

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

Form 10-Q

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

For the quarterly period ended March 31, 2021

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
(State or other jurisdiction of
incorporation or organization)

84-1368850
(I.R.S. Employer
Identification Number)

950 Winter Street
Waltham, Massachusetts 02451
(Address of principal executive offices) (Zip Code)
781-577-5300
(Registrant's telephone number, including area code)

Securities registered pursuant to Section 12(b) of the Securities Exchange Act of 1934:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock, \$0.01 par value per share	ELOX	The Nasdaq Global Market

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

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

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

Large accelerated filer	<input type="checkbox"/>	Accelerated filer	<input type="checkbox"/>
Non-accelerated filer	<input checked="" type="checkbox"/>	Smaller reporting company	<input checked="" type="checkbox"/>
		Emerging growth company	<input type="checkbox"/>

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

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

On May 3, 2021, the registrant had 47,856,257 shares of common stock, \$0.01 par value per share, outstanding.

ELOXX PHARMACEUTICALS, INC.
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Special Note Regarding Forward-Looking Statements

Eloxx Pharmaceuticals, Inc., together with its subsidiaries, is collectively referred to herein as “we,” “our,” “us,” “Eloxx” or the “Company”. *Hyperlinks and web addresses are provided as a convenience and for informational purposes only. Eloxx bears no responsibility for the security or content of external websites.*

This Quarterly Report on Form 10-Q, or this Report, and information incorporated herein, contain forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. We intend such forward-looking statements to be covered by the safe harbor provisions for forward-looking statements contained in Section 27A of the Securities Act of 1933, as amended (the “Securities Act”) and Section 21E of the Securities Exchange Act of 1934, as amended (the “Exchange Act”). All statements other than statements of present and historical facts contained in this Report, including without limitation statements regarding our strategy, future operations, future financial position, future revenues, projected costs, prospects, plans and objectives of management, are forward-looking statements. Without limiting the foregoing, in some cases, you can identify forward-looking statements by terms such as “aim,” “may,” “will,” “would,” “should,” “expect,” “exploring,” “plan,” “anticipate,” “could,” “intend,” “target,” “project,” “contemplate,” “believe,” “estimate,” “predict,” “potential,” “seeks,” or “continue” or the negative of these terms or other similar expressions, although not all forward-looking statements contain these words. No forward-looking statement is a guarantee of future results, performance, or achievements, and one should avoid placing undue reliance on such statements.

Forward-looking statements are based on our management’s beliefs and assumptions and on information currently available to us. Such beliefs and assumptions may or may not prove to be correct