th day of the third calendar month of the applicable year following the year in which the shares of Common Stock under this Award are no longer subject to a "substantial risk of forfeiture" within the meaning of Treasury Regulations Section 1.409A-1(d).

(c) The form of delivery of the shares of Common Stock in respect of your Award (*e.g.*, a stock certificate or electronic entry evidencing such shares) shall be determined by the Corporation.

7. DIVIDENDS. You shall receive no benefit or adjustment to your Award with respect to any cash dividend, stock dividend or other distribution that does not result from an adjustment pursuant to Article One, Section V.G. of the Plan; provided, however, that this sentence will not apply with respect to any shares of Common Stock that are delivered to you in connection with your Award after such shares have been delivered to you.

8. RESTRICTIVE LEGENDS. The shares of Common Stock issued under your Award shall be endorsed with appropriate legends as determined by the Corporation.

9. EXECUTION OF DOCUMENTS. You hereby acknowledge and agree that the manner selected by the Corporation by which you indicate your consent to your Grant Notice is also deemed to be your execution of your Grant Notice and of this Award Agreement. You further agree that such manner of indicating consent may be relied upon as your signature for establishing your execution of any documents to be executed in the future in connection with your Award.

10. AWARD NOT A SERVICE CONTRACT.

(a) Nothing in this Award Agreement (including, but not limited to, the vesting of your Award or the issuance of the shares subject to your Award), the Plan or any covenant of good faith and fair dealing that may be found implicit in this Award Agreement or the Plan shall: (i) confer upon you any right to continue in the employ of, or affiliation with, the Corporation or a Parent or Subsidiary; (ii) constitute any promise or commitment by the Corporation or a Parent or Subsidiary regarding the fact or nature of future positions, future work assignments, future compensation or any other term or condition of employment or affiliation; (iii) confer any right or benefit under this Award Agreement or the Plan unless such right or benefit has specifically accrued under the terms of this Award Agreement or Plan; or (iv) deprive the Corporation of the right to terminate you at will and without regard to any future vesting opportunity that you may have.

(b) The Corporation has the right to reorganize, sell, spin-out or otherwise restructure one or more of its businesses or Subsidiaries at any time or from time to time, as it deems appropriate (a "***reorganization***"). Such a reorganization could result in the termination of your Service, or the termination of Parent or Subsidiary status of your employer and the loss of benefits available to you under this Award Agreement, including but not limited to, the termination of the right to continue vesting in the Award. This Award Agreement, the Plan, the transactions contemplated hereunder and the vesting

schedule set forth herein or any covenant of good faith and fair dealing that may be found implicit in any of them do not constitute an express or implied promise of continued engagement as an employee or consultant for the term of this Award Agreement, for any period, or at all, and shall not interfere in any way with the Corporation's right to conduct a reorganization.

11. WITHHOLDING OBLIGATIONS.

(a) On each vesting date, and on or before the time you receive a distribution of the shares underlying your Restricted Stock Units, and at any other time as reasonably requested by the Corporation in accordance with applicable tax laws, you hereby authorize any required withholding from the Common Stock issuable to you and/or otherwise agree to make adequate provision in cash for any sums required to satisfy the federal, state, local and foreign tax withholding obligations of the Corporation or any a Parent or Subsidiary that arise in connection with your Award (the "***Withholding Taxes***"). Specifically, pursuant to Section 11(d), you have agreed to a "same day sale" commitment with a broker-dealer that is a member of the Financial Industry Regulatory Authority (a "***FINRA Dealer***") whereby you have irrevocably agreed to sell a portion of the shares to be delivered in connection with your Restricted Stock Units to satisfy the Withholding Taxes and whereby the FINRA Dealer committed to forward the proceeds necessary to satisfy the Withholding Taxes directly to the Corporation and/or its Parents or Subsidiaries. If, for any reason, such "same day sale" commitment pursuant to section 11(d) does not result in sufficient proceeds to satisfy the Withholding Taxes or would be prohibited by applicable law at the applicable time, you hereby authorize the Corporation and/or the relevant Parent or Subsidiary, or their respective agents, at their discretion, to satisfy the obligations with regard to all Withholding Taxes by one or a combination of the following: (i) withholding from any compensation otherwise payable to you by the Corporation or any Parent or Subsidiary; (ii) causing you to tender a cash payment (which may be in the form of a check, electronic wire transfer or other method permitted by the Corporation); or (iii) withholding shares of Common Stock from the shares of Common Stock issued or otherwise issuable to you in connection with your Restricted Stock Units with a fair market value (measured as of the date shares of Common Stock are issued to you) equal to the amount of such Withholding Taxes; provided, however, that the number of such shares of Common Stock so withheld will not exceed the amount necessary to satisfy the Corporation's required tax withholding obligations using the minimum statutory withholding rates for federal, state, local and, if applicable, foreign tax purposes, including payroll taxes, that are applicable to supplemental taxable income; and, provided, further, that to the extent necessary to qualify for an exemption from application of Section 16(b) of the Exchange Act, if applicable, such share withholding procedure will be subject to the prior approval of the Corporation's Compensation Committee.

(b) Unless the tax withholding obligations of the Corporation and/or any Parent or Subsidiary are satisfied, the Corporation shall have no obligation to deliver to you any Common Stock or other consideration pursuant to this Award.

(c) In the event the Corporation's obligation to withhold arises prior to the delivery to you of Common Stock or it is determined after the delivery of Common Stock to you that the amount of the Corporation's withholding obligation was greater than the amount withheld by the Corporation, you agree to indemnify and hold the Corporation harmless from any failure by the Corporation to withhold the proper amount.

12. TAX CONSEQUENCES. The Corporation has no duty or obligation to minimize the tax consequences to you of this Award and shall not be liable to you for any adverse tax consequences to you arising in connection with this Award. You are hereby advised to consult with your own personal tax, financial and/or legal advisors regarding the tax consequences of this Award and by signing the Grant Notice, you have agreed that you have done so or knowingly and voluntarily declined to do so. You

understand that you (and not the Corporation) shall be responsible for your own tax liability that may arise as a result of this investment or the transactions contemplated by this Award Agreement.

13. UNSECURED OBLIGATION. Your Award is unfunded, and as a holder of a vested Award, you shall be considered an unsecured creditor of the Corporation with respect to the Corporation's obligation, if any, to issue shares or other property pursuant to this Award Agreement. You shall not have voting or any other rights as a stockholder of the Corporation with respect to the shares to be issued pursuant to this Award Agreement until such shares are issued to you pursuant to Section 6 of this Award Agreement. Upon such issuance, you will obtain full voting and other rights as a stockholder of the Corporation. Nothing contained in this Award Agreement, and no action taken pursuant to its provisions, shall create or be construed to create a trust of any kind or a fiduciary relationship between you and the Corporation or any other person.

14. NOTICES. Any notice or request required or permitted hereunder shall be given in writing to each of the other parties hereto and shall be deemed effectively given on the earlier of (i) the date of personal delivery, including delivery by express courier, or delivery via electronic means, or (ii) the date that is five (5) days after deposit in the United States Post Office (whether or not actually received by the addressee), by registered or certified mail with postage and fees prepaid, addressed at the following addresses, or at such other address(es) as a party may designate by ten (10) days' advance written notice to each of the other parties hereto:

CORPORATION:	Eloxx Pharmaceuticals, Inc. Attn: Plan Administrator 950 Winter Street, 4th Floor North Waltham, MA 02451
PARTICIPANT:	Your address as on file with the Corporation at the time notice is given

15. HEADINGS. The headings of the Sections in this Award Agreement are inserted for convenience only and shall not be deemed to constitute a part of this Award Agreement or to affect the meaning of this Award Agreement.

16. ADDITIONAL ACKNOWLEDGEMENTS. You hereby consent and acknowledge that:

(a) The future value of your Award is unknown and cannot be predicted with certainty. You do not have, and will not assert, any claim or entitlement to compensation, indemnity or damages arising from the termination of this Award or diminution in value of this Award and you irrevocably release the Corporation, its Parents and Subsidiaries and, if applicable, your employer, if different from the Corporation, from any such claim that may arise.

(b) The rights and obligations of the Corporation under your Award shall be transferable by the Corporation to any one or more persons or entities, and all covenants and agreements hereunder shall inure to the benefit of, and be enforceable by, the Corporation's successors and assigns.

(c) You agree upon request to execute any further documents or instruments necessary or desirable in the sole determination of the Corporation to carry out the purposes or intent of your Award.

(d) You acknowledge and agree that you have reviewed your Award in its entirety, have had an opportunity to obtain the advice of counsel prior to executing and accepting your Award and fully understand all provisions of your Award.

(e) This Award Agreement shall be subject to all applicable laws, rules, and regulations, and to such approvals by any governmental agencies or national securities exchanges as may be required.

(f) All obligations of the Corporation under the Plan and this Award Agreement shall be binding on any successor to the Corporation, whether the existence of such successor is the result of a direct or indirect purchase, merger, consolidation, or otherwise, of all or substantially all of the business and/or assets of the Corporation.

(g) Neither the Corporation nor any Subsidiary or Affiliate shall be liable for any exchange rate fluctuation between your local currency and the United States Dollar that may affect the value of the Award or of any amounts due to you pursuant to the settlement of the Award or the subsequent sale of any shares of Common Stock acquired upon settlement.

17. GOVERNING PLAN DOCUMENT. Your Award is subject to all the provisions of the Plan as if the Award had been granted under the Plan, the provisions of which are hereby made a part of your Award, and is further subject to all interpretations, amendments, rules and regulations which may from time to time be promulgated and adopted pursuant to the Plan. Your Award (and any compensation paid or shares issued under your Award) is subject to recoupment in accordance with The Dodd–Frank Wall Street Reform and Consumer Protection Act and any implementing regulations thereunder, any clawback policy adopted by the Corporation and any compensation recovery policy otherwise required by applicable law. No recovery of compensation under such a clawback policy will be an event giving rise to a right to voluntarily terminate employment upon a resignation for "good reason," or for a "constructive termination" or any similar term under any plan of or agreement with the Corporation.

18. EFFECT ON OTHER EMPLOYEE BENEFIT PLANS. The value of the Award subject to this Award Agreement shall not be included as compensation, earnings, salaries, or other similar terms used when calculating benefits under any employee benefit plan (other than the Plan) sponsored by the Corporation or any Parent or Subsidiary except as such plan otherwise expressly provides. The Corporation expressly reserves its rights to amend, modify, or terminate any or all of the employee benefit plans of the Corporation or any Parent or Subsidiary.

19. CHOICE OF LAW. The interpretation, performance and enforcement of this Award Agreement shall be governed by the law of the State of Delaware without regard to that state's conflicts of laws rules.

20. SEVERABILITY. If all or any part of this Award Agreement or the Plan is declared by any court or governmental authority to be unlawful or invalid, such unlawfulness or invalidity shall not invalidate any portion of this Award Agreement or the Plan not declared to be unlawful or invalid. Any Section of this Award Agreement (or part of such a Section) so declared to be unlawful or invalid shall, if possible, be construed in a manner which will give effect to the terms of such Section or part of a Section to the fullest extent possible while remaining lawful and valid.

21. OTHER DOCUMENTS. You hereby acknowledge receipt or the right to receive a document providing the information required by Rule 428(b)(1) promulgated under the Securities Act. In addition, you acknowledge receipt of the Corporation's *Insider Trading Policy* and the Corporation's *Blackout Policy*.

22. AMENDMENT. This Award Agreement may not be modified, amended or terminated except by an instrument in writing, signed by you and by a duly authorized representative of the Corporation. Notwithstanding the foregoing, this Award Agreement may be amended solely by the Plan Administrator by a writing which specifically states that it is amending this Award Agreement, so long as a copy of such amendment is delivered to you, and provided that, except as otherwise expressly provided in the Plan, no such amendment materially adversely affecting your rights hereunder may be made without your written consent. Without limiting the foregoing, the Plan Administrator reserves the right to change, by written notice to you, the provisions of this Award Agreement in any way it may deem necessary or advisable to carry out the purpose of the Award as a result of any change in applicable laws or regulations or any future law, regulation, ruling, or judicial decision, provided that any such change shall be applicable only to rights relating to that portion of the Award which is then subject to restrictions as provided herein.

23. COMPLIANCE WITH SECTION 409A OF THE CODE. This Award is intended to comply with the "short-term deferral" rule set forth in Treasury Regulation Section 1.409A-1(b)(4). Notwithstanding the foregoing, if it is determined that the Award fails to satisfy the requirements of the short-term deferral rule and is otherwise deferred compensation subject to Section 409A, and if you are a "Specified Employee" (within the meaning set forth in Section 409A(a)(2)(B)(i) of the Code) as of the date of your "separation from service" (within the meaning of Treasury Regulation Section 1.409A-1(h) and without regard to any alternative definition thereunder), then the issuance of any shares that would otherwise be made upon the date of the separation from service or within the first six (6) months thereafter will not be made on the originally scheduled date(s) and will instead be issued in a lump sum on the earlier of: (i) the fifth business day following your death, or (ii) the date that is six (6) months and one day after the date of the separation from service, with the balance of the shares issued thereafter in accordance with the original vesting and issuance schedule set forth above, but if and only if such delay in the issuance of the shares is necessary to avoid the imposition of adverse taxation on you in respect of the shares under Section 409A of the Code. Each installment of shares that vests is intended to constitute a "separate payment" for purposes of Treasury Regulation Section 1.409A-2(b)(2)

* * * * *

This Award Agreement shall be deemed to be signed by the Corporation and the Participant upon the signing or electronic acceptance by the Participant of the Restricted Stock Unit Grant Notice to which it is attached.

ELOXX PHARMACEUTICALS, INC.

PERFORMANCE
RESTRICTED STOCK UNIT GRANT NOTICE
(INDUCEMENT GRANT OUTSIDE OF THE
AMENDED AND RESTATED
SEVION THERAPEUTICS, INC. 2008 INCENTIVE COMPENSATION PLAN)

As an inducement material to Participant's entering into employment with Eloxx Pharmaceuticals, Inc.[1] (the "***Corporation***"), the Corporation hereby awards to the individual named below (the "***Participant***") a Restricted Stock Unit Award for the number of shares of the Corporation's Common Stock ("***Restricted Stock Units***") set forth below (the "***Award***"). The Award is granted outside of the Corporation's Amended and Restated 2008 Incentive Compensation Plan (the "***Plan***") but is subject to all of the terms and conditions as set forth in this notice of grant (this "***Restricted Stock Unit Grant Notice***") and in the Plan (as if it had been granted under the Plan) and the Restricted Stock Unit Agreement (the "***Award Agreement***"), both of which are attached hereto and incorporated herein in their entirety. Capitalized terms not otherwise defined herein shall have the meanings set forth in the Plan or the Award Agreement. In the event of any conflict between the terms in the Award and the Plan, the terms of the Plan shall control.

Participant:	Robert Ward
Date of Grant:	December 26, 2017
Number of Restricted Stock Units/Shares:	22,427

Vesting Schedule: The Restricted Stock Units shall vest upon the Corporation's first successful completion of a Phase 2b study with respect to any indication (as determined by the Board in its reasonable discretion) prior to the 10th anniversary of the Date of Grant, subject to Participant's continued Service through such date.

In addition, the Restricted Stock Units may be eligible for accelerated vesting if and to the extent provided in the Participant's individual employment or service agreement with the Corporation.

Issuance Schedule: Subject to any adjustment pursuant to Article One, Section V.G. of the Plan, one share of Common Stock will be issued for each Restricted Stock Unit that vests at the time set forth in Section 6 of the Award Agreement.

Additional Terms/Acknowledgements: Participant acknowledges receipt of, and understands and agrees to, this Restricted Stock Unit Grant Notice, the Award Agreement and the Plan. Participant further acknowledges that as of the Date of Grant, this Restricted Stock Unit Grant Notice, the Award Agreement and the Plan set forth the entire understanding between Participant and the Corporation regarding the acquisition of the Common Stock pursuant to the Award specified above and supersede all prior oral and written agreements on the terms of this Award with the exception, if applicable, of (i) the written employment agreement or offer letter entered into between the Company and Participant specifying the

[1] Formerly, Sevion Therapeutics, Inc.

terms that should govern this specific Award and (ii) any compensation recovery or "clawback" policy that is adopted by the Corporation or is otherwise required by applicable law.

By accepting this Award, Participant acknowledges having received and read the Restricted Stock Unit Grant Notice, the Award Agreement and the Plan and agrees to all of the terms and conditions set forth in these documents. By accepting this Award, Participant consents to receive Plan documents by electronic delivery and to participate in the Plan through an on-line or electronic system established and maintained by the Corporation or another third party designated by the Corporation.

ELOXX PHARMACEUTICALS, INC.

By: /s/ Gregory Weaver
Signature
Title: Chief Financial Officer
Date: March 5, 2018

PARTICIPANT

/s/ Robert E. Ward
Signature
Date: March 5, 2018

ATTACHMENTS: Award Agreement and Amended and Restated 2008 Incentive Compensation Plan

ELOXX PHARMACEUTICALS, INC.

INDUCEMENT GRANT OUTSIDE OF THE
AMENDED AND RESTATED
SEVION THERAPEUTICS, INC. 2008 INCENTIVE COMPENSATION PLAN
RESTRICTED STOCK UNIT AGREEMENT

Pursuant to the Restricted Stock Unit Grant Notice (the "***Grant Notice***") and this Restricted Stock Unit Agreement (the "***Award Agreement***") and in consideration of your services, Eloxx Pharmaceuticals, Inc.[2] (the "***Corporation***") has awarded you ("***Participant***") a Restricted Stock Unit Award (the "***Award***") for the number of Restricted Stock Units/shares indicated in the Grant Notice. The Award is granted in compliance with NASDAQ Listing Rule 5634(c)(4) as a material inducement to you entering into employment with the Corporation. The Award is granted outside of, but subject to the terms of, the Corporation's Amended and Restated 2008 Incentive Compensation Plan (the "***Plan***") and other relevant Plan provisions as if the Award had been granted as a Restricted Stock Unit Award under Article Two, Section IV of the Plan, provided that for the avoidance of doubt, the shares of Common Stock issued under the Award shall not reduce and shall have no impact on the number of shares available for grant under the Plan. Capitalized terms not explicitly defined in this Award Agreement or the Grant Notice shall have the same meanings given to them in the Plan. The terms of your Award, in addition to those set forth in the Grant Notice, are as follows.

1. GRANT OF THE AWARD. This Award represents the right to be issued on a future date one share of Common Stock for each Restricted Stock Unit that vests on the applicable vesting date(s) (subject to any adjustment under Section 3 below) as indicated in the Grant Notice. As of the Date of Grant, the Corporation will credit to a bookkeeping account maintained by the Corporation for your benefit (the "***Account***") the number of Restricted Stock Units/shares of Common Stock subject to the Award.

2. VESTING. Subject to the limitations contained herein and in your Employment Agreement, your Award will vest, if at all, in accordance with the vesting schedule provided in the Grant Notice, provided that vesting will cease upon the termination of your Service. Except as otherwise provided in the Grant Notice, upon such termination of your Service, the Restricted Stock Units/shares of Common Stock credited to the Account that were not vested on the date of such termination will be forfeited at no cost to the Corporation and you will have no further right, title or interest in or to such underlying shares of Common Stock.

3. NUMBER OF SHARES. The number of Restricted Stock Units/shares subject to your Award may be adjusted from time to time for events described in Article One, Section V.G. of the Plan. Any additional Restricted Stock Units, shares, cash or other property that becomes subject to the Award pursuant to this Section 3, if any, shall be subject, in a manner determined by the Plan Administrator, to the same forfeiture restrictions, restrictions on transferability, and time and manner of delivery as applicable to the other Restricted Stock Units and shares covered by your Award. Notwithstanding the provisions of this Section 3, no fractional shares or rights for fractional shares of Common Stock shall be created pursuant to this Section 3. Any fraction of a share will be rounded down to the nearest whole share.

4. SECURITIES LAW COMPLIANCE. You may not be issued any Common Stock under your Award unless the shares of Common Stock underlying the Restricted Stock Units are either (i) then registered under the Securities Act, or (ii) the Corporation has determined that such issuance would be

[2] Formerly, Sevion Therapeutics, Inc.

exempt from the registration requirements of the Securities Act. Your Award must also comply with other applicable laws and regulations governing the Award, and you shall not receive such Common Stock if the Corporation determines that such receipt would not be in material compliance with such laws and regulations.

5. TRANSFER RESTRICTIONS. Prior to the time that shares of Common Stock have been delivered to you, you may not transfer, pledge, sell or otherwise dispose of this Award or the shares issuable in respect of your Award, except as expressly provided in this Section 5. For example, you may not use shares that may be issued in respect of your Restricted Stock Units as security for a loan. The restrictions on transfer set forth herein will lapse upon delivery to you of shares in respect of your vested Restricted Stock Units. Notwithstanding the foregoing, by delivering written notice to the Corporation, in a form satisfactory to the Corporation, you may designate a third party who, in the event of your death, shall thereafter be entitled to receive any distribution of Common Stock to which you were entitled at the time of your death pursuant to this Award Agreement. In the absence of such a designation, your legal representative will be entitled to receive, on behalf of your estate, such Common Stock or other consideration.

(a) Death. Your Award is transferable by will and by the laws of descent and distribution. At your death, vesting of your Award will cease and your executor or administrator of your estate shall be entitled to receive, on behalf of your estate, any Common Stock or other consideration that vested but was not issued before your death.

(b) Domestic Relations Orders. Upon receiving written permission from the Plan Administrator or its duly authorized designee, and provided that you and the designated transferee enter into transfer and other agreements required by the Corporation, you may transfer your right to receive the distribution of Common Stock or other consideration hereunder, pursuant to a domestic relations order or marital settlement agreement that contains the information required by the Corporation to effectuate the transfer. You are encouraged to discuss the proposed terms of any division of this Award with the Corporation General Counsel prior to finalizing the domestic relations order or marital settlement agreement to verify that you may make such transfer, and if so, to help ensure the required information is contained within the domestic relations order or marital settlement agreement.

6. DATE OF ISSUANCE.

(a) The issuance of shares in respect of the Restricted Stock Units is intended to comply with Treasury Regulations Section 1.409A-1(b)(4) and will be construed and administered in such a manner. Subject to the satisfaction of the withholding obligations set forth in this Award Agreement, in the event one or more Restricted Stock Units vests, the Corporation shall issue to you one share of Common Stock for each Restricted Stock Unit that vests on the applicable vesting date(s) described in the Grant Notice (subject to any adjustment under Section 3 above). The issuance date determined by this paragraph is referred to as the "***Original Issuance Date***".

(b) If the Original Issuance Date falls on a date that is not a business day, delivery shall instead occur on the next following business day.

(i) the Original Issuance Date does not occur (1) during an "open window period" applicable to you, as determined by the Corporation in accordance with the Corporation's then-effective policy on trading in Corporation securities, or (2) on a date when you are otherwise permitted to sell shares of Common Stock on an established stock exchange or stock market, *and*

(ii) either (1) Withholding Taxes do not apply, or (2) the Corporation decides, prior to the Original Issuance Date, (A) not to satisfy the Withholding Taxes by withholding shares of Common Stock from the shares otherwise due, on the Original Issuance Date, to you under this Award, and (B) not to permit you to pay your Withholding Taxes in cash,

then the shares that would otherwise be issued to you on the Original Issuance Date will not be delivered on such Original Issuance Date and will instead be delivered on the first business day when you are not prohibited from selling shares of the Corporation's Common Stock in the open public market, but in no event later than December 31 of the calendar year in which the Original Issuance Date occurs (that is, the last day of your taxable year in which the Original Issuance Date occurs), or, if and only if permitted in a manner that complies with Treasury Regulations Section 1.409A-1(b)(4), no later than the date that is the 15th day of the third calendar month of the applicable year following the year in which the shares of Common Stock under this Award are no longer subject to a "substantial risk of forfeiture" within the meaning of Treasury Regulations Section 1.409A-1(d).

(c) The form of delivery of the shares of Common Stock in respect of your Award (*e.g.*, a stock certificate or electronic entry evidencing such shares) shall be determined by the Corporation.

7. DIVIDENDS. You shall receive no benefit or adjustment to your Award with respect to any cash dividend, stock dividend or other distribution that does not result from an adjustment pursuant to Article One, Section V.G. of the Plan; provided, however, that this sentence will not apply with respect to any shares of Common Stock that are delivered to you in connection with your Award after such shares have been delivered to you.

8. RESTRICTIVE LEGENDS. The shares of Common Stock issued under your Award shall be endorsed with appropriate legends as determined by the Corporation.

9. EXECUTION OF DOCUMENTS. You hereby acknowledge and agree that the manner selected by the Corporation by which you indicate your consent to your Grant Notice is also deemed to be your execution of your Grant Notice and of this Award Agreement. You further agree that such manner of indicating consent may be relied upon as your signature for establishing your execution of any documents to be executed in the future in connection with your Award.

10. AWARD NOT A SERVICE CONTRACT.

(a) Nothing in this Award Agreement (including, but not limited to, the vesting of your Award or the issuance of the shares subject to your Award), the Plan or any covenant of good faith and fair dealing that may be found implicit in this Award Agreement or the Plan shall: (i) confer upon you any right to continue in the employ of, or affiliation with, the Corporation or a Parent or Subsidiary; (ii) constitute any promise or commitment by the Corporation or a Parent or Subsidiary regarding the fact or nature of future positions, future work assignments, future compensation or any other term or condition of employment or affiliation; (iii) confer any right or benefit under this Award Agreement or the Plan unless such right or benefit has specifically accrued under the terms of this Award Agreement or Plan; or (iv) deprive the Corporation of the right to terminate you at will and without regard to any future vesting opportunity that you may have.

(b) The Corporation has the right to reorganize, sell, spin-out or otherwise restructure one or more of its businesses or Subsidiaries at any time or from time to time, as it deems appropriate (a "***reorganization***"). Such a reorganization could result in the termination of your Service, or the termination of Parent or Subsidiary status of your employer and the loss of benefits available to you

under this Award Agreement, including but not limited to, the termination of the right to continue vesting in the Award. This Award Agreement, the Plan, the transactions contemplated hereunder and the vesting schedule set forth herein or any covenant of good faith and fair dealing that may be found implicit in any of them do not constitute an express or implied promise of continued engagement as an employee or consultant for the term of this Award Agreement, for any period, or at all, and shall not interfere in any way with the Corporation's right to conduct a reorganization.

11. WITHHOLDING OBLIGATIONS.

(a) On each vesting date, and on or before the time you receive a distribution of the shares underlying your Restricted Stock Units, and at any other time as reasonably requested by the Corporation in accordance with applicable tax laws, you hereby authorize any required withholding from the Common Stock issuable to you and/or otherwise agree to make adequate provision in cash for any sums required to satisfy the federal, state, local and foreign tax withholding obligations of the Corporation or any a Parent or Subsidiary that arise in connection with your Award (the "***Withholding Taxes***"). Specifically, pursuant to Section 11(d), you have agreed to a "same day sale" commitment with a broker-dealer that is a member of the Financial Industry Regulatory Authority (a "***FINRA Dealer***") whereby you have irrevocably agreed to sell a portion of the shares to be delivered in connection with your Restricted Stock Units to satisfy the Withholding Taxes and whereby the FINRA Dealer committed to forward the proceeds necessary to satisfy the Withholding Taxes directly to the Corporation and/or its Parents or Subsidiaries. If, for any reason, such "same day sale" commitment pursuant to section 11(d) does not result in sufficient proceeds to satisfy the Withholding Taxes or would be prohibited by applicable law at the applicable time, you hereby authorize the Corporation and/or the relevant Parent or Subsidiary, or their respective agents, at their discretion, to satisfy the obligations with regard to all Withholding Taxes by one or a combination of the following: (i) withholding from any compensation otherwise payable to you by the Corporation or any Parent or Subsidiary; (ii) causing you to tender a cash payment (which may be in the form of a check, electronic wire transfer or other method permitted by the Corporation); or (iii) withholding shares of Common Stock from the shares of Common Stock issued or otherwise issuable to you in connection with your Restricted Stock Units with a fair market value (measured as of the date shares of Common Stock are issued to you) equal to the amount of such Withholding Taxes; provided, however, that the number of such shares of Common Stock so withheld will not exceed the amount necessary to satisfy the Corporation's required tax withholding obligations using the minimum statutory withholding rates for federal, state, local and, if applicable, foreign tax purposes, including payroll taxes, that are applicable to supplemental taxable income; and, provided, further, that to the extent necessary to qualify for an exemption from application of Section 16(b) of the Exchange Act, if applicable, such share withholding procedure will be subject to the prior approval of the Corporation's Compensation Committee.

(b) Unless the tax withholding obligations of the Corporation and/or any Parent or Subsidiary are satisfied, the Corporation shall have no obligation to deliver to you any Common Stock or other consideration pursuant to this Award.

(c) In the event the Corporation's obligation to withhold arises prior to the delivery to you of Common Stock or it is determined after the delivery of Common Stock to you that the amount of the Corporation's withholding obligation was greater than the amount withheld by the Corporation, you agree to indemnify and hold the Corporation harmless from any failure by the Corporation to withhold the proper amount.

12. TAX CONSEQUENCES. The Corporation has no duty or obligation to minimize the tax consequences to you of this Award and shall not be liable to you for any adverse tax consequences to you arising in connection with this Award. You are hereby advised to consult with your own personal tax,

financial and/or legal advisors regarding the tax consequences of this Award and by signing the Grant Notice, you have agreed that you have done so or knowingly and voluntarily declined to do so. You understand that you (and not the Corporation) shall be responsible for your own tax liability that may arise as a result of this investment or the transactions contemplated by this Award Agreement.

13. UNSECURED OBLIGATION. Your Award is unfunded, and as a holder of a vested Award, you shall be considered an unsecured creditor of the Corporation with respect to the Corporation's obligation, if any, to issue shares or other property pursuant to this Award Agreement. You shall not have voting or any other rights as a stockholder of the Corporation with respect to the shares to be issued pursuant to this Award Agreement until such shares are issued to you pursuant to Section 6 of this Award Agreement. Upon such issuance, you will obtain full voting and other rights as a stockholder of the Corporation. Nothing contained in this Award Agreement, and no action taken pursuant to its provisions, shall create or be construed to create a trust of any kind or a fiduciary relationship between you and the Corporation or any other person.

14. NOTICES. Any notice or request required or permitted hereunder shall be given in writing to each of the other parties hereto and shall be deemed effectively given on the earlier of (i) the date of personal delivery, including delivery by express courier, or delivery via electronic means, or (ii) the date that is five (5) days after deposit in the United States Post Office (whether or not actually received by the addressee), by registered or certified mail with postage and fees prepaid, addressed at the following addresses, or at such other address(es) as a party may designate by ten (10) days' advance written notice to each of the other parties hereto:

CORPORATION:	Eloxx Pharmaceuticals, Inc. Attn: Plan Administrator 950 Winter Street, 4th Floor North Waltham, MA 02451
PARTICIPANT:	Your address as on file with the Corporation at the time notice is given

15. HEADINGS. The headings of the Sections in this Award Agreement are inserted for convenience only and shall not be deemed to constitute a part of this Award Agreement or to affect the meaning of this Award Agreement.

16. ADDITIONAL ACKNOWLEDGEMENTS. You hereby consent and acknowledge that:

(a) The future value of your Award is unknown and cannot be predicted with certainty. You do not have, and will not assert, any claim or entitlement to compensation, indemnity or damages arising from the termination of this Award or diminution in value of this Award and you irrevocably release the Corporation, its Parents and Subsidiaries and, if applicable, your employer, if different from the Corporation, from any such claim that may arise.

(b) The rights and obligations of the Corporation under your Award shall be transferable by the Corporation to any one or more persons or entities, and all covenants and agreements hereunder shall inure to the benefit of, and be enforceable by, the Corporation's successors and assigns.

(c) You agree upon request to execute any further documents or instruments necessary or desirable in the sole determination of the Corporation to carry out the purposes or intent of your Award.

(d) You acknowledge and agree that you have reviewed your Award in its entirety, have had an opportunity to obtain the advice of counsel prior to executing and accepting your Award and fully understand all provisions of your Award.

(e) This Award Agreement shall be subject to all applicable laws, rules, and regulations, and to such approvals by any governmental agencies or national securities exchanges as may be required.

(f) All obligations of the Corporation under the Plan and this Award Agreement shall be binding on any successor to the Corporation, whether the existence of such successor is the result of a direct or indirect purchase, merger, consolidation, or otherwise, of all or substantially all of the business and/or assets of the Corporation.

(g) Neither the Corporation nor any Subsidiary or Affiliate shall be liable for any exchange rate fluctuation between your local currency and the United States Dollar that may affect the value of the Award or of any amounts due to you pursuant to the settlement of the Award or the subsequent sale of any shares of Common Stock acquired upon settlement.

17. GOVERNING PLAN DOCUMENT. Your Award is subject to all the provisions of the Plan as if the Award had been granted under the Plan, the provisions of which are hereby made a part of your Award, and is further subject to all interpretations, amendments, rules and regulations which may from time to time be promulgated and adopted pursuant to the Plan. Your Award (and any compensation paid or shares issued under your Award) is subject to recoupment in accordance with The Dodd–Frank Wall Street Reform and Consumer Protection Act and any implementing regulations thereunder, any clawback policy adopted by the Corporation and any compensation recovery policy otherwise required by applicable law. No recovery of compensation under such a clawback policy will be an event giving rise to a right to voluntarily terminate employment upon a resignation for "good reason," or for a "constructive termination" or any similar term under any plan of or agreement with the Corporation.

18. EFFECT ON OTHER EMPLOYEE BENEFIT PLANS. The value of the Award subject to this Award Agreement shall not be included as compensation, earnings, salaries, or other similar terms used when calculating benefits under any employee benefit plan (other than the Plan) sponsored by the Corporation or any Parent or Subsidiary except as such plan otherwise expressly provides. The Corporation expressly reserves its rights to amend, modify, or terminate any or all of the employee benefit plans of the Corporation or any Parent or Subsidiary.

19. CHOICE OF LAW. The interpretation, performance and enforcement of this Award Agreement shall be governed by the law of the State of Delaware without regard to that state's conflicts of laws rules.

20. SEVERABILITY. If all or any part of this Award Agreement or the Plan is declared by any court or governmental authority to be unlawful or invalid, such unlawfulness or invalidity shall not invalidate any portion of this Award Agreement or the Plan not declared to be unlawful or invalid. Any Section of this Award Agreement (or part of such a Section) so declared to be unlawful or invalid shall, if possible, be construed in a manner which will give effect to the terms of such Section or part of a Section to the fullest extent possible while remaining lawful and valid.

21. OTHER DOCUMENTS. You hereby acknowledge receipt or the right to receive a document providing the information required by Rule 428(b)(1) promulgated under the Securities Act. In addition, you acknowledge receipt of the Corporation's *Insider Trading Policy* and the Corporation's *Blackout Policy*.

22. AMENDMENT. This Award Agreement may not be modified, amended or terminated except by an instrument in writing, signed by you and by a duly authorized representative of the Corporation. Notwithstanding the foregoing, this Award Agreement may be amended solely by the Plan Administrator by a writing which specifically states that it is amending this Award Agreement, so long as a copy of such amendment is delivered to you, and provided that, except as otherwise expressly provided in the Plan, no such amendment materially adversely affecting your rights hereunder may be made without your written consent. Without limiting the foregoing, the Plan Administrator reserves the right to change, by written notice to you, the provisions of this Award Agreement in any way it may deem necessary or advisable to carry out the purpose of the Award as a result of any change in applicable laws or regulations or any future law, regulation, ruling, or judicial decision, provided that any such change shall be applicable only to rights relating to that portion of the Award which is then subject to restrictions as provided herein.

23. COMPLIANCE WITH SECTION 409A OF THE CODE. This Award is intended to comply with the "short-term deferral" rule set forth in Treasury Regulation Section 1.409A-1(b)(4). Notwithstanding the foregoing, if it is determined that the Award fails to satisfy the requirements of the short-term deferral rule and is otherwise deferred compensation subject to Section 409A, and if you are a "Specified Employee" (within the meaning set forth in Section 409A(a)(2)(B)(i) of the Code) as of the date of your "separation from service" (within the meaning of Treasury Regulation Section 1.409A-1(h) and without regard to any alternative definition thereunder), then the issuance of any shares that would otherwise be made upon the date of the separation from service or within the first six (6) months thereafter will not be made on the originally scheduled date(s) and will instead be issued in a lump sum on the earlier of: (i) the fifth business day following your death, or (ii) the date that is six (6) months and one day after the date of the separation from service, with the balance of the shares issued thereafter in accordance with the original vesting and issuance schedule set forth above, but if and only if such delay in the issuance of the shares is necessary to avoid the imposition of adverse taxation on you in respect of the shares under Section 409A of the Code. Each installment of shares that vests is intended to constitute a "separate payment" for purposes of Treasury Regulation Section 1.409A-2(b)(2)

* * * * *

This Award Agreement shall be deemed to be signed by the Corporation and the Participant upon the signing or electronic acceptance by the Participant of the Restricted Stock Unit Grant Notice to which it is attached.

ELOXX PHARMACEUTICALS, INC.

STOCK OPTION GRANT NOTICE
(INDUCEMENT GRANT OUTSIDE OF THE
AMENDED AND RESTATED
SEVION THERAPEUTICS, INC. 2008 INCENTIVE COMPENSATION PLAN)

As an inducement material to Participant's entering into employment with Eloxx Pharmaceuticals, Inc.[1] (the "***Corporation***"), the Corporation hereby grants to Optionee an option to purchase the number of shares of the Corporation's Common Stock set forth below. This option is granted outside of the Corporation's Amended and Restated 2008 Incentive Compensation Plan (the "***Plan***"), but is subject to all of the terms and conditions as set forth in this Grant Notice, in the Stock Option Agreement, the Plan (as if it had been granted under the Plan) and the Notice of Exercise, all of which are attached hereto and incorporated herein in their entirety. Capitalized terms not explicitly defined herein but defined in the Plan or the Stock Option Agreement will have the same definitions as in the Plan or the Stock Option Agreement. If there is any conflict between the terms in this Grant Notice and the Plan, the terms of the Plan will control.

Optionee:	Robert Ward
Grant Date:	December 26, 2017
Vesting Commencement Date:	December 26, 2017
Number of Shares Subject to Option:	640,785
Exercise Price (Per Share):	$8.00
Total Exercise Price:	$5,126,064
Expiration Date:	December 25, 2027

Type of Grant: ☒ Non-Statutory Option

Exercise Schedule: Same as Vesting Schedule

Vesting Schedule: This option shall vest with respect to one-third of the shares subject to this option on the first anniversary of the Vesting Commencement Date and in 12 equal quarterly installments on each quarterly anniversary of such date with such last installment vesting on the fourth anniversary of the Vesting Commencement Date, subject to Optionee's continued Service through such date.

In addition, this option (or a portion thereof) may be eligible for accelerated vesting if and to the extent provided in the Optionee's individual employment or service agreement with the Corporation, including Sections 5(b) and 8 thereof**.**

Payment: By one or a combination of the following items (described in the Stock Option Agreement):

[1] Formerly, Sevion Therapeutics, Inc.

☒ By cash, check, bank draft or money order payable to the Corporation
☐ Pursuant to a Regulation T Program if the shares are publicly traded
☐ By delivery of already-owned shares if the shares are publicly traded
☐ If and only to the extent this option is a Non-Statutory Option, and subject to the Corporation's consent at the time of exercise, by a "net exercise" arrangement

Additional Terms/Acknowledgements: Optionee acknowledges receipt of, and understands and agrees to, this Grant Notice, the Stock Option Agreement and the Plan. Optionee acknowledges and agrees that this Grant Notice and the Stock Option Agreement may not be modified, amended or revised except as provided in the Plan. Optionee further acknowledges that as of the Grant Date, this Grant Notice, the Stock Option Agreement, and the Plan set forth the entire understanding between Optionee and the Corporation regarding this option award and supersede all prior oral and written agreements, promises and/or representations on that subject with the exception of, if applicable, (i) equity awards previously granted and delivered to Optionee, (ii) any compensation recovery policy that is adopted by the Corporation or is otherwise required by applicable law and (iii) any written employment agreement, severance agreement, offer letter or other written agreement entered into between the Corporation and Optionee specifying the terms that should govern this specific option. By accepting this option, Optionee consents to receive such documents by electronic delivery and to participate in the Plan through an on-line or electronic system established and maintained by the Corporation or another third party designated by the Corporation.

ELOXX PHARMACEUTICALS, INC.

By: /s/ Gregory Weaver
Signature
Title: Chief Financial Officer
Date: March 5, 2018

OPTIONEE:

/s/ Robert E. Ward
Signature
Date: March 5, 2018

ATTACHMENTS: Stock Option Agreement, Sevion Therapeutics, Inc. Amended and Restated 2008 Incentive Compensation Plan and Notice of Exercise

ELOXX PHARMACEUTICALS, INC.

STOCK OPTION AGREEMENT

RECITALS

A. This option has been granted to Optionee outside of, but subject to the terms and conditions of the Plan as if it has been granted under the Plan. The option is granted in compliance with NASDAQ Listing Rule 5634(c)(4) as a material inducement to you entering into employment with the Corporation. For the avoidance of doubt, the shares of Common Stock underlying this option shall not reduce and shall have no impact on the number of shares available for grant under the Plan.

B. The Board has adopted the Plan for the purpose of retaining the services of selected employees who provide services to the Corporation (or any Parent or Subsidiary).

C. Optionee is to render valuable services to the Corporation (or a Parent or Subsidiary), and the Committee has approved the grant of an option to Optionee pursuant to this Agreement.

D. All capitalized terms in this Agreement shall have the meaning assigned to them in the attached Appendix.

NOW, THEREFORE, it is hereby agreed as follows:

1. **Grant of Option**. The Corporation hereby grants to Optionee, as of the Grant Date, an option to purchase up to the number of Option Shares specified in the Grant Notice. The Option Shares shall be purchasable from time to time during the option term specified in Paragraph 2 at the Exercise Price.

2. **Option Term**. This option shall have a maximum term of ten (10) years measured from the Grant Date and shall accordingly expire at the close of business on the Expiration Date, unless sooner terminated in accordance with Paragraph 5 of this Agreement or the provisions of the Plan.

3. **Limited Transferability**. This option shall be neither transferable nor assignable by Optionee other than by will or the laws of inheritance following Optionee's death and may be exercised, during Optionee's lifetime, only by Optionee.

4. **Dates of Exercise**. This option shall become exercisable for the Option Shares in one or more installments in accordance with the Exercise Schedule set forth in the Grant Notice. As the option becomes exercisable for such installments, those installments shall accumulate, and the option shall remain exercisable for the accumulated installments until the Expiration Date or sooner termination of the option term under Paragraph 5 or 6.

5. **Termination of Service**. The option term specified in Paragraph 2 shall terminate (and this option shall cease to be outstanding) prior to the Expiration Date should any of the following provisions become applicable:

(a) Should Optionee cease to remain in Service with the Corporation (or any Parent or Subsidiary) for any reason (other than death, Permanent Disability or Misconduct) while this option is outstanding, then Optionee shall have a three (3)-month period measured from the date of such cessation of Service during which to exercise this option, but in no event shall this option be exercisable at any time after the Expiration Date.

(b) Should Optionee die while this option is outstanding, then this option may be exercised by (i) the personal representative of Optionee's estate or (ii) the person or persons to whom the option is transferred pursuant to Optionee's will or the laws of inheritance following Optionee's death. Any such right to exercise this option shall lapse, and this option shall cease to be outstanding, upon the earlier of (i) the expiration of the twelve (12)-month period measured from the date of Optionee's death or (ii) the Expiration Date.

(c) Should Optionee cease to remain in Service by reason of Permanent Disability while this option is outstanding, then Optionee shall have a twelve (12)-month period measured from the date of such cessation of Service during which to exercise this option. In no event shall this option be exercisable at any time after the Expiration Date.

(d) During the limited period of post-employment exercisability, this option may not be exercised in the aggregate for more than the number of Option Shares for which this option is, at the time of Optionee's termination of Service, exercisable pursuant to the Exercise Schedule specified in the Grant Notice or the provisions of the Plan. This option shall not become exercisable for any additional Option Shares, whether pursuant to the normal Exercise Schedule specified in the Grant Notice or the provisions of the Plan, following Optionee's termination of Service, except to the extent (if any) specifically authorized by the Plan Administrator pursuant to an express written agreement with Optionee. Upon the expiration of such limited exercise period or (if earlier) upon the Expiration Date, this option shall terminate and cease to be outstanding for any exercisable Option Shares for which the option has not otherwise been exercised.

(e) Should Optionee's Service with the Corporation (or any Parent or Subsidiary) be terminated for Misconduct or should Optionee otherwise engage in any Misconduct while this option is outstanding, then this option shall terminate immediately and cease to remain outstanding.

6. **Change in Control**.

(a) This option to the extent outstanding at the time of a Change in Control but not otherwise fully exercisable, shall automatically accelerate so that such option shall, immediately prior to the effective date of that Change in Control, become exercisable for all the shares of Common Stock at the time subject to this option and may be exercised for any or all of those shares as fully vested shares of Common Stock. However, this option shall not become exercisable on an accelerated basis if and to the extent this option is, in connection with the Change in Control, to be assumed by the successor corporation (or parent thereof) or otherwise continued in full force and effect pursuant to the terms of the Change in Control transaction or such option is replaced with a cash retention program of the successor corporation that preserves the spread existing at the time of the Change in Control on the shares of Common Stock as to which the option is not otherwise exercisable and provides for the subsequent vesting and payment of that spread in accordance with the same Exercise Schedule applicable to those shares.

(b) Immediately following the consummation of the Change in Control, this option shall terminate and cease to be outstanding, except to the extent this option is assumed by the successor corporation (or parent thereof) in connection with the Change in Control or is otherwise continued in full force and effect pursuant to the terms of the Change in Control transaction.

(c) If this option is assumed in connection with a Change in Control or is otherwise continued in full force and effect, then this option shall be appropriately adjusted, immediately after such Change in Control, to apply to the number and class of securities which would have been issuable to Optionee in consummation of such Change in Control had the option been exercised immediately prior to such Change in Control, and appropriate adjustments shall also be made to the Exercise Price, provided the

aggregate Exercise Price shall remain the same. To the extent the actual holders of the Corporation's outstanding Common Stock receive cash consideration for their Common Stock in consummation of the Change in Control transaction, the successor corporation may, in connection with the assumption or continuation of this option and subject to the Plan Administrator's approval, substitute one or more shares of its own common stock with a fair market value equivalent to the cash consideration paid per share of Common Stock in such Change in Control transaction, provided such common stock is readily traded on an established U.S. securities exchange or market.

(d) This Agreement shall not in any way affect the right of the Corporation to adjust, reclassify, reorganize or otherwise change its capital or business structure or to merge, consolidate, dissolve, liquidate or sell or transfer all or any part of its business or assets.

7. **Adjustment in Option Shares**. Should any change be made to the Common Stock by reason of any stock split, stock dividend, recapitalization, combination of shares, exchange of shares, spin-off transaction or other change affecting the outstanding Common Stock as a class without the Corporation's receipt of consideration or should the value of outstanding shares of Common stock be substantially reduced as a result of a spin-off transaction or an extraordinary dividend or distribution or should there occur any merger, consolidation or other reorganization (other than a Change in Control), then equitable adjustments shall be made to (i) the total number and/or class of securities subject to this option and (ii) the Exercise Price in such manner as the Committee deems appropriate.

8. **Stockholder Rights**. The holder of this option shall not have any stockholder rights with respect to the Option Shares until such person shall have exercised the option, paid the Exercise Price and become a holder of record of the purchased shares.

9. **Manner of Exercising Option**.

(a) In order to exercise this option with respect to all or any part of the Option Shares for which this option is at the time exercisable, Optionee (or any other person or persons exercising the option) must take the following actions:

(i) Execute and deliver to the Corporation a Notice of Exercise for the Option Shares for which the option is exercised or comply with such other procedures as the Corporation may establish for notifying the Corporation of the exercise of this option for one or more Option Shares.

(ii) Pay the aggregate Exercise Price for the purchased shares in one or more of the following forms:

(A) cash or check made payable to the Corporation;

(B) shares of Common Stock (whether delivered in the form of actual stock certificates or through attestation of ownership) held for the requisite period (if any) necessary to avoid any resulting charge to the Corporation's earnings for financial reporting purposes and valued at Fair Market Value on the Exercise Date;

(C) through a special sale and remittance procedure pursuant to which Optionee (or any other person or persons exercising the option) shall concurrently provide irrevocable instructions (i) to a brokerage firm (reasonably satisfactory to the Corporation for purposes of administering such procedure in accordance with the Corporation's pre-clearance/pre-notification policies) to effect the immediate sale of the purchased shares and remit to the Corporation, out of the sale proceeds available on the settlement date, sufficient funds to cover the aggregate Exercise Price payable for the purchased shares

plus all applicable income and employment taxes required to be withheld by the Corporation by reason of such exercise and (ii) to the Corporation to deliver the certificates for the purchased shares directly to such brokerage firm on such settlement date in order to complete the sale; and

(D) If this option is a Non-Statutory Option, subject to the consent of the Corporation at the Exercise Date, by a "net exercise" arrangement pursuant to which the Corporation will reduce the number of shares of Common Stock issued upon exercise of the option by the largest whole number of shares with a Fair Market Value that does not exceed the aggregate exercise price. Optionee must pay any remaining balance of the aggregate exercise price not satisfied by the "net exercise" in cash or other permitted form of payment. Shares of Common Stock will no longer be outstanding under the option and will not be exercisable thereafter if those shares (i) are used to pay the exercise price pursuant to the "net exercise," (ii) are delivered to Optionee as a result of such exercise, and (iii) are withheld to satisfy Optionee's tax withholding obligations.

Except to the extent the sale and remittance procedure is utilized in connection with the option exercise, payment of the Exercise Price must accompany the Notice of Exercise (or other notification procedure) delivered to the Corporation in connection with the option exercise.

(iii) Furnish to the Corporation appropriate documentation that the person or persons exercising the option (if other than Optionee) have the right to exercise this option.

(iv) Make appropriate arrangements with the Corporation (or Parent or Subsidiary employing Optionee) for the satisfaction of all applicable income and employment tax withholding requirements applicable to the option exercise.

(b) As soon as practical after the Exercise Date, the Corporation shall issue to or on behalf of Optionee (or any other person or persons exercising this option) a certificate for the purchased Option Shares, with the appropriate legends affixed thereto.

(c) In no event may this option be exercised for any fractional shares.

10. **Compliance with Laws and Regulations.**

(a) The exercise of this option and the issuance of the Option Shares upon such exercise shall be subject to compliance by the Corporation and Optionee with all applicable requirements of law relating thereto and with all applicable regulations of any stock exchange (or the Nasdaq National Market, if applicable) on which the Common Stock may be listed for trading at the time of such exercise and issuance.

(b) The inability of the Corporation to obtain approval from any regulatory body having authority deemed by the Corporation to be necessary to the lawful issuance and sale of any Common Stock pursuant to this option shall relieve the Corporation of any liability with respect to the non-issuance or sale of the Common Stock as to which such approval shall not have been obtained. The Corporation, however, shall use its best efforts to obtain all such approvals.

11. **Successors and Assigns**. Except to the extent otherwise provided in Paragraph 3, the provisions of this Agreement shall inure to the benefit of, and be binding upon, the Corporation and its successors and assigns and Optionee, Optionee's assigns, the legal representatives, heirs and legatees of Optionee's estate.

12. **Notices**. Any notice required to be given or delivered to the Corporation under the terms of this Agreement shall be in writing and addressed to the Corporation at its principal corporate offices. Any notice required to be given or delivered to Optionee shall be in writing and addressed to Optionee at the address indicated below Optionee's signature line on the Grant Notice. All notices shall be deemed effective upon personal delivery or upon deposit in the U.S. mail, postage prepaid and properly addressed to the party to be notified.

13. **Construction**. This Agreement and the option evidenced hereby are made and granted pursuant to the Plan and are in all respects limited by and subject to the terms of the Plan. All decisions of the Committee with respect to any question or issue arising under the Plan or this Agreement shall be conclusive and binding on all persons having an interest in this option.

14. **Governing Law**. The interpretation, performance and enforcement of this Agreement shall be governed by the laws of the State of Delaware without resort to that State's conflict-of-laws rules.

15. **Excess Shares**. If the Option Shares covered by this Agreement exceed, as of the Grant Date, the number of shares of Common Stock which may without stockholder approval be issued under the Plan, then this option shall be void with respect to those excess shares, unless stockholder approval of an amendment sufficiently increasing the number of shares of Common Stock issuable under the Plan is obtained in accordance with the provisions of the Plan. In no event shall the Option be exercisable with respect to any of the excess Option Shares unless and until such stockholder approval is obtained.

16. **Additional Terms Applicable to an Incentive Option**. In the event this option is designated an Incentive Option in the Grant Notice, the following terms and conditions shall also apply to the grant:

(a) This option shall cease to qualify for favorable tax treatment as an Incentive Option if (and to the extent) this option is exercised for one or more Option Shares: (A) more than three (3) months after the date Optionee ceases to be an employee for any reason other than death or Permanent Disability or (B) more than twelve (12) months after the date Optionee ceases to be an employee by reason of Permanent Disability.

(b) No installment under this option shall qualify for favorable tax treatment as an Incentive Option if (and to the extent) the aggregate Fair Market Value (determined at the Grant Date) of the Common Stock for which such installment first becomes exercisable hereunder would, when added to the aggregate value (determined as of the respective date or dates of grant) of the Common Stock or other securities for which this option or any other Incentive Options granted to Optionee prior to the Grant Date (whether under the Plan or any other option plan of the Corporation or any Parent or Subsidiary) first become exercisable during the same calendar year, exceed One Hundred Thousand Dollars ($100,000) in the aggregate. Should such One Hundred Thousand Dollar ($100,000) limitation be exceeded in any calendar year, this option shall nevertheless become exercisable for the excess shares in such calendar year as a Non-Statutory Option.

(c) Should Optionee hold, in addition to this option, one or more other options to purchase Common Stock which become exercisable for the first time in the same calendar year as this option, then for purposes of the foregoing limitations on the exercisability of such options as Incentive Options, this option and each of those other options shall be deemed to become first exercisable in that calendar year, on the basis of the chronological order in which such options were granted, except to the extent otherwise provided under applicable law or regulation.

17. **Withholding Obligations**.

(a) At the time Optionee exercises this option, in whole or in part, and at any time thereafter as requested by the Corporation, Optionee hereby authorizes withholding from payroll and any other amounts payable to Optionee, and otherwise agrees to make adequate provision for (including by means of a "same day sale" pursuant to a program developed under Regulation T as promulgated by the Federal Reserve Board to the extent permitted by the Corporation), any sums required to satisfy the federal, state, local and foreign tax withholding obligations of the Corporation or an Affiliate, if any, which arise in connection with the exercise of the option.

(b) If this option is a Non-Statutory Option, then upon Optionee's request and subject to approval by the Corporation, and compliance with any applicable legal conditions or restrictions, the Corporation may withhold from fully vested shares of Common Stock otherwise issuable to Optionee upon the exercise of this option a number of whole shares of Common Stock having a Fair Market Value, determined by the Corporation as of the Exercise Date, not in excess of the maximum amount of tax required to be withheld by law (or such lower amount as may be necessary to avoid classification of the option as a liability for financial accounting purposes). Shares of Common Stock shall be withheld solely from fully vested shares of Common Stock determined as of the Exercise date that are otherwise issuable upon such exercise. Any adverse consequences to Optionee arising in connection with such share withholding procedure shall be Optionee's sole responsibility.

(c) Optionee may not exercise this option unless the tax withholding obligations of the Corporation and/or any Affiliate are satisfied. Accordingly, Optionee may not be able to exercise this option when desired even though the option is vested, and the Corporation will have no obligation to issue a certificate for such shares of Common Stock or release such shares of Common Stock from any escrow provided for herein, if applicable, unless such obligations are satisfied.

18. **Tax Consequences**. Optionee agrees that the Corporation does not have a duty to design or administer the Plan or its other compensation programs in a manner that minimizes Optionee's tax liabilities. Optionee will not make any claim against the Corporation, or any of its Officers, Directors, Employees or Affiliates related to tax liabilities arising from this option or other compensation. In particular, Optionee acknowledge that this option is exempt from Section 409A of the Code only if the exercise price per share specified in the Grant Notice is at least equal to the "fair market value" per share of the Common Stock on the Grant Date and there is no other impermissible deferral of compensation associated with the option.

19. **Effect on Other Employee Benefit Plans**. The value of this option will not be included as compensation, earnings, salaries, or other similar terms used when calculating Optionees benefits under any employee benefit plan sponsored by the Corporation or any Affiliate, except as such plan otherwise expressly provides. The Corporation expressly reserves its rights to amend, modify, or terminate any of the Corporation's or any Affiliate's employee benefit plans or programs.

APPENDIX

The following definitions shall be in effect under the Agreement:

A. **Agreement** shall mean this Stock Option Agreement.

B. **Board** shall mean the Corporation's Board of Directors.

C. **Change in Control** shall mean a change in ownership or control of the Corporation effected through any of the following transactions:

(i) a merger, consolidation or other reorganization approved by the Corporation's stockholders, unless securities representing more than fifty percent (50%) of the total combined voting power of the voting securities of the successor corporation are immediately thereafter beneficially owned, directly or indirectly and in substantially the same proportion, by the persons who beneficially owned the Corporation's outstanding voting securities immediately prior to such transaction;

(ii) a sale, transfer or other disposition of all or substantially all of the Corporation's assets;

(iii) the closing of any transaction or series of related transactions pursuant to which any person or any group of persons comprising a "group" within the meaning of Rule 13d-5(b)(1) of the 1934 Act (other than the Corporation or a person that, prior to such transaction or series of related transactions, directly or indirectly controls, is controlled by or is under common control with, the Corporation) becomes directly or indirectly (whether as a result of a single acquisition or by reason of one or more acquisitions within the twelve (12)-month period ending with the most recent acquisition) the beneficial owner (within the meaning of Rule 13d-3 of the 1934 Act) of securities possessing (or convertible into or exercisable for securities possessing) fifty percent (50%) or more of the total combined voting power of the Corporation's securities (as measured in terms of the power to vote with respect to the election of Board members) outstanding immediately after the consummation of such transaction or series of related transactions, whether such transaction involves a direct issuance from the Corporation or the acquisition of outstanding securities held by one or more of the Corporation's existing stockholders; or

(iv) a change in the composition of the Board over a period of twelve (12) consecutive months or less such that a majority of the Board members ceases, by reason of one or more contested elections for Board membership, to be comprised of individuals who either (A) have been Board members continuously since the beginning of such period or (B) have been elected or nominated for election as Board members during such period by at least a majority of the Board members described in clause (A) who were still in office at the time the Board approved such election or nomination.

D. **Code** shall mean the Internal Revenue Code of 1986, as amended.

E. **Committee** shall mean the committee of the Board acting in its capacity as administrator of the Plan.

F. **Common Stock** shall mean shares of the Corporation's common stock.

G. **Corporation** shall mean Eloxx Pharmaceuticals, a Delaware corporation, the successor to Sevion Therapeutics, Inc., a Delaware corporation, and any successor corporation to all or substantially all of the assets or voting stock of Eloxx Pharmaceuticals, Inc. which shall by appropriate action adopt the Plan.

H. **Exercise Date** shall mean the date on which the option shall have been exercised in accordance with Paragraph 9 of the Agreement.

I. **Exercise Price** shall mean the exercise price per Option Share as specified in the Grant Notice.

J. **Exercise Schedule** shall mean the schedule set forth in the Grant Notice pursuant to which the option is to become exercisable for the Option Shares in one or more installments over the Optionee's period of Service.

K. **Expiration Date** shall mean the date on which the option expires as specified in the Grant Notice.

L. **Fair Market Value** per share of Common Stock on any relevant date shall be the closing selling price per share of Common Stock at the close of regular hours trading (i.e., before after-hours trading begins) on date on question on the Stock Exchange serving as the primary market for the Common Stock, as such price is reported by the National Association of Securities Dealers (if primarily traded on the Nasdaq Global or Global Select Market) or as officially quoted in the composite tape of transactions on any other Stock Exchange on which the Common Stock is then primarily traded. If there is no closing selling price for the Common Stock on the date in question, then the Fair Market Value shall be the closing selling price on the last preceding date for which such quotation exists.

M. **Grant Date** shall mean the date of grant of the option as specified in the Grant Notice.

N. **Grant Notice** shall mean the Notice of Grant of Stock Option accompanying the Agreement, pursuant to which Optionee has been informed of the basic terms of the option evidenced hereby.

O. **Incentive Option** shall mean an option which satisfies the requirements of Code Section 422.

P. **Misconduct** shall mean the commission of any act of fraud, embezzlement or dishonesty by Optionee, any unauthorized use or disclosure by Optionee of confidential information or trade secrets of the Corporation (or any Parent or Subsidiary), or any other intentional misconduct by Optionee adversely affecting the business or affairs of the Corporation (or any Parent or Subsidiary) in a material manner. The foregoing definition shall not in any way preclude or restrict the right of the Corporation (or any Parent or Subsidiary) to discharge or dismiss Optionee or any other person in the service of the Corporation (or any Parent or Subsidiary) for any other acts or omissions, but such other acts or omissions shall not be deemed, for purposes of the Plan or this Agreement, to constitute grounds for termination for Misconduct.

Q. **1934 Act** shall mean the Securities Exchange Act of 1934, as amended.

R. **Non-Statutory Option** shall mean an option not intended to satisfy the requirements of Code Section 422.

S. **Notice of Exercise** shall mean the notice of option exercise in the form prescribed by the Corporation.

T. **Option Shares** shall mean the number of shares of Common Stock subject to the option as specified in the Grant Notice.

U. **Optionee** shall mean the person to whom the option is granted as specified in the Grant Notice.

V. **Parent** shall mean any corporation (other than the Corporation) in an unbroken chain of corporations ending with the Corporation, provided each corporation in the unbroken chain (other than the

Corporation) owns, at the time of the determination, stock possessing fifty percent (50%) or more of the total combined voting power of all classes of stock in one of the other corporations in such chain.

W. **Permanent Disability** shall mean the inability of Optionee to engage in any substantial gainful activity by reason of any medically determinable physical or mental impairment which is expected to result in death or to be of continuous duration of twelve (12) months or more.

X. **Plan** shall mean the Corporation's Amended and Restated 2008 Incentive Compensation Plan.

Y. **Plan Administrator** shall mean either the Board or a committee of the Board or individual authorized to act as administrator of the Plan.

Z. **Stock Exchange** shall mean the American Stock Exchange, the Nasdaq Global or Global Select Market or the New York Stock Exchange.

AA. **Subsidiary** shall mean any corporation (other than the Corporation) in an unbroken chain of corporations beginning with the Corporation, provided each corporation (other than the last corporation) in the unbroken chain owns, at the time of the determination, stock possessing fifty percent (50%) or more of the total combined voting power of all classes of stock in one of the other corporations in such chain.

Boston Properties

Prudential Center
800 Boylston Street, Suite 1900
Boston, MA 02199-8103

www.bostonproperties.com

Boston Properties, Inc.
(NYSE:BXP)

October 30, 2017

VIA FEDERAL EXPRESS

Tracking No. 7706 2505 6190

Boston
Los Angeles
New York
San Francisco
Washington, DC

Greg Weaver
Eloxx Pharmaceuticals, Inc.
303 Wyman Street
Suite 300
Waltham, MA 02452

RE: Lease for Eloxx Pharmaceuticals Inc. at 950 Winter Street, Waltham, Massachusetts

Dear Mr. Weaver:

Enclosed is one (1) fully executed original signature copy of the new Lease for Eloxx Pharmaceuticals at Bay Colony in Waltham, Massachusetts.

Please let me know if I may be of further assistance.

Very truly yours,

/s/ Patrick Kimble (ra)

Patrick Kimble
Leasing Representative

Enclosure

BAY COLONY CORPORATE CENTER
950 WINTER STREET
WALTHAM, MASSACHUSETTS

Lease Dated October 26, 2017

THIS INSTRUMENT IS AN INDENTURE OF LEASE in which the Landlord and the Tenant are the parties hereinafter named, and which relates to space in a certain building (the "Building") known as, and with an address at, 950 Winter Street, Waltham, Massachusetts 02451.

The parties to this Indenture of Lease hereby agree with each other as follows:

ARTICLE I

Reference Data

1.1 Subjects Referred To

Each reference in this Lease to any of the following subjects shall be construed to incorporate the data stated for that subject in this Article:

Landlord:	BP BAY COLONY LLC, a Delaware limited liability company
Landlord's Original Address	c/o Boston Properties Limited Partnership Prudential Center 800 Boylston Street, Suite 1900 Boston, Massachusetts 02199-8103
Landlord's Construction Representative:	Luke Bowen
Tenant:	ELOXX PHARMACEUTICALS, INC., a Delaware corporation
Tenant's Original Address:	303 Wyman Street Suite 300 Waltham, MA 02452
Tenant's Email Address for Information Regarding Billings and Statements:	Greg@eloxxpharma.com

Tenant's Construction Representative:	Greg Weaver
Commencement Date:	As defined in Section 2.4 of this Lease.
Rent Commencement Date:	The date that is thirty (30) days following the Commencement Date.
Estimated Commencement Date:	November 15, 2017
Outside Completion Date:	December 15, 2017
Term or Lease Term (sometimes called the "Original Term"):	Thirty-Seven (37) calendar months (plus the partial month, if any, immediately following the Commencement Date), unless extended or sooner terminated as provided in this Lease.
Extension Option:	One (1) period of three (3) years as provided in and on the terms set forth in Section 9.18 hereof.
Rent Year:	Any twelve (12) month period during the Term of the Lease commencing as of the Rent Commencement Date, or as of any anniversary of the Rent Commencement Date, except that if the Rent Commencement Date does not occur on the first day of a calendar month, then (i) the first Rent Year shall further include the partial calendar month in which the first anniversary of the Rent Commencement Date occurs, and (ii) the remaining Rent Years shall be the successive twelve-(12)-month periods following the end of such first Rent Year.
The Site:	That certain parcel of land known as and numbered 950 Winter Street, Waltham, Middlesex County, Massachusetts.
The Building:	The Building known as and numbered 950 Winter Street, Waltham, Massachusetts.
The Property:	The Building together with all common areas, parking areas, decks and the Site.

Office Park:	That certain office park known as Bay Colony Corporate Center, containing the Building and the additional buildings known as and numbered 1000, 1050 and 1100 Winter Street, Waltham, Massachusetts, located on the property more particularly described in Exhibit A attached hereto.
Tenant's Premises:	A portion of the fourth (4th) floor of the Building in accordance with the floor plan annexed hereto as Exhibit D and incorporated herein by reference.
Number of Parking Spaces:	Eleven (11) (being three (3) spaces per 1,000 square feet of the Rentable Floor Area of the Premises).
Annual Fixed Rent:	(a) During the Original Term of this Lease, Annual Fixed Rent shall be payable by Tenant as follows:

Rent Years	Rate PSF	Annual Rate
1 - 3	$ 43.50	$ 162,516.00

(b)During the extension option period (if exercised), as determined pursuant to Section 9.18.

Base Operating Expenses:	Landlord's Operating Expenses (as hereinafter defined in Section 2.6) for calendar year 2018, being January 1, 2018 through December 31, 2018.
Base Taxes:	Landlord's Tax Expenses (as hereinafter defined in Section 2.7) for fiscal tax year 2018, being July 1, 2017 through June 30, 2018.
Tenant Electricity:	As provided in Section 2.8.
Additional Rent:	All charges and other sums payable by Tenant as set forth in this Lease, in addition to Annual Fixed Rent.
Rentable Floor Area of the Premises:	3,736 square feet.

Total Rentable Floor Area of the Building:	269,499 square feet.
Permitted Use:	General office purposes.
Broker:	Transwestern/RBJ
Security Deposit:	$40,629.00

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1.3 Exhibits

There are incorporated as part of this Lease:

Exhibit A	—	Description of Office Park
Exhibit B	—	Work Agreement
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Exhibit D	—	Floor Plan
Exhibit E	—	Form of Declaration Affixing the Commencement Date of Lease
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Exhibit G	—	List of Mortgages
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Exhibit I	—	Form of Acknowledgement of Name Change

ARTICLE II

Building, Premises, Term and Rent

2.1 The Premises

Commencing on the Commencement Date, Landlord hereby demises and leases to Tenant, and Tenant hereby hires and accepts from Landlord, Tenant’s Premises in the Building excluding exterior faces of exterior walls, the common stairways and stairwells, elevators and elevator wells, fan rooms, electric and telephone closets, janitor closets, freight elevator vestibules, and pipes, ducts, conduits, wires and appurtenant fixtures

serving exclusively or in common other parts of the Building and if Tenant's Premises includes less than the entire rentable area of any floor, excluding the common corridors, elevator lobbies and toilets located on such floor. Tenant's Premises with such exclusions is hereinafter referred to as the "Premises."

2.1.1 Relocation of Tenant's Premises

Tenant hereby agrees with Landlord that, upon the request of Landlord made not more than one (1) time during the Term with no less than 90 days' prior notice, Tenant shall relocate from the Premises then demised to Tenant under this Lease (the "Original Premises") to other premises (the "Relocated Premises") within the Office Park and upon such relocation the Relocated Premises shall become the premises demised under this Lease and wherever the term "Premises" is used herein the same thereafter shall mean and refer to the Relocated Premises; provided, however, that the Relocated Premises shall (i) be of comparable size, fit and finish, (ii) have comparable window line, views and elevator and lobby presence, and (iii) not be on the ground floor. Landlord, at its sole cost and expense, shall perform the partitioning of the Relocated Premises and shall place the same into substantially equivalent condition to that in which the Original Premises were in prior to such relocation, and Landlord shall also reimburse Tenant for Tenant's reasonable out-of-pocket moving expenses in so relocating to the Relocated Premises (including moving telephone and data service) upon billing therefor from Tenant, which billing shall include reasonable evidence thereof in the form of paid invoices, receipts and the like. Tenant shall not be required to vacate the Original Premises and to relocate to the Relocated Premises until the Relocated Premises shall be substantially complete subject to punch list items. Upon any such relocation Tenant shall enter into an amendment to this Lease confirming such relocation, but the Tenant's failure to enter into such amendment shall not affect in any manner the relocation of the Premises demised under this Lease from the original Premises to the Relocated Premises.

In connection with the foregoing, it is understood and agreed that in the event of any such relocation, Tenant's payments on account of Annual Fixed Rent for the Relocated Premises during the Original Term shall not exceed the amounts that would have been payable for the same by Tenant for the Original Premises for the same time period had the relocation not occurred.

2.2 Rights to Use Common Facilities

Subject to Landlord's right to change or alter any of the following in Landlord's discretion as herein provided, Tenant shall have, as appurtenant to the Premises, the non-exclusive right to use in common with others, subject to reasonable rules of general applicability to tenants of the Building from time to time made by Landlord of which Tenant is given notice: (a) the common lobbies, corridors, stairways, elevators and loading platform of the Building, and the pipes, ducts, conduits, wires and appurtenant meters and equipment serving the Premises in common with others, (b) common

walkways and driveways necessary for access to the Building, and (c) if the Premises include less than the entire rentable floor area of any floor, the common toilets, corridors and elevator lobby of such floor. Notwithstanding anything to the contrary herein, Landlord has no obligation to allow any particular telecommunication service provider to have access to the Building or to the Premises except as may be required by applicable law; provided, however, Landlord covenants that at least one telecommunications service provider will have access to the Building and the Premises. If Tenant requests access for a telecommunications service provider who is not already providing service to the Building, and if Landlord permits such access, Landlord may condition such access upon the payment to Landlord by the service provider of fees assessed by Landlord in its sole discretion.

2.2.1 Tenant's Parking

In addition, Tenant shall have the right to use in the parking area the Number of Parking Spaces (referred to in Section 1.1) for the parking of automobiles, in common with use by other tenants from time to time of the Property, provided, however, that Landlord shall not be obligated to furnish stalls or spaces on the Site specifically designated for Tenant's use. In the event that the Rentable Floor Area of the Premises decreases at any time during the Lease Term, the Number of Parking Spaces provided to Tenant hereunder shall be reduced proportionately. Tenant covenants and agrees that it and all persons claiming by, through and under it, shall at all times abide by all reasonable rules and regulations promulgated by Landlord with respect to the use of the parking areas on the Site. The parking privileges granted herein are non-transferable except to a permitted assignee or subtenant as provided in Section 5.6. Further, Landlord assumes no responsibility whatsoever for loss or damage due to fire, theft or otherwise to any automobile(s) parked on the Site or to any personal property therein, however caused, and Tenant covenants and agrees, upon request from Landlord from time to time, to notify its officers, employees, agents and invitees of such limitation of liability. Tenant acknowledges and agrees that a license only is hereby granted, and no bailment is intended or shall be created.

2.3 Landlord's Reservations

Landlord reserves the right from time to time, without unreasonable interference with Tenant's use: (a) to install, use, maintain, repair, replace and relocate for service to the Premises and other parts of the Building, or either, pipes, ducts, conduits, wires and appurtenant fixtures, wherever located in the Premises or Building, (b) to perform, or cause to be performed, construction in the common areas and facilities or other leased areas on the Property or in the Office Park and (c) to reduce, increase, enclose or otherwise change at any time and from time to time the size, number, location, lay-out and nature of the common areas and facilities and other tenancies and premises on the Property or in the Office Park, to create additional rentable areas through use or enclosure of common areas, and to dedicate roads within the Office Park for public use. Installations, replacements and relocations referred to in clause (a) above shall be located so far as practicable in the central core area of the Building, above ceiling surfaces, below

floor surfaces or within perimeter walls of the Premises. Except in the case of emergencies or for normal cleaning and maintenance operations, Landlord agrees to use its best efforts to give Tenant reasonable advance notice of any of the foregoing activities which require work in the Premises.

2.4 Habendum

Tenant shall have and hold the Premises for a period commencing on the date on which the Landlord delivers the Premises to Tenant with the Landlord Work (as defined in Exhibit B hereof) substantially complete and continuing for the Term, unless sooner terminated as provided in Article VI or Article VII or unless extended as provided in Section 9.18. Notwithstanding the foregoing, the parties acknowledge and agree that Landlord shall not deliver the Premises to Tenant prior to November 15, 2017. For all purposes under this Lease, the Landlord Work shall be deemed to be "substantially complete" when it is complete other than minor items of a punch list nature, the completion of which would not reasonably be expected to interfere with the lawful use of and access to the Premises.

As soon as may be convenient after the date has been determined on which the Term commences as aforesaid, Landlord and Tenant agree to join with each other in the execution of a written Declaration Affixing the Commencement Date of Lease, in the form of Exhibit E, in which the date on which the Term commences as aforesaid and the Term of this Lease shall be stated. If Tenant fails to execute such Declaration Affixing the Commencement Date of Lease, the Commencement Date and Lease Term shall be as reasonably determined by Landlord in accordance with the terms of this Lease.

2.5 Fixed Rent Payments

Tenant agrees to pay to Landlord, (1) (a) on the Rent Commencement Date (defined in Section 1.1 hereof) and thereafter monthly, in advance, on the first day of each and every calendar month during the Original Term, a sum equal to one twelfth (1/12th) of the Annual Fixed Rent (sometimes hereinafter referred to as "fixed rent") and (b) on the Commencement Date and thereafter monthly, in advance, on the first day of each and every calendar month during the Original Term, an amount estimated by Landlord from time to time to cover Tenant's monthly payments for electricity under Section 2.8 and (2) on the first day of each and every calendar month during each extension option period (if exercised), a sum equal to (a) one twelfth (1/12th) of the Annual Fixed Rent as determined in Section 9.18 for the extension option period plus (b) then applicable monthly electricity charges under Section 2.8. Until notice of some other designation is given, fixed rent and all other charges for which provision is herein made shall be paid by remittance to or for the order of Landlord either (i) by ACH transfer to Bank of America in Dallas, Texas, Bank Routing Number 111 000 012 or (ii) by mail to P.O. Box 3557, Boston, Massachusetts 02241-3557, and in the case of (i) referencing Account Number 3756454460, Account Name of Boston Properties, LP, Tenant's name and the Property address. All remittances received by Boston Properties Limited Partnership as aforesaid, or by any subsequently designated recipient, shall be treated as payment to Landlord.

Annual Fixed Rent for any partial month shall be paid by Tenant to Landlord at such rate on a pro rata basis, and, if the Rent Commencement Date is a day other than the first day of a calendar month, the first payment of Annual Fixed Rent which Tenant shall make to Landlord shall be a payment equal to a proportionate part of such monthly Annual Fixed Rent for the partial month from the Rent Commencement Date to the first day of the succeeding calendar month.

Additional Rent payable by Tenant on a monthly basis, as hereinafter provided, likewise shall be prorated, and the first payment on account thereof shall be determined in similar fashion but shall commence on the Commencement Date; and other provisions of this Lease calling for monthly payments shall be read as incorporating this undertaking by Tenant.

Notwithstanding that the payment of Annual Fixed Rent payable by Tenant to Landlord shall not commence until the Rent Commencement Date, Tenant shall be subject to, and shall comply with, all other provisions of this Lease as and at the times provided in this Lease.

The Annual Fixed Rent and all other charges for which provision is herein made shall be paid by Tenant to Landlord, without offset, deduction or abatement except as otherwise specifically set forth in this Lease.

2.6 Operating Expenses

"Landlord's Operating Expenses" means the cost of operation of the Building and the Site (including, without limitation, costs associated with the operation of other portions of the Office Park, to the extent allocable to the Property) which shall exclude costs of special services rendered to tenants (including Tenant) for which a separate charge is made, but shall include, without limitation, the following: premiums for insurance carried with respect to the Building and the Site (including, without limitation, liability insurance, insurance against loss in case of fire or casualty and insurance of monthly installments of fixed rent and any Additional Rent which may be due under this Lease and other leases of space in the Building for not more than 12 months in the case of both fixed rent and Additional Rent and if there be any first mortgage of the Property, including such insurance as may be required by the holder of such first mortgage); compensation and all fringe benefits, worker's compensation insurance premiums and payroll taxes paid to, for or with respect to all persons engaged in the operating, maintaining or cleaning of the Building or Site; water, sewer, electric, gas, oil and telephone charges associated with the common areas of the Building and the Site (excluding heating, ventilating and air conditioning, electricity and utility charges separately chargeable to tenants for additional or special services); cost of building and cleaning supplies and equipment; cost of maintenance, cleaning and repairs (other than repairs not properly chargeable against income or reimbursed from contractors under guarantees); cost of snow removal and care of landscaping; cost of operating, maintaining and cleaning the cafeteria, fitness center and any shared conference facilities serving the

Building; payments under service contracts with independent contractors; management fees at reasonable rates for self-managed buildings consistent with the type of occupancy and the service rendered; costs of maintaining a regional property management office in connection with the operation, management and maintenance of the Building; all costs of applying and reporting for the Building or any part thereof to seek or maintain certification under the U.S. EPA's Energy Star® rating system, the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) rating system or a similar system or standard; and all other reasonable and necessary expenses paid in connection with the operation, cleaning and maintenance of the Building and the Site and properly chargeable against income. Landlord's Operating Expenses shall include depreciation for capital expenditures made by Landlord during the Lease Term (i) to reduce Landlord's Operating Expenses if Landlord shall have reasonably determined that the annual reduction in Landlord's Operating Expenses shall exceed depreciation therefor or (ii) to comply with applicable laws, rules, regulations, requirements, statutes, ordinances, by-laws and court decisions of all public authorities which are hereafter in force and first apply to the Building after the date of this Lease (the capital expenditures described in subsections (i) and (ii) being hereinafter referred to as "Permitted Capital Expenditures"), plus in the case of both (i) and (ii) an interest factor, reasonably determined by Landlord, as being the interest rate then charged for long term mortgages by institutional lenders on like properties within the locality in which the Building is located, and depreciation in the case of both (i) and (ii) shall be determined by dividing the original cost of such capital expenditure by the number of years of useful life of the capital item acquired and the useful life shall be reasonably determined by Landlord in accordance with generally accepted accounting principles and practices in effect at the time of acquisition of the capital item; provided, however, if Landlord reasonably concludes on the basis of engineering estimates that a particular capital expenditure will effect savings in other Landlord's Operating Expenses, including, without limitation, energy related costs, and that such projected savings will, on an annual basis ("Projected Annual Savings"), exceed the annual depreciation therefor, then and in such event the amount of depreciation for such capital expenditure shall be increased to an amount equal to the Projected Annual Savings; and in such circumstance, the increased depreciation (in the amount of the Projected Annual Savings) shall be made for such period of time as it would take to fully amortize the cost of the item in question, together with interest thereon at the interest rate as aforesaid in equal monthly payments, each in the amount of 1/12th of the Projected Annual Savings, with such payment to be applied first to interest and the balance to principal.

To the extent that Landlord owns other buildings in the Office Park, Landlord's Operating Expenses that relate to the common areas of the Office Park (and not exclusively to the Building or exclusively to any other buildings within the Office Park) shall be reasonably allocated by Landlord among all such buildings in the Office Park.

Notwithstanding anything contained herein to the contrary, Landlord's Operating Expenses shall exclude the following:

(1) depreciation for the Building;

(2) capital improvements to the Property other than Permitted Capital Expenditures;

(3) legal fees, space planner's fees, architect's fees, leasing and brokerage commissions, advertising and promotional expenditures and any other marketing expense incurred in connection with the leasing of space in the Building (including new leases, lease amendments, lease terminations and lease renewals);

(4) the cost of performing work or furnishing service to or for any tenant other than Tenant, at Landlord's expense, to the extent such work or service is in excess of any work or service Landlord is obligated to provide to Tenant or generally to other tenants in the Building at Landlord's expense;

(5) fees, costs and expenses incurred by Landlord in connection with or relating to claims against or disputes with tenants of the Building;

(6) legal, auditing, consulting and professional fees and other costs paid or incurred in connection with financings, refinancings or sales of any interest in Landlord or of Landlord's interest in the Building or the Site or in connection with any ground lease (including, without limitation, recording costs, mortgage recording taxes, title insurance premiums and other similar costs, but excluding those legal, auditing, consulting and professional fees and other costs incurred in connection with the normal and routine maintenance and operation of the Building and/or the Site);

(7) interest, fines or penalties for late payment or violations of Legal Requirements by Landlord, if any, except to the extent incurring such expense is either (a) a reasonable business expense under the circumstances or (b) caused by a corresponding late payment or violation of a Legal Requirement by Tenant, in which event Tenant shall be responsible for the full amount of such expense;

(8) salaries and all other compensation (including fringe benefits) of partners, officers and executives above the grade of Regional Property Manager;

(9) principal or interest on indebtedness, debt amortization or ground rent paid by Landlord in connection with any mortgages, deeds of trust or other financing encumbrances, or ground leases of the Building or the Site; and

(10) the cost of remediation and removal of "Hazardous Materials" (as that term is defined in Section 5.3 below) in the Building or on the Site required by "Hazardous Materials Laws" (as that term is defined in Section 5.3 below), provided, however, that the provisions of this clause 11 shall not preclude the inclusion of costs with respect to materials

(whether existing at the Property as of the date of this Lease or subsequently introduced to the Property) which are not as of the date of this Lease (or as of the date of introduction) deemed to be Hazardous Materials under applicable Hazardous Materials Laws but which are subsequently deemed to be Hazardous Materials under applicable Hazardous Materials Laws (it being understood and agreed that Tenant shall nonetheless be responsible under Section 5.3 of this Lease for all costs of remediation and removal of Hazardous Materials to the extent caused by Tenant Parties).

"Operating Expenses Allocable to the Premises" shall mean the same proportion of Landlord's Operating Expenses for and pertaining to the Building and the Site as the Rentable Floor Area of the Premises bears to 95% of the Total Rentable Floor Area of the Building.

"Base Operating Expenses" is hereinbefore defined in Section 1.1. Base Operating Expenses shall not include (i) market-wide cost increases due to extraordinary circumstances, including but not limited to Force Majeure (as defined in Section 6.1), conservation surcharges, security concerns, boycotts, strikes, embargoes or shortages and (ii) the costs of any Permitted Capital Expenditures.

"Base Operating Expenses Allocable to the Premises" means the same proportion of Base Operating Expenses for and pertaining to the Building and the Site as the Rentable Floor Area of the Premises bears to 95% of the Total Rentable Floor Area of the Building.

If with respect to any calendar year falling within the Term, or fraction of a calendar year falling within the Term at the beginning or end thereof, the Operating Expenses Allocable to the Premises for a full calendar year exceed Base Operating Expenses Allocable to the Premises, or for any such fraction of a calendar year exceed the corresponding fraction of Base Operating Expenses Allocable to the Premises, then Tenant shall pay to Landlord, as Additional Rent, the amount of such excess. Such payments shall be made at the times and in the manner hereinafter provided in this Section 2.6.

Not later than one hundred and twenty (120) days after the end of the first calendar year or fraction thereof ending December 31 and of each succeeding calendar year during the Term or fraction thereof at the end of the Term, Landlord shall render Tenant a statement in reasonable detail and according to usual accounting practices certified by a representative of Landlord, showing for the preceding calendar year or fraction thereof, as the case may be, Landlord's Operating Expenses and Operating Expenses Allocable to the Premises. Said statement to be rendered to Tenant shall also show for the preceding year or fraction thereof as the case may be the amounts of operating expenses already paid by Tenant as Additional Rent, and the amount of operating expenses remaining due from, or overpaid by, Tenant for the year or other period covered by the statement. Within thirty (30) days after the date of delivery of such statement, Tenant shall pay to Landlord the balance of the amounts, if any, required to be paid pursuant to the above

provisions of this Section 2.6 with respect to the preceding year or fraction thereof, or Landlord shall credit any amounts due from it to Tenant pursuant to the above provisions of this Section 2.6 against (i) monthly installments of fixed rent next thereafter coming due or (ii) any sums then due from Tenant to Landlord under this Lease (or refund such portion of the overpayment as aforesaid if the Term has ended and Tenant has no further obligation to Landlord).

In addition, Tenant shall make payments monthly on account of Tenant's share of increases in Landlord's Operating Expenses anticipated for the then current year at the time and in the fashion herein provided for the payment of Annual Fixed Rent. The amount to be paid to Landlord shall be an amount reasonably estimated annually by Landlord to be sufficient to cover, in the aggregate, a sum equal to Tenant's share of such increases in Landlord's Operating Expenses for each calendar year during the Term.

Notwithstanding the foregoing, in determining the amount of Landlord's Operating Expenses for any calendar year or portion thereof falling within the Lease Term, if less than ninety-five percent (95%) of the Total Rentable Floor Area of the Building shall have been occupied by tenants at any time during the period in question, then, at Landlord's election, those components of Landlord's Operating Expenses that vary based on occupancy for such period shall be adjusted to equal the amount such components of Landlord's Operating Expenses would have been for such period had occupancy been ninety-five percent (95%) throughout such period.

2.6.1 Subject to the provisions of this Section 2.6.1 and provided that no Event of Default of Tenant Exists, Tenant shall have the right, at Tenant's sole cost and expense, to examine the correctness of Landlord's Operating Expense statement or any item contained therein:

1. Any request for examination in respect of any "Operating Year" (as defined hereinbelow) may be made by notice from Tenant to Landlord no more than sixty (60) days after the date (the "Operating Expense Statement Date") Landlord provides Tenant a statement of the actual amount of the Landlord's Operating Expenses in respect of such Operating Year and only if Tenant shall have fully paid such amount. Such notice shall set forth in reasonable detail the matters questioned. Any examination must be completed and the results communicated to Landlord no more than one hundred eighty (180) days after the Operating Expense Statement Date. "Operating Year" shall mean a period of twelve (12) consecutive calendar months, commencing on the first day of January in each year, except that the first Lease Year of the Lease Term hereof shall be the period commencing on the Commencement Date and ending on the succeeding December 31, and the last Lease Year of the Lease Term hereof shall be the period commencing on January 1 of the calendar year in which the Lease Term ends, and ending with the date on which the Lease Term ends.

2. Tenant hereby acknowledges and agrees that Tenant's sole right to contest the Landlord's Operating Expense statement shall be as expressly set forth in this Section. Tenant hereby waives any and all other rights provided pursuant to applicable laws to inspect Landlord's books and records and/or to contest the Landlord's Operating Expense statement. If Tenant shall fail to timely exercise Tenant's right to inspect Landlord's books and records as provided in this Section, or if Tenant shall fail to timely communicate to Landlord the results of Tenant's examination as provided in this Section, with respect to any Operating Year Landlord's statement of Landlord's Operating Expenses shall be conclusive and binding on Tenant.

3. So much of Landlord's books and records pertaining to the Landlord's Operating Expenses for the specific matters questioned by Tenant for the Operating Year included in Landlord's statement shall be made available to Tenant within a reasonable time after Landlord timely receives the notice from Tenant to make such examination pursuant to this Section, either electronically or during normal business hours at the offices where Landlord keeps such books and records or at another location, as determined by Landlord.

4. Tenant shall have the right to make such examination no more than once in respect of any Operating Year in which Landlord has given Tenant a statement of the Landlord's Operating Expenses.

5. Such examination may be made only by a qualified employee of Tenant or a qualified independent certified public accounting firm approved by Landlord. No examination shall be conducted by an examiner who is to be compensated, in whole or in part, on a contingent fee basis.

6. As a condition to performing any such examination, Tenant and its examiners shall be required to execute and deliver to Landlord an agreement, in form acceptable to Landlord, agreeing to keep confidential any information which it discovers about Landlord or the Building in connection with such examination.

7. No subtenant shall have any right to conduct any such examination and no assignee may conduct any such examination with respect to any period during which the assignee was not in possession of the Premises.

8. If as a result of such examination Landlord and Tenant agree that the amounts paid by Tenant to Landlord on account of the Landlord's Operating Expenses exceeded the amounts to which Landlord was entitled hereunder, or that Tenant is entitled to a credit with respect to the Landlord's Operating Expenses, Landlord, at its option, shall refund to Tenant the amount of such excess or apply the amount of such credit, as

the case may be, within thirty (30) days after the date of such agreement. Similarly, if Landlord and Tenant agree that the amounts paid by Tenant to Landlord on account of Landlord's Operating Expenses were less than the amounts to which Landlord was entitled hereunder, then Tenant shall pay to Landlord, as additional rent hereunder, the amount of such deficiency within thirty (30) days after the date of such agreement.

2.7 Real Estate Taxes

If with respect to any full Tax Year or fraction of a Tax Year falling within the Term, Landlord's Tax Expenses Allocable to the Premises as hereinafter defined for a full Tax Year exceed Base Taxes Allocable to the Premises, or for any such fraction of a Tax Year exceed the corresponding fraction of Base Taxes Allocable to the Premises then, on or before the thirtieth (30th) day following receipt by Tenant of the certified statement referred to below in this Section 2.7, then Tenant shall pay to Landlord, as Additional Rent, the amount of such excess. Not later than ninety (90) days after Landlord's Tax Expenses Allocable to the Premises are determined for the first such Tax Year or fraction thereof and for each succeeding Tax Year or fraction thereof during the Term, Landlord shall render Tenant a statement in reasonable detail certified by a representative of Landlord showing for the preceding year or fraction thereof, as the case may be, real estate taxes on the Building and the Site and abatements and refunds of any taxes and assessments. Expenditures for legal fees and for other expenses incurred in seeking the tax refund or abatement may be charged against the tax refund or abatement before the adjustments are made for the Tax Year. Only Landlord shall have the right to institute tax reduction or other proceedings to reduce real estate taxes or the valuation of the Building and the Site. Said statement to be rendered to Tenant shall also show for the preceding Tax Year or fraction thereof as the case may be the amounts of real estate taxes already paid by Tenant as Additional Rent, and the amount of real estate taxes remaining due from, or overpaid by, Tenant for the year or other period covered by the statement. Within thirty (30) days after the date of delivery of the foregoing statement, Tenant shall pay to Landlord the balance of the amounts, if any, required to be paid pursuant to the above provisions of this Section 2.7 with respect to the preceding Tax Year or fraction thereof, or Landlord shall credit any amounts due from it to Tenant pursuant to the provisions of this Section 2.7 against (i) monthly installments of fixed rent next thereafter coming due or (ii) any sums then due from Tenant to Landlord under this Lease (or refund such portion of the over-payment as aforesaid if the Term has ended and Tenant has no further obligation to Landlord).

In addition, payments by Tenant on account of increases in real estate taxes anticipated for the then current year shall be made monthly at the time and in the fashion herein provided for the payment of fixed rent. The amount so to be paid to Landlord shall be an amount reasonably estimated by Landlord to be sufficient to provide Landlord, in the aggregate, a sum equal to Tenant's share of such increases, at least ten (10) days before the day on which such payments by Landlord would become delinquent.

To the extent that real estate taxes shall be payable to the taxing authority in installments with respect to periods less than a Tax Year, the foregoing statement shall be rendered and payments made on account of such installments.

Terms used herein are defined as follows:

(i) "Tax Year" means the twelve-month period beginning July 1 each year during the Term or if the appropriate governmental tax fiscal period shall begin on any date other than July 1, such other date.

(ii) "Landlord's Tax Expenses Allocable to the Premises" shall mean the same proportion of Landlord's Tax Expenses for and pertaining to the Building and the Site as the Rentable Floor Area of the Premises bears to 95% of the Total Rentable Floor Area of the Building.

(iii) "Landlord's Tax Expenses" with respect to any Tax Year means the aggregate real estate taxes on the Building and Site with respect to that Tax Year, reduced by any abatement receipts with respect to that Tax Year.

(iv) "Base Taxes" is hereinbefore defined in Section 1.1.

(v) "Base Taxes Allocable to the Premises" means the same proportion of Base Taxes for and pertaining to the Building and the Site as the Rentable Floor Area of the Premises bears to 95% of the Total Rentable Floor Area of the Building.

(vi) "Real estate taxes" means all taxes and special assessments of every kind and nature and user fees and other like fees assessed by any governmental authority (including, but not limited to, any tax, assessment or charge resulting from the creation of a special improvement district) on the Building or Site which the Landlord shall become obligated to pay because of or in connection with the ownership, leasing and operation of the Site, the Building and the Property (including without limitation, if applicable, the excise prescribed by Massachusetts General Laws (Ter Ed) Chapter 121A, Section 10 and amounts in excess thereof paid to the City of Waltham pursuant to agreement between Landlord and the City) and reasonable expenses of and fees for any formal or informal proceedings for negotiation or abatement of taxes (collectively, "Abatement Expenses"), which Abatement Expenses shall be excluded from Base Taxes and from real estate taxes in any subsequent year if such expenses relate to a Tax Year outside the Lease Term. The amount of special taxes or special assessments to be included shall be limited to the amount of the installment (plus any interest, other than penalty interest, payable thereon) of such special tax or special assessment required to be paid during the year in respect of which such taxes are being determined. There shall be

excluded from such taxes (a) any penalties or interest owing by reason of Landlord's failure to pay such taxes when due, and (b) all income, estate, succession, inheritance and transfer taxes; provided, however, that if at any time during the Term the present system of ad valorem taxation of real property shall be changed so that in lieu of the whole or any part of the ad valorem tax on real property there shall be assessed on Landlord a capital levy or other tax on the gross rents received with respect to the Site or Building or Property, federal, state, county, municipal, or other local income, franchise, excise or similar tax, assessment, levy or charge (distinct from any now in effect in the jurisdiction in which the Property is located) measured by or based, in whole or in part, upon any such gross rents, then any and all of such taxes, assessments, levies or charges, to the extent so measured or based, shall be deemed to be included within the term "real estate taxes" but only to the extent that the same would be payable if the Site and Buildings were the only property of Landlord.

(vii) If during the Lease Term the Tax Year is changed by applicable law to less than a full 12-month period, the Base Taxes and Base Taxes Allocable to the Premises shall each be proportionately reduced.

2.8 Tenant Electricity

If with respect to any calendar year falling within the Term or fraction of a calendar year falling within the Term at the beginning or end thereof, the cost of furnishing electricity for lights and plugs and the distribution components of the heating, ventilating and air conditioning system to the spaces occupied by tenants within the Building (but expressly excluding utility charges that are (i) measured by separate meters serving individual tenant premises within the Building or (ii) separately chargeable to tenants for additional or special services) for a full calendar year exceeds the estimated payments for tenant electricity (payable pursuant to Section 2.5 hereof), or for any such fraction of a calendar year exceeds the corresponding fraction of such estimated payments, then Tenant shall pay to Landlord, as Additional Rent, on or before the thirtieth (30th) day following receipt by Tenant of the statement referred to below in this Section 2.8, its proportionate share of the amount of such excess (i.e. the same ratio of such excess as the Rentable Floor Area of the Premises bears to the total rentable floor area of the Building from time to time under lease to tenants, other than those who are separately metered). Payments by Tenant on account of such excess shall be made monthly at the time and in the fashion herein provided for the payment of Annual Fixed Rent. If the Landlord shall reasonably determine that the cost of the electricity furnished to the Tenant at the Premises exceeds the amount being paid under Sections 2.5 and 2.8, then the Landlord may charge the Tenant for such excess and the Tenant shall promptly pay the same upon billing therefor. Also, in the event that there is located in the Premises a data center containing high density computing equipment, as defined in the U.S. EPA's Energy Star® rating system ("Energy Star"), Landlord may, at any time during the Term, require the installation in accordance with Energy Star of separate metering or check metering equipment (Tenant being responsible for the costs of any such meter or check meter and the installation and connectivity thereof). Tenant shall directly pay to the utility all electric consumption on

any meter and shall pay to Landlord, as Additional Rent, all electric consumption on any check meter within thirty (30) days after being billed thereof by Landlord, in addition to other electric charges payable by Tenant under the Lease.

Not later than ninety (90) days after the end of the first calendar year or fraction thereof ending December 31 and of each succeeding calendar year during the Term or fraction thereof at the end of the Term, Landlord shall render Tenant a reasonably detailed accounting certified by a representative of Landlord showing for the preceding calendar year, or fraction thereof, as the case may be, the costs of furnishing electricity to the Building. Said statement to be rendered to Tenant also shall show for the preceding year or fraction thereof, as the case may be, the amount already paid by Tenant on account of electricity, and the amount remaining due from, or overpaid by, Tenant for the year or other period covered by the statement.

ARTICLE III

Condition of Premises; Alterations

3.1 Preparation of Premises

The condition of the Premises upon Landlord's delivery along with any work to be performed by either Landlord or Tenant shall be as set forth in the Work Agreement attached hereto as Exhibit B and made a part hereof.

ARTICLE IV

Landlord's Covenants: Interruptions and Delays

4.1 Landlord Covenants

4.1.1 Services Furnished by Landlord

To furnish services, utilities, facilities and supplies set forth in Exhibit C equal to those customarily provided by landlords in high quality buildings in the Boston West Suburban Market subject to escalation reimbursement in accordance with Section 2.6 (except as may otherwise be expressly provided in said Exhibit C).

4.1.2 Additional Services Available to Tenant

To furnish, at Tenant's expense, reasonable additional Building operation services which are usual and customary in similar office buildings in the Boston West Suburban Market upon reasonable advance request of Tenant at reasonable and equitable rates from time to time established by Landlord. Tenant agrees to pay to Landlord, as Additional Rent, the cost of any such additional Building services requested by Tenant and for the cost of any additions, alterations, improvements or other work performed by Landlord in the Premises at the request of Tenant within thirty (30) days after being billed therefor.

4.1.3 Roof, Exterior Wall, Floor Slab and Common Facility Repairs

Except for (a) normal and reasonable wear and use, and (b) damage caused by fire and casualty and by eminent domain, and except as otherwise provided in Article VI and subject to the escalation provisions of Section 2.6, (i) to make such repairs to the roof, exterior walls, floor slabs and common areas and facilities as may be necessary to keep them in serviceable condition and (ii) to maintain the Building (exclusive of Tenant's responsibilities under this Lease) in a first class manner comparable to the maintenance of similar properties in the Boston West Suburban Market.

4.1.4 Door Signs

To provide and install, at Landlord's expense, letters or numerals on exterior doors in the Premises to identify Tenant's official name and Building address; all such letters and numerals shall be in the building standard graphics and no others shall be used or permitted on the Premises.

4.2 Interruptions and Delays in Services and Repairs, Etc.

Landlord shall not be liable to Tenant for any compensation or reduction of rent by reason of inconvenience or annoyance or for loss of business arising from the necessity of Landlord or its agents entering the Premises for any of the purposes in this Lease authorized, or for repairing the Premises or any portion of the Building however the necessity may occur. In case Landlord is prevented or delayed from making any repairs, alterations or improvements, or furnishing any services or performing any other covenant or duty to be performed on Landlord's part, by reason of any cause reasonably beyond Landlord's control, including without limitation by reason of Force Majeure (as defined in Section 6.1 hereof) Landlord shall not be liable to Tenant therefor, nor, except as expressly otherwise provided in Article VI, shall Tenant be entitled to any abatement or reduction of rent by reason thereof, or right to terminate this Lease, nor shall the same give rise to a claim in Tenant's favor that such failure constitutes actual or constructive, total or partial, eviction from the Premises.

Landlord reserves the right to stop any service or utility system, when necessary by reason of accident or emergency, or until necessary repairs have been completed; provided, however, that in each instance of stoppage, Landlord shall exercise reasonable diligence to eliminate the cause thereof. Except in case of emergency repairs, Landlord will give Tenant reasonable advance notice of any contemplated stoppage and will use reasonable efforts to avoid unnecessary inconvenience to Tenant by reason thereof.

Notwithstanding anything to the contrary in this Lease contained, if due to any of the following (collectively "Abatement Events"): (i) any repairs, alterations, replacements, or improvements made by Landlord, (ii) Landlord's failure to make any repairs, alterations,

or improvements required to be made by Landlord hereunder, or to provide any service required to be provided by Landlord hereunder, or (iii) failure of electric supply, any portion of the Premises becomes untenantable or it is impracticable for Tenant to conduct its business in the Premises, in either case, so that for the Premises Untenantability Cure Period (as hereinafter defined) the continued operation in the ordinary course of Tenant's business is materially adversely affected, then, provided that Tenant ceases to use the affected portion of the Premises during the entirety of the Premises Untenantability Cure Period by reason of such untenantability, and that such untenantability and Landlord's inability to cure such condition is not caused by the fault or neglect of Tenant or Tenant's agents, employees or contractors, Annual Fixed Rent, Tenant's share of increases in Landlord's Operating Expenses, and Tenant's share of increases in Landlord's Tax Expenses shall thereafter be abated in proportion to such untenantability and its impact on the continued operation in the ordinary course of Tenant's business until the day such condition is completely corrected (the amount of such abatement being referred to herein as "Tenant's Abatement Amount"). For the purposes hereof, the "Premises Untenantability Cure Period" shall be defined as seven (7) consecutive business days after Landlord's receipt of written notice from Tenant of the condition causing untenantability or impracticability in the Premises; provided however, that the Premises Untenantability Cure Period shall be ten (10) consecutive business days after Landlord's receipt of written notice from Tenant of such condition causing untenantability in the Premises if either the condition was caused by causes beyond Landlord's control or Landlord is unable to cure such condition as the result of causes beyond Landlord's control. The provisions of this paragraph shall not apply in the event of untenantability caused by casualty or taking, which are addressed separately in Article VI of this Lease.

ARTICLE V

Tenant's Covenants

Tenant covenants and agrees to the following during the Term and such further time as Tenant occupies any part of the Premises:

5.1 Payments

To pay when due all fixed rent and Additional Rent and all charges for utility services rendered to the Premises (except as otherwise provided in Exhibit C) and, as further Additional Rent, all charges for additional services rendered pursuant to Section 4.1.2. In the event Tenant pays any utilities for the Premises directly to the utility company or provider, Tenant shall grant Landlord access to Tenant's account with such utility company or provider so that Landlord can review the utility bills relating to the Premises.

5.2 Repair and Yield Up

Except as otherwise provided in Article VI and Section 4.1.3 to keep the Premises in good order, repair and condition, reasonable wear and tear only excepted, and all glass in windows (except glass in exterior walls unless the damage thereto is attributable to

Tenant's negligence or misuse) and doors of the Premises whole and in good condition with glass of the same type and quality as that injured or broken, damage by fire or taking under the power of eminent domain only excepted, and at the expiration or termination of this Lease peaceably to yield up the Premises all construction, work, improvements, and all alterations and additions thereto in good order, repair and condition, reasonable wear and tear only excepted, first removing all goods and effects of Tenant and, to the extent specified by Landlord by notice to Tenant given at least ten (10) days before such expiration or termination, the wiring installed by Tenant for Tenant's computer, telephone and other communication systems and equipment whether located in the Premises or in any other portion of the Building, including all risers and all alterations and additions made by Tenant and all partitions installed by Tenant, and repairing any damage caused by such removal and restoring the Premises and leaving them clean and neat. Tenant shall not permit or commit any waste, and Tenant shall be responsible for the cost of repairs which may be made necessary by reason of damage to common areas in the Building, to the Site or to the other buildings caused by Tenant, Tenant's agents, contractors, employees, sublessees, licensees, concessionaires or invitees.

5.3 Use

From the commencement of the Term to use and occupy the Premises for the Permitted Use only, and not to injure or deface the Premises, Building, the Additional Building, the Site or any other part of the Property nor to permit in the Premises or on the Site any auction sale, vending machine, or inflammable fluids or chemicals, or nuisance, or the emission from the Premises of any objectionable noise or odor, nor to permit in the Premises anything which would in any way result in the leakage of fluid or the growth of mold, and not to use or devote the Premises or any part thereof for any purpose other than the Permitted Uses, nor any use thereof which is inconsistent with the maintenance of the Building as an office building of the first class in the quality of its maintenance, use and occupancy, or which is improper, offensive, contrary to law or ordinance or liable to invalidate or increase the premiums for any insurance on the Building or its contents or liable to render necessary any alteration or addition to the Building. Further, (i) Tenant shall not, nor shall Tenant permit its employees, invitees, agents, independent contractors, contractors, assignees or subtenants to, keep, maintain, store or dispose of (into the sewage or waste disposal system or otherwise) or engage in any activity which might produce or generate any substance which is or may hereafter be classified as a hazardous material, waste or substance (collectively "Hazardous Materials"), under federal, state or local laws, rules and regulations, including, without limitation, 42 U.S.C. Section 6901 et seq., 42 U.S.C. Section 9601 et seq., 42 U.S.C. Section 2601 et seq., 49 U.S.C. Section 1802 et seq. and Massachusetts General Laws, Chapter 21E and the rules and regulations promulgated under any of the foregoing, as such laws, rules and regulations may be amended from time to time (collectively "Hazardous Materials Laws"); provided, however, that Tenant shall have the right to store and use reasonable quantities of office and cleaning supplies used in the ordinary course of the use and occupancy of the Premises for the permitted use that are kept, maintained, stored and disposed of in accordance with all applicable Hazardous Materials Laws, (ii) Tenant shall immediately notify Landlord of any incident in, on or about the Premises, the Building or the Site that

would require the filing of a notice under any Hazardous Materials Laws, (iii) Tenant shall comply and shall cause its employees, invitees, agents, independent contractors, contractors, assignees and subtenants to comply with each of the foregoing and (iv) Landlord shall have the right to make such inspections (including testing) as Landlord shall elect from time to time to determine that Tenant is complying with the foregoing.

5.4 Obstructions; Items Visible From Exterior; Rules and Regulations

Not to obstruct in any manner any portion of the Building not hereby leased or any portion thereof or of the other buildings or of the Site used by Tenant in common with others; not without prior consent of Landlord to permit the painting or placing of any signs, curtains, blinds, shades, awnings, aerials or flagpoles, or the like, visible from outside the Premises; and to comply with all reasonable rules and regulations or the requirements of any customer handbook currently in existence or hereafter implemented by Landlord which are of uniform application to all occupants of the Building taking into account that differing circumstances may justify different treatment, of which Tenant bas been given notice, for the care and use of the Building and Site and their facilities and approaches; Landlord shall not be liable to Tenant for the failure of other occupants of the Buildings to confirm to such rules and regulations. If and to the extent there is any conflict between the provisions of this Lease and any rules and regulations or customer handbook for the Building, the provisions of this Lease shall control.

5.5 Safety Appliances

To keep the Premises equipped with all safety appliances required by any public authority because of any use made by Tenant other than normal office use, and to procure all licenses and permits so required because of such use and, if requested by Landlord, to do any work so required because of such use, it being understood that the foregoing provisions shall not be construed to broaden in any way Tenant’s Permitted Use.

5.6 Assignment; Sublease

Except as otherwise expressly provided herein, Tenant covenants and agrees that it shall not assign, mortgage, pledge, hypothecate or otherwise transfer this Lease and/or Tenant’s interest in this Lease or sublet (which term, without limitation, shall include granting of concessions, licenses or the like) the whole or any part of the Premises. If and so long as Tenant is a corporation with fewer than five hundred (500) shareholders or a limited liability company or a partnership, an assignment, within the meaning of this Section 5.6, shall be deemed to include one or more sales or transfers of stock or membership or partnership interests, by operation of law or otherwise, or the issuance of new stock or membership or partnership interests, by which an aggregate of more than fifty percent (50%) of Tenant’s stock or membership or partnership interests shall be vested in a patty or patties who are not stockholders or members or partners as of the date hereof (a “Majority Interest Transfer”). For the purpose of this Section 5.6, ownership of stock or membership or partnership interests shall be determined in accordance with the principles set forth in Section 544 of the Internal Revenue Code of 1986, as amended from time to time, or the corresponding provisions of any subsequent law. In addition, the

following shall be deemed an assignment within the meaning of this Section 5.6: (a) the merger or consolidation of Tenant into or with any other entity, or the sale of all or substantially all of its assets, and (b) the establishment by the Tenant or a permitted successor or assignee of one or more series of series of (1) members, managers, limited liability company interests or assets, which may have separate rights, powers or duties with respect to specified property or obligations of the Tenant (or such successor or assignee) or profits or losses associated with specified property or obligations of the Tenant (or such successor or assignee), pursuant to §18-215 of the Delaware Limited Liability Company Act, as amended, or similar laws of other states or otherwise, or (2) limited partners, general partners, partnership interests or assets, which may have separate rights, powers or duties with respect to specified property or obligations of the Tenant (or such successor or assignee) or profits or losses associated with specified property or obligations of the Tenant (or such successor or assignee) pursuant to §17-218 of the Delaware Revised Uniform Limited Partnership Act, as amended, or similar laws of other states or otherwise (a "Series Reorganization"). Any assignment, mortgage, pledge, hypothecation, transfer or subletting not expressly permitted in or consented to by Landlord under this Section 5.6 shall, at Landlord's election, be void; shall be of no force and effect; and shall confer no rights on or in favor of third parties. In addition, Landlord shall be entitled to seek specific performance of or other equitable relief with respect to the provisions hereof. The limitations of this Section 5.6 shall be deemed to apply to any guarantor(s) of this Lease.

5.6.1 Notwithstanding the provisions of Section 5.6 above, in the event Tenant desires to assign this Lease or to sublet the whole (but not part) of the Premises (no partial subletting being permitted other than as provided in Section 5.6.4 below), Tenant shall give Landlord notice (the "Proposed Transfer Notice") of any proposed sublease or assignment, and said notice shall specify the provisions of the proposed assignment or subletting, including (a) the name and address of the proposed assignee or subtenant, (b) in the case of a proposed assignment or subletting pursuant to Section 5.6.3 below, such information as to the proposed assignee's or proposed subtenant's net worth and financial capability and standing as may reasonably be required for Landlord to make the determination referred to in said Section 5.6.3 (provided, however, that Landlord shall hold such information confidential having the right to release same to its officers, accountants, attorneys and mortgage lenders on a confidential basis), (c) all of the terms and provisions upon which the proposed assignment or subletting is to be made, (d) in the case of a proposed assignment or subletting pursuant to Section 5.6.3 below, all other information necessary to make the determination referred to in said Section 5.6.3 and (e) in the case of a proposed assignment or subletting pursuant to Section 5.6.4 below, such information as may be reasonably required by Landlord to determine that such proposed assignment or subletting complies with the requirements of said Section 5.6.4.

5.6.2 In the event that Tenant shall propose to assign its interest in the Lease or to sublet the whole (but not part) of the Premises (no partial subletting being permitted other than as provided in Section 5.6.4 below) for all or substantially all

of the remainder of the Lease Term, Landlord shall have the right at its sole option, to be exercised within thirty (30) days after receipt of Tenant's Proposed Transfer Notice (the "Acceptance Period"), to terminate this Lease as of a date specified in a notice to Tenant, which date shall not be earlier than sixty (60) days nor later than one hundred and twenty (120) days after Landlord's notice to Tenant; provided, however, that upon the termination date as set forth in Landlord's notice, all obligations relating to the period after such termination date (but not those relating to the period before such termination date) shall cease and promptly upon being billed therefor by Landlord, Tenant shall make final payment of all Annual Fixed Rent and Additional Rent due from Tenant through the termination date. In the event that Landlord shall not exercise its termination rights as aforesaid, or shall fail to give any or timely notice pursuant to this Section the provisions of Sections 5.6.3, 5.6.5 and 5.6.6 shall be applicable. This Section 5.6.2 shall not be applicable to an assignment or sublease pursuant to Section 5.6.4.

5.6.3 Notwithstanding the provisions of Section 5.6 above, but subject to the provisions of this Section 5.6.3 and the provisions of Sections 5.6.5 and 5.6.6 below, in the event that Landlord shall not have exercised the termination right as set forth in Section 5.6.2, or shall have failed to give any or timely notice under Section 5.6.2, then for a period of ninety (90) days (i) after the receipt of Landlord's notice stating that Landlord does not elect the termination right, or (ii) after the expiration of the Acceptance Period, in the event Landlord shall not give any or timely notice under Section 5.6.2 as the case may be, Tenant shall have the right to assign this Lease or sublet the whole (but not part) of the Premises in accordance with the Proposed Transfer Notice provided that, in each instance, Tenant first obtains the express prior written consent of Landlord, which consent shall not be unreasonably withheld or delayed.

Without limiting the foregoing standard, Landlord shall not be deemed to be unreasonably withholding its consent to such a proposed assignment or subleasing if:

(a) the proposed assignee or subtenant is an occupant of the Building or elsewhere within the Office Park (and Landlord has available space in the Building or elsewhere in the Office Park) or is in active negotiation with Landlord or an affiliate of Landlord for premises in the Building or elsewhere within the Office Park or is not of a character consistent with the operation of a first class office building (by way of example Landlord shall not be deemed to be unreasonably withholding its consent to an assignment or subleasing to any governmental or quasi-governmental agency), or

(b) the proposed assignee or subtenant is not of good character and reputation, or

(c) the proposed assignee or subtenant does not possess adequate financial capability to perform the Tenant obligations as and when due or required, or

(d) the assignee or subtenant proposes to use the Premises (or part thereof) for a purpose other than the purpose for which the Premises may be used as stated in Section 1.1 hereof, or

(e) the character of the business to be conducted or the proposed use of the Premises by the proposed subtenant or assignee shall (i) be likely to increase Landlord's Operating Expenses beyond that which Landlord now incurs for use by Tenant; (ii) be likely to increase the burden on elevators or other Building systems or equipment over the burden generated by normal and customary office usage; or (iii) violate or be likely to violate any provisions or restrictions contained herein relating to the use or occupancy of the Premises, or

(f) there shall be existing an Event of Default (defined in Section 7.1) or there have been three (3) or more Event of Default occurrences during the Term, or

(g) Intentionally Omitted, or

(h) any part of the rent payable under the proposed assignment or sublease shall be based in whole or in part on the income or profits derived from the Premises or if any proposed assignment or sublease shall potentially have any adverse effect on the real estate investment trust qualification requirements applicable to Landlord and its affiliates, or

(i) the holder of any mortgage or ground lease on property which includes the Premises does not approve of the proposed assignment or sublease, or

(j) due to the identity or business of a proposed assignee or subtenant, such approval would cause Landlord to be in violation of any covenant or restriction contained in another lease or other agreement affecting space in the Building or elsewhere in the Property.

If Landlord shall consent to the proposed assignment or subletting, as the case may be, then, in such event, Tenant may thereafter sublease (the whole but not part of the Premises) or assign pursuant to Tenant's notice, as given hereunder; provided, however, that if such assignment or sublease shall not be executed and delivered to Landlord within ninety (90) days after the date of Landlord's consent, the consent shall be deemed null and void and the provisions of Section 5.6.1 shall be applicable.

Tenant shall not advertise, whether through a broker, agent, representative or otherwise, the proposed rent and other charges to be payable by the proposed assignee or subtenant.

5.6.4 Notwithstanding the provisions of Sections 5.6, 5.6.2, 5.6.3 and 5.6.5, but subject to the provisions of Sections 5.6.l and 5.6.6, Tenant shall have the right:

(x) to assign this Lease or to sublet the Premises (in whole or in part) to any other entity (the "Successor Entity") (i) which controls or is controlled by Tenant or Tenant's parent corporation or which is under common control with Tenant, provided that such transfer or transaction is for a legitimate business purpose of Tenant other than a transfer of Tenant's interest in this Lease, or (ii) which purchases all or substantially all of the assets of Tenant, or (iii) which purchases all or substantially all of the stock of (or other ownership or membership interests in) Tenant or (iv) which merges or combines with Tenant, or

(y) to effect a Series Reorganization, or

(z) to engage in a Majority Interest Transfer,

provided that in any of the foregoing events described in clauses (y) and (z) above, the transaction is for a legitimate business purpose of Tenant other than the limitation or segregation of the liabilities of Tenant, and provided further that in any of the foregoing events described in in (x), (y) and (z) the entity to which this Lease is so assigned or which so sublets all of the Premises or the series established by the Series Reorganization has a credit worthiness (e.g. net assets on a pro forma basis using generally accepted accounting principles consistently applied and using the most recent financial statements) which is the same or better than the Tenant as of the date of this Lease, or with respect to a partial sublease has the financial capability sufficient in Landlord's reasonable judgement to perform tenants obligations under this Lease with respect to the subleased premises (the foregoing transferees referred to, individually or collectively, as a "Permitted Transferee"). Except in cases of statutory merger or a Series Reorganization, in which case the surviving entity in the merger or the series to which this Lease has been designated shall be liable as the Tenant under this Lease, Tenant shall continue to remain fully liable under this Lease, on a joint and several basis with the Permitted Transferee. If any parent, affiliate or subsidiary of Tenant to which this Lease is assigned or the Premises sublet (in whole or in part) shall cease to be such a parent, affiliate or subsidiary, such cessation shall be considered an assignment or subletting requiring Landlord's consent.

Without limiting the generality of the foregoing, Landlord acknowledges that Tenant's parent, Eloxx Pharmaceuticals Ltd, an Israeli company ("Parent"), has

entered into a definitive agreement whereby Parent through a merger transaction (the "Merger") will become a subsidiary of Sevion Therapeutics Inc., a Delaware company (the "Upper Tier Parent"). Immediately following the Merger, the Upper Tier Parent will change its name from Sevion Therapeutics Inc. to Eloxx Pharmaceuticals, Inc., and Tenant will change its name from Eloxx Pharmaceuticals, Inc. to Eloxx Pharmaceuticals U.S. Sub, Inc. (the "Name Change," together with the Merger, the "Merger Transaction"). Landlord acknowledges that the Merger Transaction will not require Landlord's consent nor be subject to the provisions of Sections 5.6.2, 5.6.3 and 5.6.5 of this Lease; provided, however, that promptly following the Name Change, Tenant shall deliver to Landlord an Acknowledgement of Name Change in the form of Exhibit I attached hereto.

5.6.5 In the case of any assignment or subleasing as to which Landlord may consent (other than an assignment or subletting permitted under Section 5.6.4 above) such consent shall be upon the express and further condition, covenant and agreement, and Tenant hereby covenants and agrees that, in addition to the Annual Fixed Rent, Additional Rent and other charges to be paid pursuant to this Lease, fifty percent (50%) of the "Assignment/Sublease Profits" (hereinafter defined), if any, shall be paid to Landlord. The "Assignment/Sublease Profits" shall be the excess, if any, of (a) the "Assignment/Sublease Net Revenues" as hereinafter defined over (b) the Annual Fixed Rent and Additional Rent and other charges provided in this Lease (provided, however, that for the purpose of calculating the Assignment/Sublease Profits in the case of a sublease, appropriate prorations in the applicable Annual Fixed Rent, Additional Rent and other charges under this Lease shall be made based on the percentage of the Premises subleased and on the terms of the sublease). The "Assignment/Sublease Net Revenues" shall be the fixed rent, Additional Rent and all other charges and sums payable either initially or over the term of the sublease or assignment plus all other profits and increases to be derived by Tenant as a result of such subletting or assignment, less the reasonable costs of Tenant incurred in such subleasing or assignment (the definition of which shall be limited to brokerage commissions and alteration expenses and allowances, and legal fees in each case actually paid), as set forth in a statement certified by an appropriate officer of Tenant and delivered to Landlord within thirty (30) days of the full execution of the sublease or assignment document, amortized over the term of the sublease or assignment.

All payments of the Assignment/Sublease Profits due Landlord shall be made within ten (10) days of receipt of same by Tenant.

5.6.6 (A) It shall be a condition of the validity of any assignment or subletting consented to under Section 5.6.3 above, or any assignment or subletting of right under Section 5.6.4 above, that both Tenant and the assignee or sublessee enter into a separate written instrument directly with Landlord in a form and containing terms and provisions reasonably required by Landlord, including, without limitation, the agreement of the assignee or sublessee to be bound directly to

Landlord for all the obligations of the Tenant under this Lease (including any amendments or extensions thereof), including, without limitation (but in the case of a partial subletting pursuant to Section 5.6.4 such subtenant shall agree to be so bound only with respect to the subleased premises), the obligation (a) to pay the rent and other amounts provided for under this Lease (but in the case of a partial subletting pursuant to Section 5.6.4, the subtenant's liability for such payments shall be limited to the amounts payable therefor by such subtenant under the sublease), (b) to comply with the provisions of Sections 5.6 through 5.6.6 hereof and (c) to indemnify the "Landlord Parties" (as defined in Section 8.13) as provided in Section 8.1 hereof. Such assignment or subletting shall not relieve the Tenant named herein of any of the obligations of the Tenant hereunder and Tenant shall remain fully and primarily liable therefor and the liability of Tenant and such assignee (or subtenant, as the case may be) shall be joint and several. Further, and notwithstanding the foregoing, the provisions hereof shall not constitute a recognition of the sublease or the subtenant thereunder, as the case may be, and at Landlord's option, upon the termination or expiration of the Lease (whether such termination is based upon a cause beyond Tenant's control, a default of Tenant, the agreement of Tenant and Landlord or any other reason), the sublease shall be terminated.

(B) As Additional Rent, Tenant shall pay to Landlord as a fee for Landlord's review of any proposed assignment or sublease requested by Tenant and the preparation of any associated documentation in connection therewith, within thirty (30) days after receipt of an invoice from Landlord, an amount equal to the sum of (i) $1,000.00 and/or (ii) reasonable out of pocket legal fees or other expenses incurred by Landlord in connection with such request.

(C) If this Lease be assigned, or if the Premises or any part thereof be sublet or occupied by anyone other than Tenant, Landlord may upon prior notice to Tenant, at any time and from time to time, collect rent and other charges from the assignee, sublessee or occupant and apply the net amount collected to the rent and other charges herein reserved, but no such assignment, subletting, occupancy or collection shall be deemed a waiver of this covenant, or a waiver of the provisions of Sections 5.6 through 5.6.6 hereof, or the acceptance of the assignee, sublessee or occupant as a tenant or a release of Tenant from the further performance by Tenant of covenants on the part of Tenant herein contained, the Tenant herein named to remain primarily liable under this Lease.

(D) The consent by Landlord to an assignment or subletting under Section 5.6.3 above, or the consummation of an assignment or subletting of right under Section 5.6.4 above, shall in no way be construed to relieve Tenant from obtaining the express consent in writing of Landlord to any further assignment or subletting.

(E) On or after the occurrence of an "Event of Default" (defined in Section 7.1), Landlord shall be entitled to one hundred percent (100%) of any Assignment/Sublease Profits.

(F) Without limiting Tenant's obligations under Section 5.12, Tenant shall be responsible, at Tenant's sole cost and expense, for performing all work necessary to comply with Legal Requirements and Insurance Requirements in connection with any assignment or subletting hereunder including, without limitation, any work in connection with such assignment or subletting.

5.7 Right of Entry

To permit Landlord and its agents to examine the Premises at reasonable times and upon reasonable prior notice (except in the event of an emergency when no prior notice is required) and, if Landlord shall so elect, to make any alterations, additions or improvements contemplated by this Lease or any repairs or replacements Landlord may deem necessary in accordance with the terms and provisions of this Lease; to remove, at Tenant's expense, any alterations, addition, signs, curtains, blinds, shades, awnings, aerials, flagpoles, or the like not consented to in writing; and to show the Premises to prospective tenants during the eleven (11) months preceding expiration of the Term and to prospective purchasers and mortgagees at all reasonable times.

In the event Tenant sends a notice alleging the existence of a dangerous or unsafe condition, any requirements for prior notice or limitations on Landlord's access to the Premises contained in this Lease shall be deemed waived by Tenant so that Landlord may immediately exercise its rights under this Section 5.7 and Section 9.16 in such manner as Landlord deems necessary in its sole discretion to remedy such dangerous or unsafe condition.

5.8 Floor Load; Prevention of Vibration and Noise

Not to place a load upon the Premises exceeding an average rate of 70 pounds of live load per square foot of floor area (partitions shall be considered as part of the live load); and not to move any safe, vault or other heavy equipment in, about or out of the Premises except in such manner and at such time as Landlord shall in each instance authorize; Tenant's business machines and mechanical equipment which cause vibration or noise that may be transmitted to the Building structure or to any other space in the Building shall be so installed, maintained and used by Tenant so as to eliminate such vibration or noise.

5.9 Personal Property Taxes

To pay promptly when due all taxes which may be imposed upon "Tenant's Property" (as defined in Section 8.4 hereof) in the Premises to whomever assessed.

5.10 Compliance with Laws

To comply with all applicable Legal Requirements now or hereafter in force regarding the operation of Tenant's business and the use, condition, configuration and occupancy of the Premises. In addition, Tenant shall, at its sole cost and expense, promptly comply with any Legal Requirements that relate to the Base Building (as hereinafter defined), but only to the extent such obligations are triggered by Tenant's particular manner of use of the Premises, other than for general office use, or alterations, additions or improvements in the Premises performed or requested by Tenant. "Base Building" shall include the structural portions of the Building, the public restrooms and the Building mechanical, electrical and plumbing systems and equipment located in the internal core of the Building on the floor or floors on which the Premises are located. Tenant shall promptly pay all fines, penalties and damages that may arise out of or be imposed because of its failure to comply with the provisions of this Section 5.10.

5.11 Payment of Litigation Expenses

As Additional Rent, to pay all reasonable costs, counsel and other fees incurred by Landlord in connection with the successful enforcement by Landlord of any obligations of Tenant under this Lease or in connection with any bankruptcy case involving Tenant or any guarantor.

5.12 Alterations

Tenant shall not make alterations and additions to Tenant's Premises except in accordance with plans and specifications therefor first approved by Landlord, which approval shall not be unreasonably withheld. However, Landlord's determination of matters relating to aesthetic issues relating to alterations, additions or improvements which are visible outside the Premises (including, without limitation, from common lobbies within the Building) shall be in Landlord's sole discretion. Without limiting such standard Landlord shall not be deemed unreasonable for withholding approval of any alterations or additions (including, without limitation, any alterations or additions to be performed by Tenant under Article III) which (a) in Landlord's opinion might adversely affect any structural or exterior element of the Building, any area or element outside of the Premises, or any facility or base building mechanical system serving any area of the Building outside of the Premises, or (b) involve or affect the exterior design, size, height, or other exterior dimensions of the Building or (c) will require unusual expense to readapt the Premises to normal office use on Lease termination or expiration or increase the cost of construction or of insurance or taxes on the Building or of the services called for by Section 4.1 unless Tenant first gives assurance acceptable to Landlord for payment of such increased cost and that such readaptation will be made prior to such termination or expiration without expense to Landlord, (d) enlarge the Rentable Floor Area of the Premises, or (e) are inconsistent, in Landlord's judgment, with alterations satisfying Landlord's standards for new alterations in the Building. Landlord's review and approval of any such plans and specifications and consent to perform work described therein shall not be deemed an agreement by Landlord that such plans, specifications and work conform with applicable Legal Requirements and requirements of insurers of the

Building and the other requirements of this Lease with respect to Tenant's insurance obligations (herein called "Insurance Requirements") nor deemed a waiver of Tenant's obligations under this Lease with respect to applicable Legal Requirements and Insurance Requirements nor impose any liability or obligation upon Landlord with respect to the completeness, design sufficiency or compliance of such plans, specifications and work with applicable Legal Requirements and Insurance Requirements nor give right to any other parties. Further, Tenant acknowledges that Tenant is acting for its own benefit and account, and that Tenant shall not be acting as Landlord's agent in performing any work in the Premises, accordingly, no contractor, subcontractor or supplier shall have a right to lien Landlord's interest in the Property in connection with any such work. Within thirty (30) days after receipt of an invoice from Landlord, Tenant shall pay to Landlord as a fee for Landlord's review of any work or plans (excluding any review respecting initial improvements performed pursuant to Article III hereof for which a fee has previously been paid but including any review of plans or work relating to any assignment or subletting), as Additional Rent, an amount equal to the sum of: (i) $150.00 per hour for time spent by Landlord's in-house personnel, plus (ii) third party expenses incurred by Landlord to review Tenant's plans and Tenant's work. All alterations and additions shall be part of the Building unless and until Landlord shall specify the same for removal pursuant to Section 5.2. All of Tenant's alterations and additions and installation of furnishings shall be coordinated with any work being performed by Landlord and in such manner as to maintain harmonious labor relations and not to damage the Buildings or Site or interfere with construction or operation of the Buildings and other improvements to the Site and, except for installation of furnishings, shall be performed by Landlord's general contractor or by contractors or workers first approved by Landlord. Except for work by Landlord's general contractor, Tenant, before its work is started, shall secure all licenses and permits necessary therefor; deliver to Landlord a statement of the names of all its contractors and subcontractors and the estimated cost of all labor and material to be furnished by them and security satisfactory to Landlord protecting Landlord against liens arising out of the furnishing of such labor and material; and cause each contractor to carry insurance in accordance with Section 8.14 herein, and to deliver to Landlord certificates of all such insurance. Tenant shall also prepare and submit to Landlord a set of as-built plans, in both print and electronic forms, showing such work performed by Tenant to the Premises promptly after any such alterations, improvements or installations are substantially complete and promptly after any wiring or cabling for Tenant's computer, telephone and other communications systems is installed by Tenant or Tenant's contractor. Without limiting any of Tenant's obligations hereunder, Tenant shall be responsible, as Additional Rent, for the costs of any alterations, additions or improvements in or to the Building that are required in order to comply with Legal Requirements as a result of any work performed by Tenant. Landlord shall have the right to provide such rules and regulations relative to the performance of any alterations, additions, improvements and installations by Tenant hereunder and Tenant shall abide by all such reasonable rules and regulations and shall cause all of its contractors to so abide including, without limitation, payment for the costs of using Building services. Tenant agrees to pay promptly when due the entire cost of any work done on the Premises by Tenant, its agents, employees, or independent contractors, and not to cause or permit any liens for labor or materials performed or furnished in connection therewith to attach to the

Premises or the Buildings or the Site and immediately to discharge any such liens which may so attach. Tenant shall pay, as Additional Rent, 100% of any real estate taxes on the Property which shall, at any time after commencement of the Term, result from any alteration, addition or improvement to the Premises made by Tenant. Tenant acknowledges and agrees that Landlord shall be the owner of any additions, alterations and improvements in the Premises or the Building to the extent paid for by Landlord.

5.13 Vendors

Any vendors engaged by Tenant to perform services in or to the Premises including, without limitation, janitorial contractors and moving contractors shall be coordinated with any work being performed by or for Landlord and in such manner as to maintain harmonious labor relations and not to damage the Building or the Property or interfere with Building construction or operation and shall be performed by vendors first approved by Landlord.

5.14 OFAC

As an inducement to Landlord to enter into this Lease, Tenant hereby represents and warrants that: (i) Tenant is not, nor is it owned or controlled directly or indirectly by, any person, group, entity or nation named on the Specially Designated Nationals and Blocked Persons List maintained by the Office of Foreign Assets Control of the United States Treasury ("OFAC") (any such person, group, entity or nation being hereinafter referred to as a "Prohibited Person"); (ii) Tenant is not (nor is it owned, controlled, directly or indirectly, by any person, group, entity or nation which is) acting directly or indirectly for or on behalf of any Prohibited Person; and (iii) Tenant (and any person, group, or entity which Tenant controls, directly or indirectly) has not conducted nor will conduct business nor has engaged nor will engage in any transaction or dealing with any Prohibited Person that either may cause or causes Landlord to be in violation of any OFAC rule or regulation, including without limitation any assignment of this Lease or any subletting of all or any portion of the Premises. In connection with the foregoing, it is expressly understood and agreed that (x) any breach by Tenant of the foregoing representations and warranties shall be deemed an immediate Event of Default by Tenant under Section 7.1 of this Lease (without the benefit of notice or grace) and shall be covered by the indemnity provisions of Section 8.1 below, and (y) the representations and warranties contained in this subsection shall be continuing in nature and shall survive the expiration or earlier termination of this Lease.

ARTICLE VI

Casualty and Taking

6.1 Damage Resulting from Casualty

In case the Building or the Site are damaged by fire or casualty and such fire or casualty damage cannot, in the ordinary course, reasonably be expected to be repaired within one

hundred twenty (120) days from the time that repair work would commence, Landlord may, at its election, terminate this Lease by notice given to Tenant within sixty (60) days after the date of such fire or other casualty, specifying the effective date of termination. The effective date of termination specified by Landlord shall not be less than thirty (30) days nor more than forty-five (45) days after the date of notice of such termination.

In case during the last eighteen (18) months of the Lease Term, the Premises are damaged by fire or casualty and such fire or casualty damage cannot, in the ordinary course, reasonably be expected to be repaired within one hundred fifty (150) days (and/or as to special work or work which requires long lead time then if such work cannot reasonably be expected to be repaired within such additional time as is reasonable under the circumstances given the nature of the work) from the time that repair work would commence , Tenant may, at its election, terminate this Lease by notice given to Landlord within sixty (60) days after the date of such fire or other casualty, specifying the effective date of termination. The effective date of termination specified by Tenant shall be not less than thirty (30) days nor more than forty-five (45) days after the date of notice of such termination.

Unless terminated pursuant to the foregoing provisions, this Lease shall remain in full force and effect following any such damage subject, however, to the following provisions.

If the Building or the Site or any part thereof are damaged by fire or other casualty and this Lease is not so terminated, or Landlord or Tenant have no right to terminate this Lease, and in any such case the holder of any mortgage which includes the Building as a part of the mortgaged premises or any ground lessor of any ground lease which includes the Site as part of the demised premises allows the net insurance proceeds to be applied to the restoration of the Building (and/or the Site), Landlord promptly after such damage and the determination of the net amount of insurance proceeds available shall use due diligence to restore the Premises and the Building in the event of damage thereto (excluding “Tenant’s Property” (as defined in Section 8.4 hereof), except as expressly provided in the immediately following paragraph of this Section 6.1) into proper condition for use and occupation and a just proportion of the Annual Fixed Rent, Tenant’s share of Operating Costs and Tenant’s share of real estate taxes according to the nature and extent of the injury to the Premises shall be abated until the Premises shall have been put by Landlord substantially into such condition except for punch list items. Notwithstanding anything herein contained to the contrary, Landlord shall not be obligated to expend for such repair and restoration any amount in excess of the net insurance proceeds (plus any amount that Landlord elects to self-insure pursuant to Section 8.12).

Notwithstanding the foregoing, if Landlord is proceeding with the restoration of the Building and the Premises in accordance with the previous paragraph, Landlord shall also restore any alterations, additions or improvements within the Premises that are part of Tenant’s Property (x) which have previously been approved by Landlord in accordance with the terms and provisions of this Lease or which are existing in the Premises as of the

date of this Lease, and (y) with respect to which Tenant has carried "all risk" insurance covering the loss or damage in accordance with Section 8.4 below and pays the proceeds of such insurance (or an amount equivalent thereto) to Landlord within five (5) business days following Landlord's written request); provided, however, that in no event shall Landlord be required to fund any insufficiency in the insurance proceeds (or equivalent amount) provided by Tenant with respect to such loss or damage (or to fund any of the costs of restoration in the absence of any payment by Tenant).

Unless such restoration is completed within two hundred seventy (250) days from the date of the casualty or taking, such period to be subject, however, to extension where the delay in completion of such work is due to Force Majeure, as defined hereinbelow (but in no event beyond fourteen (14) months from the date of the casualty or taking), Tenant, as its sole and exclusive remedy, shall have the right to terminate this Lease at any time after the expiration of such two hundred seventy (250) day (as extended) period until the restoration is substantially completed, such termination to take effect as of the thirtieth (30th) day after the date of receipt by Landlord of Tenant's notice, with the same force and effect as if such date were the date originally established as the expiration date hereof unless, within thirty (30) days after Landlord's receipt of Tenant's notice, such restoration is substantially completed, in which case Tenant's notice of termination shall be of no force and effect and this Lease and the Lease Term shall continue in full force and effect. When used herein, "Force Majeure" shall mean any prevention, delay or stoppage due to governmental regulation, strikes, lockouts, acts of God, acts of war, terrorists acts, civil commotions, unusual scarcity of or inability to obtain labor or materials, labor difficulties, fire or other casualty (including the time necessary to repair any damage caused thereby) or other causes reasonably beyond Landlord's control (excluding Landlord's financial difficulties) or attributable to Tenant's action or inaction.

6.2 Uninsured Casualty

Notwithstanding anything to the contrary contained in this Lease, if the Building or the Premises shall be substantially damaged by fire or casualty as the result of a risk not covered by the forms of casualty insurance at the time maintained by Landlord (or would have been maintained by Landlord had it not elected to self-insure pursuant to Section 8.12) and such fire or casualty damage cannot, in the ordinary course, reasonably be expected to be repaired within ninety (90) days from the time that repair work would commence, Landlord may, at its election, terminate the Term of this Lease by notice to the Tenant given within sixty (60) days after such loss. If Landlord shall give such notice, then this Lease shall terminate as of the date of such notice with the same force and effect as if such date were the date originally established as the expiration date hereof.

6.3 Rights of Termination for Taking

If the entire Building, or such portion of the Premises or such portion of the common areas of the Office Park necessary to provide access to the Premises as to render the balance (if reconstructed to the maximum extent practicable in the circumstances) unsuitable for Tenant's purposes, shall be taken by condemnation or right of eminent domain, Landlord or Tenant shall have the right to terminate this Lease by notice to the

other of its desire to do so, provided that such notice is given not later than thirty (30) days after Tenant has been deprived of possession. If either party shall give such notice, then this Lease shall terminate as of the date of such notice with the same force and effect as if such date were the date originally established as the expiration date hereof.

Further, if so much of the Building shall be so taken that continued operation of the Building would be uneconomic as a result of the taking, Landlord shall have the right to terminate this Lease by giving notice to Tenant of Landlord's desire to do so not later than thirty (30) days after Tenant has been deprived of possession of the Premises (or such portion thereof as may be taken). If Landlord shall give such notice, then this Lease shall terminate as of the date of such notice with the same force and effect as if such date were the date originally established as the expiration date hereof.

Should any part of the Premises be so taken or condemned during the Lease Term hereof, and should this Lease not be terminated in accordance with the foregoing provisions, and the holder of any mortgage which includes the Premises as part of the mortgaged premises or any ground lessor of any ground lease which includes the Site as part of the demised premises allows the net condemnation proceeds to be applied to the restoration of the Building, Landlord agrees that after the determination of the net amount of condemnation proceeds available to Landlord, Landlord shall use due diligence to put what may remain of the Premises into proper condition for use and occupation as nearly like the condition of the Premises prior to such taking as shall be practicable (excluding Tenant's Property). Notwithstanding the foregoing, Landlord shall not be obligated to expend for such repair and restoration any amount in excess of the net condemnation proceeds made available to it.

If the Premises shall be affected by any exercise of the power of eminent domain, then the Annual Fixed Rent, Tenant's share of operating costs and Tenant's share of real estate taxes shall be justly and equitably abated and reduced according to the nature and extent of the loss of use thereof suffered by Tenant; and in case of a taking which permanently reduces the Rentable Floor Area of the Premises, a just proportion of the Annual Fixed Rent, Tenant's share of operating costs and Tenant's share of real estate taxes shall be abated for the remainder of the Lease Term.

6.4 Award

Landlord shall have and hereby reserves to itself any and all rights to receive awards made for damages to the Premises, the Buildings, the Property and the Site and the leasehold hereby created, or any one or more of them, accruing by reason of exercise of eminent domain or by reason of anything lawfully done in pursuance of public or other authority. Tenant hereby grants, releases and assigns to Landlord all Tenant's rights to such awards, and covenants to execute and deliver such further assignments and assurances thereof as Landlord may from time to time request, and if Tenant shall fail to execute and deliver the same within fifteen (15) days after notice from Landlord, Tenant hereby covenants and agrees that Landlord shall be irrevocably designated and appointed as its attorney-in-fact to execute and deliver in Tenant's name and behalf all such further assignments thereof which conform with the provisions hereof.

Nothing contained herein shall be construed to prevent Tenant from prosecuting in any condemnation proceeding a claim for the value of any improvements or alterations performed at Tenant's expense and any of Tenant's usual trade fixtures installed in the Premises by Tenant at Tenant's expense and for relocation and moving expenses, provided that such action and any resulting award shall not affect or diminish the amount of compensation otherwise recoverable by Landlord from the taking authority.

ARTICLE VII

Default

7.1 Tenant's Default

(a) If at any time subsequent to the date of this Lease any one or more of the following events (herein sometimes called an "Event of Default") shall occur:

(i) Tenant shall fail to pay any installment of the Annual Fixed Rent, Additional Rent or other charges for which provision is made herein on or before the date on which the same become due and payable, and the same continues for five (5) days after notice from Landlord thereof, or

(ii) Landlord having rightfully given the notice specified in subdivision (i) above twice in any calendar year, Tenant shall thereafter in the same calendar year fail to pay the Annual Fixed Rent, Additional Rent or any other monetary amount due under this Lease on or before the date on which the same become due and payable, or,

(iii) Tenant shall assign its interest in this Lease or sublet any portion of the Premises in violation of the requirements of Sections 5.6 through 5.6.6 of this Lease; or

(iv) Tenant shall fail to perform or observe some term or condition of this Lease which, because of its character, would immediately jeopardize Landlord's interest (such as, but without limitation, failure to maintain general liability insurance, or the employment of labor and contractors within the Premises which interfere with Landlord's work, in violation of Exhibit B), and such failure continues for three (3) days after notice from Landlord to Tenant thereof; or

(v) Tenant shall neglect or fail to perform or observe any other covenant herein contained on Tenant's part to be performed or observed and Tenant shall fail to remedy the same within thirty

(30) days after notice to Tenant specifying such neglect or failure, or if such neglect or failure is of such a nature that Tenant cannot reasonably remedy the same within such thirty (30) day period, Tenant shall fail to commence promptly to remedy the same and to prosecute such remedy to completion with diligence and continuity; or

(vi) Tenant's leasehold interest in the Premises shall be taken on execution or by other process of law directed against Tenant; or

(vii) Tenant shall make an assignment for the benefit of creditors or shall file a voluntary petition in bankruptcy or shall be adjudicated bankrupt or insolvent, or shall file any petition or answer seeking any reorganization, arrangement, composition, readjustment, liquidation, dissolution or similar relief for itself under any present or future federal, state or other statute, law or regulation for the relief of debtors, or shall seek or consent to or acquiesce in the appointment of any trustee, receiver or liquidator of Tenant or of all or any substantial part of its properties, or shall admit in writing its inability to pay its debts generally as they become due; or

(viii) A petition shall be filed against Tenant in bankruptcy or under any other law seeking any reorganization, arrangement, composition, readjustment, liquidation, dissolution, or similar relief under any present or future Federal, State or other statute, law or regulation and shall remain undismissed or unstayed for an aggregate of sixty (60) days (whether or not consecutive), or if any debtor in possession (whether or not Tenant) trustee, receiver or liquidator of Tenant or of all or any substantial part of its properties or of the Premises shall be appointed without the consent or acquiescence of Tenant and such appointment shall remain unvacated or unstayed for an aggregate of sixty (60) days (whether or not consecutive) then, and in any of said cases (notwithstanding any license of a former breach of covenant or waiver of the benefit hereof or consent in a former instance).

Landlord lawfully may, immediately or at any time thereafter, and without demand or further notice terminate this Lease by notice to Tenant, specifying a date not less than ten (10) days after the giving of such notice on which this Lease shall terminate, and this Lease shall come to an end on the date specified therein as fully and completely as if such date were the date herein originally fixed for the expiration of the Lease Term (Tenant hereby waiving any rights of redemption), and Tenant will then quit and surrender the Premises to Landlord, but Tenant shall remain liable as hereinafter provided.

(b) If this Lease shall have been terminated as provided in this Article, then Landlord may, without notice, re-enter the Premises, either by force, summary proceedings, ejectment or otherwise, and remove and dispossess Tenant and all other persons and any and all property from the same, as if this Lease had not been made, and Tenant hereby waives the service of notice of intention to re-enter or to institute legal proceedings to that end.

(c) In the event that this Lease is terminated under any of the provisions contained in Section 7.1 (a) or shall be otherwise terminated by breach of any obligation of Tenant, Tenant covenants and agrees forthwith to pay and be liable for, on the days originally fixed herein for the payment thereof, amounts equal to the several installments of rent and other charges reserved as they would, under the terms of this Lease, become due if this Lease had not been terminated or if Landlord had not entered or re-entered, as aforesaid, and whether the Premises be relet or remain vacant, in whole or in part, or for a period less than the remainder of the Term, and for the whole thereof, but in the event the Premises be relet by Landlord, Tenant shall be entitled to a credit in the net amount of rent and other charges received by Landlord in reletting, after deduction of all expenses incurred in reletting the Premises (including, without limitation, remodeling costs, brokerage fees and the like), and in collecting the rent in connection therewith, in the following manner:

Amounts received by Landlord after reletting shall first be applied against such Landlord's expenses, until the same are recovered, and until such recovery, Tenant shall pay, as of each day when a payment would fall due under this Lease, the amount which Tenant is obligated to pay under the terms of this Lease (Tenant's liability prior to any such reletting and such recovery not in any way to be diminished as a result of the fact that such reletting might be for a rent higher than the rent provided for in this Lease); when and if such expenses have been completely recovered, the amounts received from reletting by Landlord as have not previously been applied shall be credited against Tenant's obligations as of each day when a payment would fall due under this Lease, and only the net amount thereof shall be payable by Tenant. Further, amounts received by Landlord from such reletting for any period shall be credited only against obligations of Tenant allocable to such period, and shall not be credited against obligations of Tenant hereunder accruing subsequent or prior to such period; nor shall any credit of any kind be due for any period after the date when the term of this Lease is scheduled to expire according to its terms.

Landlord agrees to use reasonable efforts to relet the Premises after Tenant vacates the same in the event this Lease is terminated based upon an Event of Default by Tenant hereunder. The marketing of the Premises in a manner similar to the manner in which Landlord markets other premises within Landlord's control within the Building shall be deemed to have satisfied Landlord's

obligation to use “reasonable efforts” hereunder. In no event shall Landlord be required to (i) solicit or entertain negotiations with any other prospective tenant for the Premises until Landlord obtains full and complete possession of the Premises (including, without limitation, the final and unappealable legal right to relet the Premises free of any claim of Tenant), (ii) relet the Premises before leasing other vacant space in the Building, or (iii) lease the Premises for a rental less than the current fair market rent then prevailing for similar office space in the Building.

(d) (i) In the alternative, Landlord may elect, by notice given to Tenant at any time after such termination and whether or not Landlord shall have collected any damages under subsection (c) above, but as final damages and in lieu of all other damages beyond the date of such notice, to require Tenant to pay such a sum as at the time of the giving of such notice represents the amount of the excess, if any, of (a) the discounted present value, at a discount rate of 6%, of the Annual Fixed Rent, Additional Rent and other charges which would have been payable by Tenant under this Lease from the date of such notice for what would be the then unexpired Lease Term if the Lease terms had been fully complied with by Tenant, over and above (b) the discounted present value, at a discount rate of 6%, of the Annual Fixed Rent, Additional Rent and other charges that would be received by Landlord if the Premises were released at the time of such notice for the remainder of the Lease Term at the fair market value (including provisions regarding periodic increases in Annual Fixed Rent and Additional Rent if such are applicable) prevailing at the time of such notice as reasonably determined by Landlord, plus all expenses which Landlord may have incurred with respect to the collection of such damages.

(ii) For the purposes of this Article, if Landlord elects to require Tenant to pay damages in accordance with the immediately preceding paragraph, the total rent shall be computed by assuming that Tenant’s share of excess taxes, Tenant’s share of excess operating costs and Tenant’s share of excess electrical costs would be, for the balance of the unexpired Term from the date of such notice, the amount thereof (if any) for the immediately preceding annual period payable by Tenant to Landlord.

(e) In case of any Event of Default, re-entry, dispossession by summary proceedings or otherwise, Landlord may (i) re-let the Premises or any part or parts thereof, either in the name of Landlord or otherwise, for a term or terms which may at Landlord’s option be equal to or less than or exceed the period which would otherwise have constituted the balance of the Term of this Lease and may grant concessions, abatements or free rent to the extent that Landlord considers advisable or necessary to re-let the same and (ii) may make such alterations, repairs and decorations in the Premises as Landlord in its sole judgment considers advisable or necessary for the purpose of reletting the Premises; and the making of such alterations, repairs and decorations shall not operate or be construed to release Tenant from liability hereunder as aforesaid. Landlord shall in no event be

liable in any way whatsoever for failure to re-let the Premises, or, in the event that the Premises are re-let, for failure to collect the rent under re-letting. Tenant hereby expressly waives any and all rights of redemption granted by or under any present or future laws in the event of Tenant being evicted or dispossessed, or in the event of Landlord obtaining possession of the Premises, by reason of the violation by Tenant of any of the covenants and conditions of this Lease.

(f) The specified remedies to which Landlord may resort hereunder are not intended to be exclusive of any remedies or means of redress to which Landlord may at any time be entitled lawfully, and Landlord may invoke any remedy (including the remedy of specific performance) allowed at law or in equity as if specific remedies were not herein provided for. Further, nothing contained in this Lease shall limit or prejudice the right of Landlord to prove for and obtain in proceedings for bankruptcy or insolvency by reason of the termination of this Lease, an amount equal to the maximum allowed by any statute or rule of law in effect at the time when, and governing the proceedings in which, the damages are to be proved, whether or not the amount be greater, equal to, or less than the amount of the loss or damages referred to above.

7.2 Landlord's Default

Landlord shall in no event be in default in the performance of any of Landlord's obligations hereunder unless and until Landlord shall have failed to perform such obligations within thirty (30) days after notice by Tenant to Landlord properly specifying wherein Landlord has failed to perform any such obligation; provided, however, that if such failure is of such a nature that Landlord cannot reasonably remedy the same within such thirty (30) day period and Landlord has commenced such cure within such thirty (30) day period, Landlord shall have such additional time as is reasonably required to cure any such default provided that Landlord diligently and continually prosecutes such cure to completion. The Tenant shall not assert any right to deduct the cost of repairs or any monetary claim against the Landlord from rent thereafter due and payable, but shall look solely to the Landlord for satisfaction of such claim.

ARTICLE VIII

Insurance and Indemnity

8.1 Tenant's Indemnity

(a) Indemnity. To the fullest extent permitted by law, Tenant waives any right to contribution against the Landlord Parties (as hereinafter defined) and agrees to indemnify and save harmless the Landlord Parties from and against all claims of whatever nature by a third party arising from or claimed to have arisen from (i) any act, omission or negligence of the Tenant Patties (as hereinafter defined); (ii) any accident, injury or damage whatsoever caused to any person, or to the property of any person, occurring in or about the Premises from the earlier of (A) the date on which any Tenant Patty first enters the Premises for any reason or (B) the Commencement Date, and thereafter

throughout and until the end of the Lease Term, and after the end of the Lease Term for so long after the end of the Lease Term as any of Tenant's Property (as defined in Section 8.4) remains on the Premises, or Tenant or anyone acting by, through or under Tenant may use, be in occupancy of any part of, or have access to the Premises or any portion thereof; (iii) any accident, injury or damage whatsoever occurring outside the Premises but within the Building, or on common areas or the Office Park, where such accident, injury or damage results, or is claimed to have resulted, from any act, omission or negligence on the part of any of the Tenant Parties; or (iv) any breach of this Lease by Tenant. Tenant shall pay such indemnified amounts as they are incurred by the Landlord Parties. This indemnification shall not be construed to deny or reduce any other rights or obligations of indemnity that any of the Landlord Parties may have under this Lease. The indemnification rights of Landlord Parties provided in this Lease are their exclusive indemnification rights with respect to this Lease. Landlord Parties waive any additional rights to indemnification they may have against Tenant Parties with respect to this Lease under common law. Notwithstanding anything contained herein to the contrary, Tenant shall not be obligated to indemnify a Landlord Party for any claims to the extent that such Landlord Party's damages in fact result from matters included in Landlord's indemnity in Section 8.1.1 of this Article.

(b) Breach. In the event that Tenant breaches any of its indemnity obligations hereunder: (i) Tenant shall pay to the Landlord Parties all liabilities, loss, cost, or expense (including reasonable attorneys' fees) incurred as a result of said breach; and (ii) the Landlord Parties may deduct and offset from any amounts due to Tenant under this Lease any amounts owed by Tenant pursuant to this Section 8.1(b).

(c) No limitation. The indemnification obligations under this Section 8.1 shall not be limited in any way by any limitation on the amount or type of damages, compensation or benefits payable by or for Tenant or any subtenant or other occupant of the Premises under workers' compensation acts, disability benefit acts, or other employee benefit acts. Tenant waives any immunity from or limitation on its indemnity or contribution liability to the Landlord Parties based upon such acts.

(d) Subtenants and other occupants. Tenant shall require its subtenants and other occupants of the Premises to provide similar indemnities to the Landlord Parties in a form reasonably acceptable to Landlord.

(e) Survival. The terms of this Section 8.1 shall survive any termination or expiration of this Lease.

(f) Costs. The foregoing indemnity and hold harmless agreement shall include indemnity for all costs, expenses and liabilities (including, without limitation, attorneys' fees and disbursements) incurred by the Landlord Parties in connection with any such claim or any action or proceeding brought thereon, and the defense thereof. In addition, in the event that any action or proceeding shall be brought against one or more Landlord Parties by reason of any such claim, Tenant, upon request from the Landlord Party, shall resist and defend such action or proceeding on behalf of the Landlord Party by counsel

appointed by Tenant's insurer (if such claim is covered by insurance without reservation) or otherwise by counsel reasonably satisfactory to the Landlord Party. The Landlord Parties shall not be bound by any compromise or settlement of any such claim, action or proceeding without the prior written consent of such Landlord Parties.

(g) Landlord Parties and Tenant Parties. The term "Landlord Party" or "Landlord Parties" shall mean Landlord, any affiliate of Landlord, Landlord's managing agents for the Building, each mortgagee (if any), each ground lessor (if any), and each of their respective direct or indirect partners, officers, shareholders, directors, members, trustees, beneficiaries, servants, employees, principals, contractors, licensees, agents or representatives. For the purposes of this Lease, the term "Tenant Party" or "Tenant Parties" shall mean Tenant, any affiliate of Tenant, any permitted subtenant or any other permitted occupant of the Premises, and each of their respective direct or indirect partners, officers, shareholders, directors, members, trustees, beneficiaries, servants, employees, principals, contractors, licensees, agents, invitees or representatives.

8.1.1 Landlord's Indemnity. Subject to the limitations in Section 9.3 and in Section 8.2 and Section 8.13 of this Article, and to the extent not resulting from any act, omission, fault, negligence or misconduct of Tenant or its contractors, licensees, invitees, agents, servants or employees, Landlord waives its right to contribution and agrees to indemnify and save harmless Tenant from and against any claim by a third party arising from any injury to any person occurring in the Premises or in the Complex after the date that possession of the Premises is first delivered to Tenant and until the expiration or earlier termination of the Lease Term, to the extent such injury results from the negligence or willful misconduct of Landlord or Landlord's employees, or from any breach or default by Landlord in the performance or observance of its covenants or obligations under this Lease; provided, however, that in no event shall the aforesaid indemnity render Landlord responsible or liable for any loss or damage to fixtures, personal property or other property of Tenant, and Landlord shall in no event be liable for any indirect or consequential damages. Tenant shall provide notice of any such third party claim to Landlord as soon as practicable. Landlord shall have the right, but not the duty, to defend the claim. The provisions of this Section shall not be applicable to (i) the holder of any mortgage now or hereafter on the Property or Building (whether or not such holder shall be a mortgagee in possession of or shall have exercised any rights under a conditional, collateral or other assignment of leases and/or rents respecting the Property or Building), or (ii) any person acquiring title as a result of, or subsequent to, a foreclosure of any such mortgage or a deed in lieu of foreclosure, except to the extent of liability insurance maintained by either of the foregoing. The indemnification rights of Tenant provided in this Lease are its exclusive indemnification rights with respect to this Lease. Tenant waives any additional rights to indemnification it may have against Landlord Parties with respect to this Lease under common law.

8.2 Tenant's Risk

Tenant agrees to use and occupy the Premises, and to use such other portions of the Building and the Office Park as Tenant is given the right to use by this Lease at Tenant's own risk. The Landlord Parties shall not be liable to the Tenant Patties for any damage, injury, loss, compensation, or claim (including, but not limited to, claims for the interruption of or loss to a Tenant Party's business) based on, arising out of or resulting from any cause whatsoever, including, but not limited to, repairs to any portion of the Premises or the Building or the Office Park, any fire, robbery, theft, mysterious disappearance, or any other crime or casualty, the actions of any other tenants of the Building or of any other person or persons, or any leakage in any part or portion of the Premises or the Building or the Office Park, or from water, rain or snow that may leak into, or flow from any part of the Premises or the Building or the Office Park, or from drains, pipes or plumbing fixtures in the Building or the Office Park. Any goods, property or personal effects stored or placed in or about the Premises shall be at the sole risk of the Tenant Party, and neither the Landlord Patties nor their insurers shall in any manner be held responsible therefor. The Landlord Patties shall not be responsible or liable to a Tenant Party, or to those claiming by, through or under a Tenant Party, for any loss or damage that may be occasioned by or through the acts or omissions of persons occupying adjoining premises or any part of the premises adjacent to or connecting with the Premises or any part of the Building or otherwise. The provisions of this section shall be applicable to the fullest extent permitted by law, and until the expiration or earlier termination of the Lease Term, and during such further period as any of Tenant's Property remains on the Premises, or Tenant or anyone acting by, through or under Tenant may use, be in occupancy of any part of, or have access to the Premises or of the Building.

8.3 Tenant's Commercial General Liability Insurance

Tenant agrees to maintain in full force on or before the earlier of (i) the date on which any Tenant Party first enters the Premises for any reason or (ii) the Commencement Date, and thereafter throughout and until the end of the Lease Term, and after the end of the Lease Term for so long as any of Tenant's Property remains on the Premises, or Tenant or anyone acting by, through or under Tenant may use, be in occupancy of any part of, or have access to the Premises or any portion thereof, a policy of commercial general liability insurance, on an occurrence basis, issued on a form at least as broad as Insurance Services Office ("ISO") Commercial General Liability Coverage "occurrence" form CG 00 01 10 01 or another Commercial General Liability "occurrence" form providing equivalent coverage. Such insurance shall include contractual liability coverage, specifically covering but not limited to the indemnification obligations undertaken by Tenant in this Lease. The minimum limits of liability of such insurance shall be $3,000,000.00 per occurrence, which may be satisfied through a combination of primary and excess/umbrella insurance. In addition, in the event Tenant hosts a function in the Premises, in the Building or on the Property, Tenant agrees to obtain, and cause any persons or parties providing services for such function to obtain, the appropriate insurance coverages as determined by Landlord (including liquor liability coverage, if applicable) and provide Landlord with evidence of the same.

8.4 Tenant’s Property Insurance

Tenant shall maintain at all times during the Term of this Lease, and during such earlier or later time as Tenant may be performing work in or to the Premises or have property, fixtures, furniture, equipment, machinery, goods, supplies, wares or merchandise on the Premises, and continuing thereafter so long as any of Tenant’s Property, remains on the Premises, or Tenant or anyone acting by, through or under Tenant may use, be in occupancy of or have access to, any part of the Premises, business interruption insurance and insurance against loss or damage covered by the so-called “all risk” or equivalent type insurance coverage with respect to (i) Tenant’s property, fixtures, furniture, equipment, machinery, goods, supplies, wares and merchandise, and other property of Tenant located at the Premises, (ii) all additions, alterations and improvements made by or on behalf of the Tenant in the Premises (except to the extent paid for by Landlord in connection with this Lease or existing in the Premises as of the date of this Lease) (“Leasehold Improvements”), and (iii) any property of third parties, including but not limited to leased or rented property, in the Premises in Tenant’s care, custody, use or control, provided that such insurance in the case of (iii) may be maintained by such third parties, (collectively, “Tenant’s Property”). At the request of Landlord, Tenant shall provide to Landlord a detailed description of the Leasehold Improvements made by or on behalf of Tenant and the cost thereof. The business interruption insurance required by this section shall be in minimum amounts typically carried by prudent tenants engaged in similar operations, but in no event shall be in an amount less than the Annual Fixed Rent then in effect during any year during the Term, plus any Additional Rent due and payable for the immediately preceding year during the Term. The “all risk” insurance required by this section shall be in an amount at least equal to the full replacement cost of Tenant’s Property. In addition, during such time as Tenant is performing work in or to the Premises, Tenant, at Tenant’s expense, shall also maintain, or shall cause its contractor(s) to maintain, builder’s risk insurance for the full insurable value of such work. Landlord and such additional persons or entities as Landlord may reasonably request shall be named as loss payees, as their interests may appear, on the policy or policies required by this section for Leasehold Improvements. In the event of loss or damage covered by the “all risk” insurance required by this Lease, the responsibilities for repairing or restoring the loss or damage shall be determined in accordance with Article VI. To the extent that Landlord is obligated to pay for the repair or restoration of the loss or damage covered by the policy, Landlord shall be paid the proceeds of the “all risk” insurance covering the loss or damage. To the extent Tenant is obligated to pay for the repair or restoration of the loss or damage, covered by the policy, Tenant shall be paid the proceeds of the “all risk” insurance covering the loss or damage. If both Landlord and Tenant are obligated to pay for the repair or restoration of the loss or damage covered by the policy, the insurance proceeds shall be paid to each of them in the pro rata proportion of their obligations to repair or restore the loss or damage. If the loss or damage is not repaired or restored (for example, if the Lease is terminated pursuant to Article VI), the insurance proceeds shall be paid to Landlord and Tenant in the pro rata proportion of their relative contributions to the cost of the leasehold improvements covered by the policy.

8.5 Tenant's Other Insurance

Tenant agrees to maintain in full force on or before the earlier of (i) the date on which any Tenant Party first enters the Premises for any reason or (ii) the Commencement Date, and thereafter throughout the end of the Term, and after the end of the Term for so long after the end of the Term any of Tenant's Property remains on the Premises or as Tenant or anyone acting by, through or under Tenant may use, or be in occupancy of, or have access to the Premises or any portion thereof, (1) automobile liability insurance (covering any automobiles owned or operated by Tenant at the Site); (2) worker's compensation insurance as required by law; and (3) employer's liability insurance. Such automobile liability insurance shall be in an amount not less than One Million Dollars ($1,000,000) for each accident. Such employer's liability insurance shall be in an amount not less than One Million Dollars ($1,000,000) for each accident, One Million Dollars ($1,000,000) disease-policy limit, and One Million Dollars ($1,000,000) disease-each employee.

8.6 Requirements for Tenant's Insurance

All insurance required to be maintained by Tenant pursuant to this Lease shall be maintained with responsible companies that are admitted to do business, and are in good standing in the Commonwealth of Massachusetts and that have a rating of at least "A" and are within a financial size category of not less than "Class X" in the most current Best's Key Rating Guide or such similar rating as may be reasonably selected by Landlord. All such insurance shall be acceptable in form and content to Landlord. Tenant shall immediately notify Landlord upon any cancellation or failure to renew with respect to any such insurance. All commercial general liability, excess/umbrella liability and automobile liability insurance policies shall be primary and noncontributory. No such policy shall contain any deductible or self-insured retention greater than $25,000.00 for property insurance and $25,000.00 for commercial general liability insurance. Any deductibles and such self-insured retentions shall be deemed to be "insurance" for purposes of the waiver in Section 8.13 below. Landlord reserves the right from time to time to require Tenant to obtain higher minimum amounts of insurance based on such limits as are customarily carried with respect to similar properties in the area in which the Premises are located. The minimum amounts of insurance required by this Lease shall not be reduced by the payment of claims or for any other reason. In the event Tenant shall fail to obtain or maintain any insurance meeting the requirements of this Article, or to deliver such policies or certificates as required by this Article, Landlord may, at its option, on five (5) days notice to Tenant, procure such policies for the account of Tenant, and the cost thereof shall be paid to Landlord within five (5) days after delivery to Tenant of bills therefor.

8.7 Additional Insureds

To the fullest extent permitted by law, the commercial general liability and auto insurance carried by Tenant pursuant to this Lease, and any additional liability insurance carried by Tenant pursuant to Section 8.5 of this Lease or any other provision of this Lease, shall name Landlord, Landlord's managing agent, and such other persons as Landlord may reasonably request from time to time as additional insureds with respect to

liability arising out of or related to this Lease or the operations of Tenant (collectively "Additional Insureds"). Such insurance shall provide primary coverage without contribution from any other insurance carried by or for the benefit of Landlord, Landlord's managing agent, or other Additional Insureds. Such insurance shall also waive any right of subrogation against each Additional Insured. For the avoidance of doubt, each primary policy and each excess/umbrella policy through which Tenant satisfies its obligations under this Section 8.7 must provide coverage to the Additional Insureds that is primary and non-contributory.

8.8 Certificates of Insurance

On or before the earlier of (i) the date on which any Tenant Party first enters the Premises for any reason or (ii) the Commencement Date, Tenant shall furnish Landlord with certificates evidencing the insurance coverage required by this Lease, and renewal certificates shall be furnished to Landlord at least annually thereafter, and at least thirty (30) days prior to the expiration date of each policy for which a certificate was furnished (acceptable forms of such certificates for liability and property insurance, respectively, as of the date hereof, are attached as Exhibit F, however, other forms of certificates may satisfy the requirements of this Section 8.8). Failure by the Tenant to provide the certificates or letters required by this Section 8.8 shall not be deemed to be a waiver of the requirements in this Section 8.8. Upon request by Landlord, a true and complete copy of any insurance policy required by this Lease shall be delivered to Landlord within ten (10) days following Landlord's request.

8.9 Subtenants and Other Occupants

Tenant shall require its subtenants and other occupants of the Premises to provide written documentation evidencing the obligation of such subtenant or other occupant to indemnify the Landlord Parties to the same extent that Tenant is required to indemnify the Landlord Parties pursuant to Section 8.1 above, and to maintain insurance that meets the requirements of this Article, and otherwise to comply with the requirements of this Article, provided that the terms of this Section 8.9 shall not relieve Tenant of any of its obligations to comply with the requirements of this Article. Tenant shall require all such subtenants and occupants to supply certificates of insurance evidencing that the insurance requirements of this Article have been met and shall forward such certificates to Landlord on or before the earlier of (i) the date on which the subtenant first enters the Premises or (ii) the commencement of the sublease. Tenant shall be responsible for identifying and remedying any deficiencies in such certificates or policy provisions.

8.10 No Violation of Building Policies

Tenant shall not commit or permit any violation of the policies of fire, boiler, sprinkler, water damage or other insurance covering the Office Park and/or the fixtures, equipment and property therein carried by Landlord, or do or permit anything to be done, or keep or permit anything to be kept, in the Premises, which in case of any of the foregoing (i) would result in termination of any such policies, (ii) would adversely affect Landlord's right of recovery under any of such policies, or (iii) would result in reputable and independent insurance companies refusing to insure the Office Park or the property of Landlord in amounts reasonably satisfactory to Landlord.

8.11 Tenant to Pay Premium Increases

If, because of anything done, caused or permitted to be done, or omitted by Tenant (or its subtenant or other occupants of the Premises), the rates for liability, fire, boiler, sprinkler, water damage or other insurance on the Office Park or on the Property and equipment of Landlord or any other tenant or subtenant in the Building shall be higher than they otherwise would be, Tenant shall reimburse Landlord and/or the other tenants and subtenants in the Building for the additional insurance premiums thereafter paid by Landlord or by any of the other tenants and subtenants in the Building which shall have been charged because of the aforesaid reasons, such reimbursement to be made from time to time on Landlord's demand.

8.12 Landlord's Insurance

(a) Required insurance. Landlord shall maintain insurance against loss or damage with respect to the Building on an "all risk" or equivalent type insurance form, with customary exceptions, subject to such deductibles and self-insured retentions as Landlord may reasonably determine, in an amount equal to at least the replacement value of the Building. Landlord shall also maintain such insurance with respect to any improvements, alterations, and fixtures of Tenant located at the Premises to the extent paid for by Landlord. The cost of such insurance shall be treated as a part of Landlord's Operating Expenses. Payment for losses thereunder shall be made solely to Landlord.

(b) Optional insurance. Landlord may maintain such additional insurance with respect to the Building and the Office Park, including, without limitation, earthquake insurance, terrorism insurance, flood insurance, liability insurance and/or rent insurance, as Landlord may in its sole discretion elect. Landlord may also maintain such other insurance as may from time to time be required by the holder of any mortgage on the Building or Property. The cost of all such additional insurance shall also be part of the Landlord's Operating Expenses.

(c) Blanket and self-insurance. Any or all of Landlord's insurance may be provided by blanket coverage maintained by Landlord or any affiliate of Landlord under its insurance program for its portfolio of properties, or by Landlord or any affiliate of Landlord under a program of self-insurance, and in such event Landlord's Operating Expenses shall include the portion of the reasonable cost of blanket insurance or self-insurance that is allocated to the Building.

(d) No obligation. Landlord shall not be obligated to insure, and shall not assume any liability of risk of loss for, Tenant's Property, including any such property or work of Tenant's subtenants or occupants. Landlord will also have no obligation to carry insurance against, nor be responsible for, any loss suffered by Tenant, subtenants or other occupants due to interruption of Tenant's or any subtenant's or occupant's business.

8.13 Waiver of Subrogation

To the fullest extent permitted by law, and notwithstanding any term or provision of this Lease to the contrary, the parties hereto waive and release any and all rights of recovery against the other, and agree not to seek to recover from the other or to make any claim against the other, and in the case of Landlord, against all Tenant Parties, and in the case of Tenant, against all Landlord Parties, for any loss or damage incurred by the waiving/releasing party to the extent such loss or damage is insured under any insurance policy required by this Lease or which would have been so insured had the party carried the insurance it was required to carry hereunder. Tenant shall obtain from its subtenants and other occupants of the Premises a similar waiver and release of claims against any or all of Tenant or Landlord. In addition, the parties hereto (and in the case of Tenant, its subtenants and other occupants of the Premises) shall procure an appropriate clause in, or endorsement on, any insurance policy required by this Lease pursuant to which the insurance company waives subrogation. The insurance policies required by this Lease shall contain no provision that would invalidate or restrict the parties' waiver and release of the rights of recovery in this section. The parties hereto covenant that no insurer shall hold any right of subrogation against the parties hereto by virtue of such insurance policy.

8.14 Tenant's Work

During such times as Tenant is performing work or having work or services performed in or to the Premises, Tenant shall require its contractors, and their subcontractors of all tiers, to obtain and maintain commercial general liability, automobile, workers compensation, employer's liability, builder's risk, and equipment/property insurance in such amounts and on such terms as are customarily required of such contractors and subcontractors on similar projects. The amounts and terms of all such insurance are subject to Landlord's written approval, which approval shall not be unreasonably withheld. The commercial general liability and auto insurance carried by Tenant's contractors and their subcontractors of all tiers pursuant to this Section 8.14 shall name the Additional Insureds as additional insureds with respect to liability arising out of or related to their work or services. Such insurance shall provide primary coverage without contribution from any other insurance carried by or for the benefit of Landlord, Landlord's managing agent, or other Additional Insureds. Such insurance shall also waive any right of subrogation against each Additional Insured. Tenant shall obtain and submit to Landlord, prior to the earlier of (i) the entry onto the Premises by such contractors or subcontractors or (ii) commencement of the work or services, certificates of insurance evidencing compliance with the requirements of this Section 8.14.

ARTICLE IX

Miscellaneous Provisions

9.1 Waiver

No waiver by Landlord of any condition of this Lease, nor any failure by Tenant to deliver any security deposit, letter of credit, pre-paid rent, financial information, guaranty or other item required upon the execution and delivery of this Lease, shall be construed as excusing satisfaction of any such condition or the delivery of any such item by Tenant, and Landlord reserves the right to declare the failure of Tenant to satisfy any such condition or deliver any such item an Event of Default under this Lease. Further, no waiver at any time of any of the provisions hereof by Landlord or Tenant shall be construed as a waiver of any of the other provisions hereof, and a waiver at any time of any of the provisions hereof shall not be construed as a waiver at any subsequent time of the same provisions. The consent or approval of Landlord or Tenant to or of any action by the other requiring such consent or approval shall not be construed to waive or render unnecessary Landlord's or Tenant's consent or approval to or of subsequent similar act by the other.

No payment by Tenant, or acceptance by Landlord, of a lesser amount than shall be due from Tenant to Landlord shall be treated otherwise than as a payment on account. The acceptance by Landlord of a check for a lesser amount with an endorsement or statement thereon, or upon any letter accompanying such check, that such lesser amount is payment in full, shall be given no effect, and Landlord may accept such check without prejudice to any other rights or remedies which Landlord may have against Tenant.

9.2 Cumulative Remedies

Except as expressly provided in this Lease, the specific remedies to which Landlord may resort under the terms of this Lease are cumulative and are not intended to be exclusive of any other remedies or means of redress to which such party may be lawfully entitled in case of any breach or threatened breach by Tenant of any provisions of this Lease. In addition to the other remedies provided in this Lease, Landlord shall be entitled to the restraint by injunction of the violation or attempted or threatened violation of any of the covenants, conditions or provisions of this Lease or to a decree compelling specific performance of any such covenants, conditions or provisions.

9.3 Quiet Enjoyment

This Lease is subject and subordinate to all matters of record. Tenant, subject to the terms and provisions of this Lease on payment of the rent and observing, keeping and performing all of the terms and provisions of this Lease on Tenant's part to be observed, kept and performed, shall lawfully, peaceably and quietly have, hold, occupy and enjoy the Premises during the Term (exclusive of any period during which Tenant is holding over after the expiration or termination of this Lease without the consent of Landlord), without hindrance or ejection by any persons lawfully claiming under Landlord to have

title to the Premises superior to Tenant, subject, however, to the terms of this Lease; the foregoing covenant of quiet enjoyment is in lieu of any other covenant, express or implied; and it is understood and agreed that this covenant and any and all other covenants of Landlord contained in this Lease shall be binding upon Landlord and Landlord's successors, including ground or master lessees, only with respect to breaches occurring during Landlord's or Landlord's successors' respective ownership of Landlord's interest hereunder, as the case may be.

Further, Tenant specifically agrees to look solely to Landlord's then equity interest in the Building at the time owned, or in which Landlord holds an interest as ground lessee, for recovery of any judgment from Landlord; it being specifically agreed that neither Landlord (original or successor), nor any beneficiary of any trust of which any person holding Landlord's interest is trustee, nor any member, manager, partner, director or stockholder, nor Landlord's managing agent, shall ever be personally liable for any such judgment, or for the payment of any monetary obligation to Tenant. The provision contained in the foregoing sentence is not intended to, and shall not, limit any right that Tenant might otherwise have to obtain injunctive relief against Landlord or Landlord's successors in interest, or any action not involving the personal liability of Landlord (original or successor), any successor trustee to the persons named herein as Landlord, or any beneficiary of any trust of which any person holding Landlord's interest is trustee, or of any manager, member, partner, director or stockholder of Landlord or of Landlord's managing agent to respond in monetary damages from Landlord's assets other than Landlord's equity interest aforesaid in the Building, but in no event shall Tenant have the right to terminate or cancel this Lease or to withhold rent or to set-off any claim or damages against rent as a result of any default by Landlord or breach by Landlord of its covenants or any warranties or promises hereunder, except in the case of a wrongful eviction of Tenant from the demised premises (constructive or actual) by Landlord continuing after notice to Landlord thereof and a reasonable opportunity for Landlord to cure the same. In no event shall Landlord or Tenant ever be liable to the other party for any indirect or consequential damages suffered from whatever cause; provided, however, that the foregoing shall not limit or alter any procedural right or remedy of Landlord under this Lease nor shall the same apply to the obligations of Tenant with respect to any hold over by Tenant after the expiration or earlier termination of this Lease. In the event that Landlord shall be determined to have acted unreasonably in withholding any consent or approval under this Lease, the sole recourse and remedy of Tenant in respect thereof shall be to specifically enforce Landlord's obligation to grant such consent or approval, and in no event shall the Landlord be responsible for any damages of whatever nature in respect of its failure to give such consent or approval nor shall the same otherwise affect the obligations of Tenant under this Lease or act as any termination of this Lease.

9.4 Notice to Mortgagee and Ground Lessor

After receiving notice from any person, firm or other entity that it holds a mortgage which includes the Premises as part of the mortgaged premises, or that it is the ground lessor under a lease with Landlord, as ground lessee, which includes the Premises as a part of the demised premises, no notice from Tenant to Landlord shall be effective unless and until a copy of the same is given to such holder or ground lessor, and the curing of

any of Landlord's defaults by such holder or ground lessor within a reasonable time thereafter (including a reasonable time to obtain possession of the premises if the mortgagee or ground lessor elects to do so) shall be treated as performance by Landlord. For the purposes of this Section 9.4 or Section 9.14, the term "mortgage" includes a mortgage on a leasehold interest of Landlord (but not one on Tenant's leasehold interest). If any mortgage is listed on Exhibit G then the same shall constitute notice from the holder of such mortgage for the purposes of this Section 9.4. Further no Annual Fixed Rent or Additional Rent may be paid by Tenant more than thirty (30) days in advance except with the prior written consent of all holder(s) of such mortgages and ground leases, and any such payment without such consent shall not be binding on such holder(s).

9.5 Assignment of Rents

With reference to any assignment by Landlord of Landlord's interest in this Lease, or the rents payable hereunder, conditional in nature or otherwise, which assignment is made to the holder of a mortgage or ground lease on property which includes the Premises, Tenant agrees:

(a) That the execution thereof by Landlord, and the acceptance thereof by the holder of such mortgage or the ground lessor, shall never be treated as an assumption by such holder or ground lessor of any of the obligations of Landlord hereunder, unless such holder, or ground lessor, shall, by notice sent to Tenant, specifically otherwise elect; and

(b) That, except as aforesaid, such holder or ground lessor shall be treated as having assumed Landlord's obligations hereunder only upon foreclosure of such holder's mortgage and the taking of possession of the Premises, or, in the case of a ground lessor, the assumption of Landlord's position hereunder by such ground lessor.

In no event shall the acquisition of title to the Building and the land on which the same is located by a purchaser which, simultaneously therewith, leases the entire Building or such land back to the seller thereof be treated as an assumption by such purchaser-lessor, by operation of law or otherwise, of Landlord's obligations hereunder, but Tenant shall look solely to such seller-lessee, and its successors from time to time in title, for performance of Landlord's obligations hereunder subject to the provisions of Section 9.3 hereof. In any such event, this Lease shall be subject and subordinate to the lease to such purchaser provided that such purchaser agrees to recognize the right of Tenant to use and occupy the Premises upon the payment of rent and other charges payable by Tenant under this Lease and the performance by Tenant of Tenant's obligations hereunder and provided that Tenant agrees to attorn to such purchaser. For all purposes, such seller-lessee, and its successors in title, shall be the landlord hereunder unless and until Landlord's position shall have been assumed by such purchaser-lessor.

9.6 Surrender

No act or thing done by Landlord during the Lease Term shall be deemed an acceptance of a surrender of the Premises, and no agreement to accept such surrender shall be valid, unless in writing signed by Landlord. No employee of Landlord or of Landlord's agents shall have any power to accept the keys of the Premises prior to the termination of this Lease. The delivery of keys to any employee of Landlord or of Landlord's agents shall not operate as a termination of the Lease or a surrender of the Premises.

9.7 Brokerage

(A) Tenant warrants and represents that Tenant has not dealt with any broker in connection with the consummation of this Lease other than the broker, person or firm, if any, designated in Section 1.1 hereof; and in the event any claim is made against the Landlord relative to dealings by Tenant with brokers other than the Brokers, if any, designated in Section 1.1 hereof, Tenant shall defend the claim against Landlord with counsel of Tenant's selection first approved by Landlord (which approval will not be unreasonably withheld) and save harmless and indemnify Landlord on account of loss, cost or damage which may arise by reason of such claim.

(B) Landlord warrants and represents that Landlord has not dealt with any broker in connection with the consummation of this Lease other than the broker, person or firm, if any, designated in Section 1.1 hereof; and in the event any claim is made against the Tenant relative to dealings by Landlord with brokers other than the Brokers, if any, designated in Section 1.1 hereof, Landlord shall defend the claim against Tenant with counsel of Landlord's selection first approved by Tenant (which approval will not be unreasonably withheld) and save harmless and indemnify Tenant on account of loss, cost or damage which may arise by reason of such claim. Landlord agrees that it shall be solely responsible for the payment of brokerage commissions to the Broker for the Original Term of this Lease, if any, designated in Section 1.1 hereof.

9.8 Invalidity of Particular Provisions

If any term or provision of this Lease, including but not limited to any waiver of contribution or claims, indemnity, obligation, or limitation of liability or of damages, or the application thereof to any person or circumstance shall, to any extent, be invalid or unenforceable, the remainder of this Lease, or the application of such term or provision to persons or circumstances other than those as to which it is held invalid or unenforceable, shall not be affected thereby, and each term and provision of this Lease shall be valid and be enforced to the fullest extent permitted by law.

9.9 Provisions Binding, Etc.

The obligations of this Lease shall run with the land, and except as herein otherwise provided, the terms hereof shall be binding upon and shall inure to the benefit of the successors and assigns, respectively, of Landlord and Tenant and, if Tenant shall be an

individual, upon and to his heirs, executors, administrators, successors and assigns. Each term and each provision of this Lease to be performed by Tenant shall be construed to be both a covenant and a condition. The reference contained to successors and assigns of Tenant is not intended to constitute a consent to subletting or assignment by Tenant.

9.10 Recording; Confidentiality

Tenant agrees not to record the within Lease, but each party hereto agrees, on the request of the other, to execute a so-called Notice of Lease or short form lease in form recordable and complying with applicable law and reasonably satisfactory to both Landlord's and Tenant's attorneys. In no event shall such document set forth rent or other charges payable by Tenant under this Lease; and any such document shall expressly state that it is executed pursuant to the provisions contained in this Lease, and is not intended to vary the terms and conditions of this Lease.

Tenant agrees that this Lease and the terms contained herein will be treated as strictly confidential and except as required by law (or except with the written consent of Landlord) Tenant shall not disclose the same to any third party except for Tenant's partners, lenders, accountants, investors, subtenants and attorneys who have been advised of the confidentiality provisions contained herein and agree to be bound by the same. In the event Tenant is required by law to provide this Lease or disclose any of its terms, Tenant shall give Landlord prompt notice of such requirement prior to making disclosure so that Landlord may seek an appropriate protective order. If failing the entry of a protective order Tenant is compelled to make disclosure, Tenant shall only disclose portions of the Lease which Tenant is required to disclose and will exercise reasonable efforts to obtain assurance that confidential treatment will be accorded to the information so disclosed.

9.11 Notices

Whenever, by the terms of this Lease, notice shall or may be given either to Landlord or to Tenant, such notice shall be in writing and shall be sent by overnight commercial courier or by registered or certified mail postage or delivery charges prepaid, as the case maybe:

If intended for Landlord, addressed to Landlord at the address set forth in Article I of this Lease (or to such other address or addresses as may from time to time hereafter be designated by Landlord by like notice) with a copy to Landlord, Attention: Regional General Counsel.

If intended for Tenant, addressed to Tenant at the address set forth in Article I of this Lease except that from and after the Commencement Date the address of Tenant shall be the Premises (or to such other address or addresses as may from time to time hereafter be designated by Tenant by like notice).

Except as otherwise provided herein, all such notices shall be effective when received; provided, that (i) if receipt is refused, notice shall be effective upon the first occasion that

such receipt is refused, (ii) if the notice is unable to be delivered due to a change of address of which no notice was given, notice shall be effective upon the date such delivery was attempted, (iii) if the notice address is a post office box number, notice shall be effective the day after such notice is sent as provided hereinabove or (iv) if the notice is to a foreign address, notice shall be effective two (2) days after such notice is sent as provided hereinabove.

Where provision is made for the attention of an individual or department, the notice shall be effective only if the wrapper in which such notice is sent is addressed to the attention of such individual or department.

Any notice given by an attorney on behalf of Landlord or by Landlord's managing agent shall be considered as given by Landlord and shall be fully effective. Any notice given by an attorney on behalf of Tenant shall be considered as given by Tenant and shall be fully effective.

Time is of the essence with respect to any and all notices and periods for giving notice or taking any action thereto under this Lease.

9.12 When Lease Becomes Binding and Authority

Employees or agents of Landlord have no authority to make or agree to make a lease or any other agreement or undertaking in connection herewith. The submission of this document for examination and negotiation does not constitute an offer to lease, or a reservation of, or option for, the Premises, and this document shall become effective and binding only upon the execution and delivery hereof by both Landlord and Tenant. All negotiations, considerations, representations and understandings between Landlord and Tenant are incorporated herein and may be modified or altered only by written agreement between Landlord and Tenant, and no act or omission of any employee or agent of Landlord shall alter, change or modify any of the provisions hereof. Landlord and Tenant hereby represent and warrant to the other that all necessary action has been taken to enter this Lease and that the person signing this Lease on behalf of Landlord and Tenant has been duly authorized to do so.

9.13 Section Headings

The titles of the Articles throughout this Lease are for convenience and reference only, and the words contained therein shall in no way be held to explain, modify, amplify or aid in the interpretation, construction or meaning of the provisions of this Lease.

9.14 Rights of Mortgagee

This Lease shall be subject and subordinate to any mortgage now or hereafter on the Site or the Building, or both, and to each advance made or hereafter to be made under any mortgage, and to all renewals, modifications, consolidations, replacements and extensions thereof and all substitutions therefor provided that in the case of a future mortgage the holder of such mortgage agrees to recognize the rights of Tenant under this

Lease (including the right to use and occupy the Premises) upon the payment of rent and other charges payable by Tenant under this Lease and the performance by Tenant of Tenant's obligations hereunder. In confirmation of such subordination and recognition, Tenant shall execute and deliver promptly such instruments of subordination and recognition as such mortgagee may reasonably request subject to receipt of such instruments of recognition from such mortgagee as Tenant may reasonably request (Tenant hereby agreeing to pay any legal or other fees charged by the mortgagee in connection with providing the same). Tenant hereby appoints such mortgagee (from time to time) as Tenant's attorney-in-fact to execute such subordination upon default of Tenant in complying with such mortgagee's (from time to time) request. In the event that any mortgagee or its respective successor in title shall succeed to the interest of Landlord, then, this Lease shall nevertheless continue in full force and effect and Tenant shall and does hereby agree to attorn to such mortgagee or successor and to recognize such mortgagee or successor as its landlord. If any holder of a mortgage which includes the Premises, executed and recorded prior to the date of this Lease, shall so elect, this Lease and the rights of Tenant hereunder, shall be superior in right to the rights of such holder, with the same force and effect as if this Lease had been executed, delivered and recorded, or a statutory notice hereof recorded, prior to the execution, delivery and recording of any such mortgage. The election of any such holder shall become effective upon either notice from such holder to Tenant in the same fashion as notices from Landlord to Tenant are to be given hereunder or by the recording in the appropriate registry or recorder's office of an instrument in which such holder subordinates its rights under such mortgage to this Lease.

If in connection with obtaining financing for the Building or Office Park, a bank, insurance company, pension trust or other institutional lender shall request reasonable modifications in this Lease as a condition to such financing, Tenant will not unreasonably withhold, delay or condition its consent thereto, provided that such modifications do not increase the monetary obligations of Tenant hereunder or materially adversely affect the leasehold interest hereby created.

9.15 Status Reports and Financial Statements

Recognizing that Landlord may find it necessary to establish to third parties, such as accountants, banks, potential or existing mortgagees, potential purchasers or the like, the then current status of performance hereunder, Tenant, within ten (10) business days after the request of Landlord made from time to time, will promptly furnish to Landlord, or any existing or potential holder of any mortgage encumbering the Premises, the Building, the Site and/or the Property or any potential purchaser of the Premises, the Building, the Site and/or the Property, (each an "Interested Party"), a statement of the status of any matter pertaining to this Lease, including, without limitation, acknowledgments that (or the extent to which) each party is in compliance with its obligations under the terms of this Lease. In addition, Tenant shall deliver to Landlord, or any Interested Party designated by Landlord, financial statements of Tenant and any guarantor of Tenant's obligations under this Lease, as reasonably requested by Landlord, including, but not limited to financial statements for the past three (3) years; provided, however, that Landlord shall keep any non-public information provided by Tenant pursuant to this

Section 9.15 confidential, and shall not disclose the same other than (i) to Landlord's officers, employees and consultants (or to any of the Interested Parties, provided that Landlord informs such Interested Parties of Landlord's confidentiality obligations under this Section 9.15), or (ii) to the extent required by applicable law or by any administrative, governmental or judicial proceeding. Any such status statement or financial statement delivered by Tenant pursuant to this Section 9.15 (or any financial statement otherwise delivered by Tenant in connection with this Lease or any future amendment hereto) may be relied upon by any Interested Party.

9.16 Self-Help

If Tenant shall at any time default (beyond applicable notice and cure periods, if any) in the performance of any obligation under this Lease (although notice and cure shall not be required either in an emergency or where Tenant has alleged in written notice to Landlord that an unsafe or dangerous condition exists), Landlord shall have the right, but shall not be obligated, to enter upon the Premises and to perform such obligation notwithstanding the fact that no specific provision for such substituted performance by Landlord is made in this Lease with respect to such default. In performing such obligation, Landlord may make any payment of money or perform any other act. All sums so paid by Landlord (together with interest at the rate of two and one-half percentage points over the then prevailing prime rate in Boston as set by Bank of America, N.A., or its successor) (but in no event greater than the maximum rate permitted by applicable law) and all costs and expenses in connection with the performance of any such act by Landlord, shall be deemed to be Additional Rent under this Lease and shall be payable to Landlord immediately on demand. Landlord may exercise the foregoing rights without waiving any other of its rights or releasing Tenant from any of its obligations under this Lease.

9.17 Holding Over

Any holding over by Tenant after the expiration of the term of this Lease shall be treated as a tenancy at sufferance and shall be on the terms and conditions as set forth in this Lease, as far as applicable except that Tenant shall pay as a use and occupancy charge an amount equal to 175% of the greater of (x) the Annual Fixed Rent and Additional Rent calculated (on a daily basis) at the highest rate payable under the terms of this Lease or (y) the fair market rental value of the Premises, in each case for the period measured from the day on which Tenant's hold-over commences and terminating on the day on which Tenant vacates the Premises. In addition, Tenant shall save Landlord, its agents and employees harmless and will exonerate, defend and indemnify Landlord, its agents and employees from and against any and all damages which Landlord may suffer on account of Tenant's hold-over in the Premises after the expiration or prior termination of the term of this Lease. Nothing in the foregoing nor any other term or provision of this Lease shall be deemed to permit Tenant to retain possession of the Premises or hold over in the Premises after the expiration or earlier termination of the Lease Term. All property which remains in the Building or the Premises after the expiration or termination of this Lease (unless Tenant is then holding over) shall be conclusively deemed to be abandoned and may either be retained by Landlord as its property or sold or otherwise disposed of in such manner as Landlord may see fit. If any part thereof shall be sold, then Landlord may

receive the proceeds of such sale and apply the same, at its option against the expenses of the sale, the cost of moving and storage, any arrears of rent or other charges payable hereunder by Tenant to Landlord and any damages to which Landlord may be entitled under this Lease and at law and in equity.

9.18 Extension Option

(A) On the conditions (which conditions Landlord may waive by written notice to Tenant) that both at the time of exercise of the option to extend and as of the commencement of the Extended Term in question (i) there exists no Event of Default (defined in Section 7.1) and there have been no more than two (2) Event of Default occurrences during the Term, (ii) this Lease is still in full force and effect, and (iii) Tenant has neither assigned this Lease nor sublet the Premises (except for an assignment or subletting permitted without Landlord's consent under Section 5.6.4 hereof), Tenant shall have the right to extend the Term hereof upon all the same terms, conditions, covenants and agreements herein contained (except for the Annual Fixed Rent which shall be adjusted during the option periods as hereinbelow set forth) for one (1) period of three (3) years as hereinafter set forth. The option period is sometimes herein referred to as the "Extended Term." Notwithstanding any implication to the contrary Landlord has no obligation to make any additional payment to Tenant in respect of any construction allowance or the like or to perform any work to the Premises as a result of the exercise by Tenant of any such option.

(B) If Tenant desires to exercise the option to extend the Term, then Tenant shall give notice ("Exercise Notice") to Landlord, not earlier than twelve (12) months nor later than nine (9) months prior to the expiration of the Term as it may have been previously extended hereunder of Tenant's request for Landlord's quotation of the annual fair market rent for the Premises as of the commencement date of the extension period, such quotation to be based on the use of the Premises as first class office space utilizing properties of a similar character within the Boston West Suburban market (including premises within the Property if at the time such quotation is requested such premises shall be available for rent) (hereinafter called the "Annual Market Rent"). Within thirty (30) days after Landlord's receipt of Tenant's notice requesting such a quotation, Landlord shall notify Tenant of Landlord's quotation of the Annual Market Rent. If at the expiration of fifteen (15) days after the date when Landlord provides such quotation to Tenant as aforesaid (the "Negotiation Period"), Landlord and Tenant have not reached agreement on a determination of an Annual Fixed Rent for the Extended Term and executed a written instrument extending the Term of this Lease pursuant to such agreement, then Tenant shall have the right, for fifteen (15) days following the expiration of the Negotiation Period, to make a request to Landlord for a broker determination (the "Broker Determination") of the Prevailing Market Rent (as defined in Exhibit H attached hereto) for the Extended Term, which Broker Determination shall be made in the manner set forth in Exhibit H If Tenant timely shall have requested the Broker Determination, then the Annual Fixed Rent for the Extended Term shall be the greater of (a) the Prevailing Market Rent as determined by the Broker Determination or (b) the Annual Fixed Rent in effect during the last twelve (12) month period of the Lease Term

immediately prior to the Extended Term. If Tenant does not timely request the Broker Determination, then the Annual Fixed Rent during the Extended Term shall be equal to the greater of (a) the Annual Market Rent as quoted by Landlord for the option period, or (b) the Annual Fixed Rent in effect during the last twelve (12) month period of the Lease Term immediately prior to the Extended Term.

(C) Upon the giving of such notice by Tenant to Landlord exercising Tenant's option to extend the lease Term in accordance with the provisions of Section 9.18(B) above, this Lease and the Term hereof shall be extended, for the option period, without the necessity for the execution of any additional documents (except that Landlord and Tenant agree to enter into an instrument in writing setting forth the Annual Fixed Rent for the Extended Term determined in the relevant manner set forth in this Section 9.18); and in such event all references herein to the Term or the term of this Lease shall be construed as referring to the Term, as so extended, unless the context clearly otherwise requires, and except that there shall be no further option to extend the Lease Term.

9.19 Security Deposit

(A) If, in Section 1.1 hereof, a security deposit is specified, Tenant agrees that the same will be paid upon execution and delivery of this Lease, and that Landlord shall hold the same, throughout the term of this Lease (including any extension thereof), as security for the performance by Tenant of all obligations on the part of Tenant to be kept and performed. Landlord shall have the right from time to time without prejudice to any other remedy Landlord may have on account thereof, to apply such deposit, or any part thereof, to Landlord's damages arising from any default on the part of Tenant which continues beyond applicable notice and cure periods, if any. If Landlord so applies all or any portion of such deposit, Tenant shall within seven (7) days after notice from Landlord deliver cash to Landlord in an amount sufficient to restore such deposit to the full amount stated in Section 1.1. Tenant not then being in default and having performed all of its obligations under this Lease, including the payment of all Annual Fixed Rent, Landlord shall return the deposit, or so much thereof as shall not have theretofore been applied in accordance with the terms of this Section 9.19, to Tenant on the expiration or earlier termination of the term of this Lease and surrender possession of the Premises by Tenant to Landlord in the condition required in the Lease at such time. While Landlord holds such deposit, Landlord shall have no obligation to pay interest on the same and shall have the right to commingle the same with Landlord's other funds. If Landlord conveys Landlord's interest under this Lease, the deposit, or any part thereof not previously applied, may be turned over by Landlord to Landlord's grantee, and, if so turned over, Tenant agrees to look solely to such grantee for proper application of the deposit in accordance with the terms of this Section 9.19, and the return thereof in accordance herewith.

Neither the holder of any mortgage nor the lessor in any ground lease on property which includes the Premises shall ever be responsible to Tenant for the return or application of any such deposit, whether or not it succeeds to the position of Landlord hereunder, unless such deposit shall have been received in hand by such holder or ground lessor.

(B) (i) Landlord shall return a Thirteen Thousand Five Hundred and Forty-Three Dollars and 00/100 ($13,543.00) portion of such deposit to Tenant so that the remainder of such deposit shall be Twenty-Seven Thousand Eight Hundred and Eighty-Six Dollars and 00/100 ($27,086.00) on the first day of the eighteenth (18th) month of the Lease Term if (i) Tenant is not then in default under the terms of this Lease without the benefit of notice or grace, (ii) Landlord has not applied such deposit or any portion thereof to Landlord's damages arising from any default on the part of Tenant, whether or not Tenant has restored the amount so applied by Landlord and (iii) there have been no more than two (2) Event of Default occurrences during the Term.

(ii) If Tenant believes that it has satisfied all the conditions precedent to a reduction in the amount of the security deposit, then it shall request such reduction in writing to Landlord, which request shall certify to Landlord that all such conditions have been satisfied. If Landlord determines that all of the aforesaid conditions are met, the security deposit shall be so reduced in accordance with this Section.

9.20 Late Payment.

If Landlord shall not have received any payment or installment of Annual Fixed Rent or Additional Rent (the "Outstanding Amount") on or before the date on which the same first becomes payable under this Lease (the "Due Date"), the amount of such payment or installment shall incur a late charge equal to the sum of: (a) five percent (5%) of the Outstanding Amount for administration and bookkeeping costs associated with the late payment and (b) interest on the Outstanding Amount from the Due Date through and including the date such payment or installment is received by Landlord, at a rate equal to the lesser of (i) the rate announced by Bank of America, N.A. (or its successor) from time to time as its prime or base rate (or if such rate is no longer available, a comparable rate reasonably selected by Landlord), plus two percent (2%), or (ii) the maximum applicable legal rate, if any. Such interest shall be deemed Additional Rent and shall be paid by Tenant to Landlord upon demand. Notwithstanding the foregoing, Landlord agrees to waive the late charges due hereunder for the first late payment by Tenant under this Lease per calendar year, provided that Landlord receives such payment from Tenant within five (5) business days of the Due Date (provided further that if such payment is not received within the aforesaid five (5) business day period, interest on the Outstanding Amount will accrue as of the original Due Date). Any other late payments during that same calendar year shall be subject to the imposition of the late charge immediately following the Due Date as set forth above.

9.21 Tenant's Payments

Each and every payment and expenditure, other than Annual Fixed Rent, shall be deemed to be Additional Rent or additional rent hereunder, whether or not the provisions requiring payment of such amounts specifically so state, and shall be payable, unless otherwise provided in this Lease, within ten (10) days after written demand by Landlord, and in the case of the non-payment of any such amount, Landlord shall have, in addition to all of its other rights and remedies, all the rights and remedies available to Landlord

hereunder or by law in the case of non-payment of Annual Fixed Rent. Unless expressly otherwise provided in this Lease, the performance and observance by Tenant of all the terms, covenants and conditions of this Lease to be performed and observed by Tenant shall be at Tenant's sole cost and expense. If Tenant has not objected to any statement of Additional Rent which is rendered by Landlord to Tenant within ninety (90) days after Landlord has rendered the same to Tenant, then the same shall be deemed to be a final account between Landlord and Tenant not subject to any further dispute. In the event that Tenant shall seek Landlord's consent or approval under this Lease, then Tenant shall reimburse Landlord, upon demand, as Additional Rent, for all reasonable costs and expenses, including legal and architectural costs and expenses, incurred by Landlord in processing such request, whether or not such consent or approval shall be given. Notwithstanding anything in this Lease to the contrary, if Landlord or any affiliate of Landlord has elected to qualify as a real estate investment trust ("REIT"), any service required or permitted to be performed by Landlord pursuant to this Lease, the charge or cost of which may be treated as impermissible tenant service income under the laws governing a REIT, may be performed by a taxable REIT subsidiary that is affiliated with either Landlord or Landlord's property manager, an independent contractor of Landlord or Landlord's property manager (the "Service Provider"). If Tenant is subject to a charge under this Lease for any such service, then, at Landlord's direction, Tenant will pay such charge either to Landlord for further payment to the Service Provider or directly to the Service Provider, and, in either case, (i) Landlord will credit such payment against Additional Rent due from Tenant under this Lease for such service, and (ii) such payment to the Service Provider will not relieve Landlord from any obligation under the Lease concerning the provisions of such service.

9.22 Waiver of Trial By Jury

To induce Landlord to enter into this Lease, Tenant hereby waives any right to trial by jury in any action, proceeding or counterclaim brought by either Landlord or Tenant on any matters whatsoever arising out of or any way connected with this Lease, the relationship of the Landlord and the Tenant, the Tenant's use or occupancy of the Premises and/or any claim of injury or damage, including but not limited to, any summary process eviction action.

9.23 Electronic Signatures

The parties acknowledge and agree that this Lease may be executed by electronic signature, which shall be considered as an original signature for all purposes and shall have the same force and effect as an original signature. Without limitation, "electronic signature" shall include faxed versions of an original signature or electronically scanned and transmitted versions (e.g., via pdf) of an original signature.

9.24 Governing Law

This Lease shall be governed exclusively by the provisions hereof and by the law of the Commonwealth of Massachusetts, as the same may from time to time exist.

9.25 Light and Air

Tenant agrees that no diminution of light, air or view by any structure (inside or outside the Building) which may hereafter be erected or modified (whether or not by Landlord) shall entitle Tenant to any reduction of rent hereunder, result in any liability of Landlord to Tenant, or in any other way affect this Lease.

9.26 Name of Building

Tenant shall not use the name of the Building or Office Park for any purpose other than as the address of the business conducted by Tenant in the Premises without the written consent of Landlord. Landlord reserves the right to change the name of the Building and/or the Office Park at any time in its sole discretion by written notice to Tenant and Landlord shall not be liable to Tenant for any loss, cost or expense on account of any such change of name.

[*Signatures on Following Page*]

EXECUTED in two or more counterparts each of which shall be deemed to be an original.

WITNESS:

LANDLORD:

BP BAY COLONY LLC, a Delaware limited liability company

BY: BP BAY COLONY HOLDINGS LLC, a Delaware limited liability company, its sole member

BY: BOSTON PROPERTIES LIMITED PARTNERSHIP, a Delaware limited partnership, its member

BY: BOSTON PROPERTIES, INC., a Delaware Corporation, its general partner

By: /s/ David C. Provost
Name: David C. Provost
Title: SVP

WITNESS:

TENANT:

ELOXX PHARMACEUTICALS, INC, a Delaware corporation

By: /s/ Silvia Norman
Name: Silvia Norman
Title: CEO
Hereunto duly authorized

EXHIBIT A

DESCRIPTION OF OFFICE PARK

Parcel I:

That certain parcel of land situate in Waltham in the County of Middlesex, Commonwealth of Massachusetts, described as follows:

Northeasterly by Winter Street, eight hundred sixty-six and 87/100 feet;

Easterly by land now or formerly of City of Cambridge, four hundred forty-two and 93/100 feet;

Southwesterly by land now or formerly of Waltham Resources Corp., ten hundred and fifty feet; and

Northerly, by three lines measuring together, four hundred fourteen and 19/100 feet,

Northwesterly, by three lines measuring together, seven hundred forty-three and 28/100 feet,

Southwesterly, being a curving line, three hundred sixty-four and 63/100 feet,

Northwesterly, one hundred forty and 15/100 feet,

Northeasterly, ninety-two and 37/100 feet,

Northwesterly, twenty feet,

Northeasterly, three hundred and eighty-three feet, and

Northwesterly, twenty feet, all by Lot 6 as shown on plan hereinafter mentioned.

Said parcel is shown as Lot 5, Sheet 4, on said plan. (Plan No. 41218C).

All of said boundaries are determined by the Land Court to be located as shown on a subdivision plan, as approved by the Land Court, filed in the Land Registration Office, a copy of which is filed in the Registry of Deeds for the South Registry District of Middlesex County in Registration Book 1051, Page 79, with Certificate 184229.

Parcel II:

That certain parcel of land situate in Waltham in the County of Middlesex, Commonwealth of Massachusetts, described as follows:

Northeasterly, by Winter Street, four hundred and one feet,

Southeasterly, twenty feet,

Southwesterly, three hundred and eighty-three feet,

Southeasterly, twenty feet,

Southwesterly, ninety-two and 37/100 feet,

Southeasterly, one hundred forty and 19/100 feet,

Northeasterly, being a curving line, three hundred sixty-four and 63/100 feet,

Southeasterly, by three lines measuring together, seven hundred forty-three and 28/100 feet, and

Southerly, by three lines measuring together, four hundred fourteen and 19/100 feet, all by Lot 5 as shown on plan hereinafter mentioned;

Southwesterly by land now or formerly of Waltham Resources Corp., four hundred eighty-nine and 18/100 feet,

Northerly, four hundred twelve and 10/100 feet, and

Northwesterly, three hundred twenty-six and 44/100 feet, by Lot 7 on said plan; and

Northeasterly, thirteen and 10/100 feet,

Northwesterly, three hundred seventy-nine and 63/100 feet,

Northwesterly, again, four hundred forty-seven and 33/100 feet,

Northeasterly, two hundred five and 91/100 feet, and

Northwesterly, twenty feet, all by Lot 8 on said plan.

Said parcel is shown as Lot 6, Sheet 3, on said plan, (Plan No. 412 l 8C).

All of said boundaries are determined by the Land Court to be located as shown on a subdivision plan, as approved by the Land Court, filed in the Land Registration Office, a copy of which is filed in the Registry of Deeds for the South Registry District of Middlesex County in Registration Book 1051, Page 79, with Certificate 184229.

Parcel III:

Those certain parcels of land situate in Waltham in the County of Middlesex, Commonwealth of Massachusetts, being shown as Lots 10 and 11 on a plan entitled "Land Court Plan of Land in Waltham, Mass., Prepared for: London & Leeds Development Corp., scale: l"-80', dated May 2, 1995, prepared by Schofield Brothers of New England, Inc., 1071 Worcester Road, Framingham, Mass. 01701, filed in the Land Registration Office as Land Court Plan No. 41218E.

Parcel IV {Appurtenant Rights):

TOGETHER WITH the rights, easements, benefits and appurtenances in the following instruments:

A. Declaration of Easement dated April 30, 1984 and filed with the Middlesex South Registry District of the Land Court as Document Number 661086.

B. Declaration of Restrictions dated October 20, 1983 and recorded with the Middlesex South Registry of Deeds at Book 15274, Page 590.

C. Grant of Utility Easements dated October 20, 1983 and recorded with the Middlesex South Registry of Deeds at Book 15274, Page 577 and filed with the Middlesex South Registry District of the Land Court as Document Number 649824.

D. License Agreement dated June 8, 1984 and recorded with the Middlesex South Registry of Deeds at Book 15651, Page 171.

E. Declaration of Easements and Covenants dated October 30, 1986 and filed with the Land Court as Document number 726257; as amended by First Amendment of Declaration of Easements and Covenants dated December 15, 1997 and filed with the Land Court as Document Number 1049953.

F. Grant of Drainage Easements dated October 20, 1983 and recorded with the Registry of Deeds at Book 15274, Page 597.

EXHIBIT B

WORK AGREEMENT

1.1 Condition of Premises 2
1.2 Quality and Performance of Work 2
1.3 Early Access by Tenant 2

1.1 Condition of Premises

(A) Landlord shall perform the following work in the Premises at Landlord's sole cost and expense (collectively, the "Landlord Work"): (i) install new building standard carpet in all existing carpeted areas throughout the Premises, (ii) make any needed repairs to the kitchen plumbing fixtures as determined by Landlord in its reasonable discretion, and (iii) repair sheetrock as needed and paint the interior of the Premises with building standard paint. Except for the Landlord Work, Tenant shall accept the Premises in their as-is condition without any obligation on the Landlord's part to perform any additions, alterations, improvements, demolition or other work therein or pertaining thereto.

(B) If Landlord shall have failed to substantially complete the Landlord Work on or before Outside Completion Date, the Annual Fixed Rent shall be abated by one (1) day for each day beyond the Outside Completion Date that Landlord thus fails to substantially complete the Landlord Work. The foregoing rent abatement shall be Tenant's sole and exclusive remedy at law or in equity or otherwise for Landlord's failure to substantially complete the Landlord Work within the time period set forth above.

1.2 Quality and Performance of Work

All construction work required or permitted by the Lease shall be done in a good and workmanlike manner and in compliance with all applicable laws, ordinances, rules, regulations, statutes, by-laws, court decisions, and orders and requirements of all public authorities ("Legal Requirements") and all Insurance Requirements (as defined in Section 5.12 of the Lease). All of Tenant's work shall be coordinated with any work being performed by or for Landlord and in such manner as to maintain harmonious labor relations. Each party may inspect the work of the other at reasonable times and shall promptly give notice of observed defects. Each patty authorizes the other to rely in connection with design and construction upon approval and other actions on the party's behalf by any Construction Representative of the party named in Section 1.1 of the Lease or any person hereafter designated in substitution or addition by notice to the party relying.

1.3 Early Access by Tenant

Beginning on the date that is two (2) weeks prior to the date on which Landlord reasonably estimates that Landlord will deliver the Premises to Tenant with the Landlord Work substantially complete, Landlord shall permit Tenant access (which shall include access to the server room within the Premises) for installing Tenant's trade fixtures, office equipment and furnishings in portions of the Premises prior to substantial completion of Landlord Work when it can be done without material interference with remaining work or with the maintenance of harmonious labor relations. Any such access by Tenant shall be upon all of the terms and conditions of the Lease (other than the payment of Annual Fixed Rent) and shall be at Tenant's sole risk, and Landlord shall not be responsible for any injury to persons or damage to property resulting from such early access by Tenant.

EXHIBIT C

LANDLORD SERVICES

I. CLEANING

Cleaning and janitorial services shall be provided as needed Monday through Friday, exclusive of holidays observed by the cleaning company and, Saturdays and Sundays.

A. OFFICE AREAS

Cleaning and janitorial services to be provided in the office areas shall include:

1. Vacuuming, damp mopping of resilient floors and trash removal.
2. Dusting of horizontal surfaces within normal reach (tenant equipment to remain in place).
3. High dusting and dusting of vertical blinds to be rendered as needed.

B. LAVATORIES

Cleaning and janitorial services to be provided m the common area lavatories of the building shall include:

I. Dusting, damp mopping of resilient floors, trash removal, sanitizing of basins, bowls and urinals as well as cleaning of mirrors and bright work.
2. Refilling of soap, towel, tissue and sanitary dispensers to be rendered as necessary.
3. High dusting to be rendered as needed.

C. MAIN LOBBIES, ELEVATORS, STAIRWELLS AND COMMON CORRIDORS

Cleaning and janitorial services to be provided in the common areas of the building shall include:

1. Trash removal, vacuuming, dusting and damp mopping of resilient floors and cleaning and sanitizing of water fountains.
2. High dusting to be rendered as needed.

D. WINDOW CLEANING

All exterior windows shall be washed on the inside and outside surfaces semi-annually.

II. HVAC

A. Heating, ventilating and air conditioning equipment will be provided with sufficient capacity to accommodate a maximum population density of one (1) person per one hundred fifty (150) square feet of useable floor area served, and a combined lighting and standard electrical load of 3.0 watts per square foot of useable floor area. In the event Tenant introduces into the Premises personnel or equipment which overloads the system's ability to adequately perform its proper functions, Landlord shall so notify Tenant in writing and supplementary system(s) may be required and installed by Landlord at Tenant's expense, if within fifteen (15) days Tenant has not modified its use so as not to cause such overload.

Operating criteria of the basic system shall not be less than the following:

(i) Cooling season indoor temperatures of not in excess of 73 - 79 degrees Fahrenheit when outdoor temperatures are 91 degrees Fahrenheit ambient.

(ii) Heating season minimum room temperature of 68 - 75 degrees Fahrenheit when outdoor temperatures are 6 degrees Fahrenheit ambient.

B. Landlord shall provide heating, ventilating and air conditioning as normal seasonal changes may require during the hours of 8:00 a.m. to 6:00 p.m. Monday through Friday (legal holidays in all cases excepted).

If Tenant shall require air conditioning (during the air conditioning season) or heating or ventilating during any other time period, Landlord shall use landlord's best efforts to furnish such services for the area or areas specified by written request of Tenant delivered to the Building Superintendent or the Landlord before 3:00 p.m. of the business day preceding the extra usage. Landlord shall charge Tenant for such extra-hours usage at reasonable rates customary for first-class office buildings in the Boston Suburban market, and Tenant shall pay Landlord, as Additional Rent, upon receipt of billing therefor.

III. ELECTRICAL SERVICES

A. Landlord shall provide electric power for a combined load of 3.0 watts per square foot of useable area for lighting and for office machines through standard receptacles for the typical office space.

B. In the event that Tenant has special equipment (such as computers and reproduction equipment) that requires either 3-phase electric power or any voltage other than 120 volts, or for any other usage in excess of 3.0 watts per square foot, Landlord may at its option require the installation of separate metering (Tenant being solely responsible for the costs of any such separate meter and the installation thereof) and direct billing to Tenant for the electric power required for any such special equipment.

C. Landlord will furnish and install, at Tenant's expense, all replacement lighting tubes, lamps and ballasts required by Tenant.

IV. ELEVATORS

Provide passenger elevator service.

V. WATER

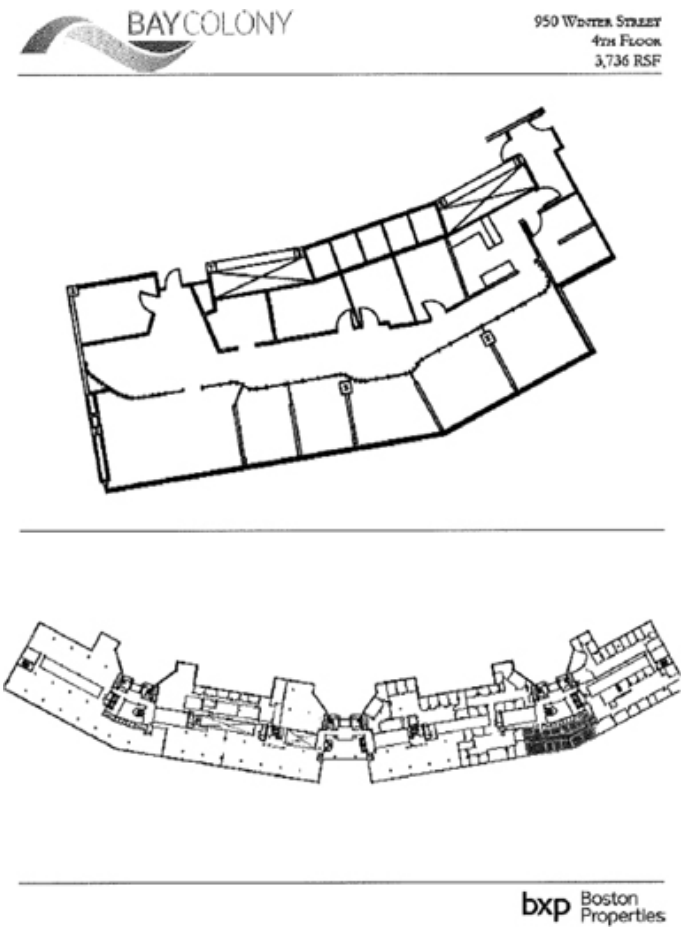
Provide tempered water for lavatory purposes and cold water for drinking, lavatory and toilet purposes.

VI. CARD ACCESS SYSTEM

Landlord will provide a card access system at one entry door of the building.

EXHIBIT D

FLOOR PLAN



bxp Boston Properties

EXHIBIT E

FORM OF DECLARATION AFFIXING THE COMMENCEMENT DATE OF LEASE

THIS AGREEMENT made this day of 200 , by and between ***[LANDLORD]*** (hereinafter "Landlord") and ***[TENANT]*** (hereinafter "Tenant").

W I T N E S S E T H T H A T:

1. This Agreement is made pursuant to Section ***[2.4]*** of that certain Lease dated ***[date]***, between Landlord and Tenant (the "Lease").

2. It is hereby stipulated that the Lease Term commenced on ***[commencement date]***, (being the "Commencement Date" under the Lease), and shall end and expire on ***[expiration date]***, unless sooner terminated or extended, as provided for in the Lease.

WITNESS the execution hereof by persons hereunto duly authorized. the date first above written.

LANDLORD:

[INSERT LL SIGNATURE BLOCK]

By: _____
Name:
Title:

TENANT:

ATTEST:

[TENANT]

By: _____
Name:
Title:

By: /s/ Silvia Noiman
Name: Silvia Noiman
Title: CEO
Hereunto duly authorized

EXHIBIT F

FORM OF CERTIFICATE OF INSURANCE

ACORD

CERTIFICATE OF LIABILITY INSURANCE

DATE (M/D/YYYY)

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER
—

CONTACT NAME:
PHONE (A/C, No, Ext):
FAX (A/C, No):
E-MAIL ADDRESS:

INSURER(S) AFFORDING COVERAGE	NAIC #
INSURER A:	
INSURER B:	
INSURER C:	
INSURER D:	
INSURER E:	
INSURER F:	

INSURED
SAMPLE

COVERAGES CERTIFICATE NUMBER: REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
	COMMERCIAL GENERAL LIABILITY						EACH OCCURRENCE	$
	☐ CLAIMS-MADE ☐ OCCUR						DAMAGE TO RENTED PREMISES (Ea occurrence)	$
							MED EXP (Any one person)	$
							PERSONAL & ADV INJURY	$
	GEN'L AGGREGATE LIMIT APPLIES PER:						GENERAL AGGREGATE	$
	☐ POLICY ☐ PRO-JECT ☐ LOC						PRODUCTS - COMP/OP AGG	$
	☐ OTHER							$
	AUTOMOBILE LIABILITY						COMBINED SINGLE LIMIT (Ea accident)	$
	X ANY AUTO						BODILY INJURY (Per person)	$
	☐ ALL OWNED AUTOS ☐ SCHEDULED AUTOS						BODILY INJURY (Per accident)	$
	☐ HIRED AUTOS ☐ NON-OWNED AUTOS						PROPERTY DAMAGE (Per accident)	$
								$
	X UMBRELLA LIAB X OCCUR						EACH OCCURRENCE	$
	☐ EXCESS LIAB ☐ CLAIMS-MADE						AGGREGATE	$
	☐ DED ☐ RETENTION $							$
	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY	Y/N					☐ PER STATUTE ☐ OTH-ER	
	ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	N	N/A				E.L. EACH ACCIDENT	$
							E.L. DISEASE - EA EMPLOYEE	$
							E.L. DISEASE - POLICY LIMIT	$

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

CERTIFICATE HOLDER

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE
of Marsh USA Inc.

ACORD 25 (2014/01) The ACORD name and logo are registered marks of ACORD

ACORD

EVIDENCE OF PROPERTY INSURANCE

DATE (MM/DD/YYYY)

THIS EVIDENCE OF PROPERTY INSURANCE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE ADDITIONAL INTEREST NAMED BELOW. THIS EVIDENCE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS EVIDENCE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE ADDITIONAL INTEREST.

AGENCY	PHONE (A/C, No, Ext):	COMPANY
FAX (A/C, No):	E-MAIL ADDRESS:	
CODE:	SUB CODE:	
AGENCY CUSTOMER ID #:		
INSURED	LOAN NUMBER	POLICY NUMBER
	EFFECTIVE DATE / EXPIRATION DATE / CONTINUED UNTIL TERMINATED IF CHECKED	
	THIS REPLACES PRIOR EVIDENCE DATED:	

Enter text: The named insured(s) as it/they will appear on the policy declarations page.

PROPERTY INFORMATION

LOCATION/DESCRIPTION

THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS EVIDENCE OF PROPERTY INSURANCE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

COVERAGE INFORMATION

COVERAGE / PERILS / FORMS	AMOUNT OF INSURANCE	DEDUCTIBLE

REMARKS (Including Special Conditions)

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

ADDITIONAL INTEREST

NAME AND ADDRESS	☐ MORTGAGEE ☐ LOSS PAYEE	☐ ADDITIONAL INSURED
	LOAN #	
	AUTHORIZED REPRESENTATIVE	

ACORD 27 (2009/12)

EXHIBIT G

LIST OF MORTGAGES

None.

EXHIBIT H

BROKER DETERMINATION OF PREVAILING MARKET RENT

Where in the Lease to which this Exhibit is attached provision is made for a Broker Determination of Prevailing Market Rent, the following procedures and requirements shall apply:

1. Tenant's Request. Tenant shall send a notice to Landlord in accordance with Section 9.18 of the Lease, requesting a Broker Determination of the Prevailing Market Rent, which notice to be effective must (i) make explicit reference to the Lease and to the specific section of the Lease pursuant to which said request is being made, (ii) include the name of a broker selected by Tenant to act for Tenant, which broker shall be affiliated with a major Boston commercial real estate brokerage firm selected by Tenant and which broker shall have at least ten (10) years' experience dealing in properties of a nature and type generally similar to the Building located in the Boston West Suburban Market, and (iii) explicitly state that Landlord is required to notify Tenant within thirty (30) days of an additional broker selected by Landlord.

2. Landlord's Response. Within thirty (30) days after Landlord's receipt of Tenant's notice requesting the Broker Determination and stating the name of the broker selected by Tenant, Landlord shall give written notice to Tenant of Landlord's selection of a broker having at least the affiliation and experience referred to above.

3. Selection of Third Broker. Within ten (10) days thereafter the two (2) brokers so selected shall select a third such broker also having at least the affiliation and experience referred to above.

4. Rental Value Determination. Within thirty (30) days after the selection of the third broker, the three (3) brokers so selected, by majority opinion, shall make a determination of the annual fair market rental value of the Premises for the Extended Term. Such annual fair market rental value determination (x) may include provision for annual increases in rent during said Extended Term if so determined, (y) shall take into account the as-is condition of the Premises and (z) shall take account of, and be expressed in relation to, the payment in respect of taxes and operating costs and provisions for paying for so-called tenant electricity as contained in the Lease. The brokers shall advise Landlord and Tenant in writing by the expiration of said thirty (30) day period of the annual fair market rental value which as so determined shall be referred to as the "Prevailing Market Rent."

5. Resolution of Broker Deadlock. If the Brokers are unable to agree at least by majority on a determination of annual fair market rental value, then the brokers shall send a notice to Landlord and Tenant by the end of the thirty (30) day period for making said determination setting forth their individual determinations of annual fair market rental value, and the highest such determination and the lowest such determination shall be disregarded and the remaining determination shall be deemed to be the determination of annual fair market rental value and shall be referred to as the Prevailing Market Rent.

6. Costs. Each party shall pay the costs and expenses of the broker selected by it and each shall pay one half (1/2) of the costs and expenses of the third broker.

7. Failure to Select Broker or Failure of Broker to Serve. If Tenant shall have requested a Broker Determination and Landlord shall not have designated a broker within the time period provided therefor above and such failure shall continue for more than ten (10) days after notice thereof, then Tenant's broker shall alone make the determination of the Prevailing Market Rent in writing to Landlord and Tenant within thirty (30) days after the expiration of Landlord's right to designate a broker hereunder. If Tenant and Landlord have both designated brokers but the two brokers so designated do not, within a period of fifteen (15) days after the appointment of the second broker, agree upon and designate the third broker willing so to act, the Tenant, the Landlord or either broker previously designated may request the Boston Bar Association (or such organization as may succeed to the Boston Bar Association) to designate the third broker willing so to act and a broker so appointed shall, for all purposes, have the same standing and powers as though he had been reasonably appointed by the brokers first appointed. In case of the inability or refusal to serve of any person designated as a broker, or in case any broker for any reason ceases to be such, a broker to fill such vacancy shall be appointed by the Tenant, the Landlord, the brokers first appointed or the Boston Bar Association, as the case may be, whichever made the original appointment, or if the person who made the original appointment fails to fill such vacancy, upon application of any broker who continues to act or by the Landlord or Tenant such vacancy may be filled by the said Boston Bar Association, and any broker so appointed to fill such vacancy shall have the same standing and powers as though originally appointed.

EXHIBIT I

ACKNOWLEDGEMENT OF NAME CHANGE

RE: Lease dated , 2017 by and between BP BAY COLONY LLC, a Delaware limited liability company ("**Landlord**") and ELOXX PHARMACEUTICALS, INC., a Delaware company ("**Tenant**"), respecting premises located at 950 Winter Street, Waltham, Massachusetts (the "**Lease**").

The undersigned hereby certifies that (i) Eloxx Pharmaceuticals, Inc. has changed its name to Eloxx Pharmaceuticals U.S. Sub, Inc. ("**New Tenant**"), (ii) the change effects the name only and there has been no change in the structure of the tenant entity (i.e., no merger, acquisition, assignment of lease or sublease of premises, etc. except for the Merger (as defined in Section 5.6.4 of the Lease)) and (iii) such change of name does not constitute an assignment, subletting or other transaction requiring Landlord's consent or acknowledgement under the Lease.

New Tenant shall provide the Landlord concurrently with the execution and delivery of this Acknowledgement on behalf of New Tenant a certificate of insurance pursuant to the terms and conditions of the Lease.

Electronic Signatures. The parties acknowledge and agree that this Acknowledgement may be executed by electronic signature, which shall be considered as an original signature for all purposes and shall have the same force and effect as an original signature. Without limitation, "electronic signature" shall include !axed versions of an original signature or electronically scanned and transmitted versions (e.g., via pdf) of an original signature.

ELOXX PHARMACEUTICALS I.S. SUB, INC., a Delaware limited liability company

By: /s/ Silvia Noiman
Name: Silvia Noiman
Title: CEO
(Duly Authorized)

Date:

[Signatures Continue on Following Page]

Landlord hereby acknowledges the above.

BP BAY COLONY LLC, a Delaware limited liability company

BY: BP BAY COLONY HOLDINGS LLC, a Delaware limited liability company, its sole member

BY: BOSTON PROPERTIES LIMITED PARTNERSHIP, a Delaware limited partnership, its member

BY: BOSTON PROPERTIES, INC., a Delaware Corporation, its general partner

BY: _____
Name:
Title:

Exhibit 21.1

Subsidiaries of Eloxx Pharmaceuticals, Inc.
as of December 31, 2017

Eloxx Pharmaceuticals Ltd., a private limited company organized under the laws of Israel

Exhibit 23.1

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in the Registration Statements on Form S-8 dated January 10, 2018 of our report relating to the consolidated financial statements of Eloxx Pharmaceuticals, Inc. (the "Company"), appearing in this Annual Report on Form 10-K of the Company for the year ended December 31, 2017.

Tel Aviv, Israel
March 16, 2018

/s/ KOST FORER GABBAY & KASIERER
KOST FORER GABBAY & KASIERER
A member of Ernst & Young Global

Exhibit 31.1

CERTIFICATION

I, Robert E. Ward, certify that:

1. I have reviewed this annual report on Form 10-K of Eloxx Pharmaceuticals, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

(a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

(b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

(c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

(d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

(a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

(b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

/s/ Robert E. Ward

Chairman of the Board of Directors
and Chief Executive Officer
(Principal Executive Officer)

DATE: March 16, 2018

Exhibit 31.2

CERTIFICATION

I, Gregory Weaver, certify that:

1. I have reviewed this annual report on Form 10-K of Eloxx Pharmaceuticals, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

(a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

(b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

(c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

(d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant’s other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant’s auditors and the audit committee of the registrant’s board of directors (or persons performing the equivalent functions):

(a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant’s ability to record, process, summarize and report financial information; and

(b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant’s internal control over financial reporting.

/s/ Gregory Weaver

Chief Financial Officer
(Principal Financial Officer and Principal Accounting Officer)

DATE: March 16, 2018

Exhibit 32.1

CERTIFICATION

Pursuant to the requirement set forth in Rule 13a-14(b) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), and Section 1350 of Chapter 63 of Title 18 of the United States Code (18 U.S.C. §1350), Robert E. Ward, Chief Executive Officer of Eloxx Pharmaceuticals, Inc. (the "Company"), hereby certifies that, to the best of his knowledge:

1. The Company's Annual Report on Form 10-K for the period ended December 31, 2017, to which this Certification is attached as Exhibit 32.1 (the "Annual Report") fully complies with the requirements of Section 13(a) or Section 15(d) of the Exchange Act, and

2. The information contained in the Annual Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

IN WITNESS WHEREOF, the undersigned have set their hands hereto as of the 16th day of March, 2018.

/s/ Robert E. Ward

Robert E. Ward.
Chief Executive Officer

(1) This certification accompanies the Form 10-K to which it relates, is not deemed filed with the Securities and Exchange Commission and is not to be incorporated by reference into any filing of Eloxx Pharmaceuticals, Inc. under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended (whether made before or after the date of the Form 10-K), irrespective of any general incorporation language contained in such filing.

Exhibit 32.2

CERTIFICATION

Pursuant to the requirement set forth in Rule 13a-14(b) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), and Section 1350 of Chapter 63 of Title 18 of the United States Code (18 U.S.C. §1350), Gregory Weaver, Chief Financial Officer of Eloxx Pharmaceuticals, Inc. (the "Company"), hereby certifies that, to the best of his knowledge:

1. The Company's Annual Report on Form 10-K for the period ended December 31, 2017, to which this Certification is attached as Exhibit 32.1 (the "Annual Report") fully complies with the requirements of Section 13(a) or Section 15(d) of the Exchange Act, and

2. The information contained in the Annual Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

IN WITNESS WHEREOF, the undersigned have set their hands hereto as of the 16th day of March, 2018.

/s/ Gregory Weaver
Gregory Weaver
Chief Financial Officer

(1) This certification accompanies the Form 10-K to which it relates, is not deemed filed with the Securities and Exchange Commission and is not to be incorporated by reference into any filing of Eloxx Pharmaceuticals, Inc. under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended (whether made before or after the date of the Form 10-K), irrespective of any general incorporation language contained in such filing.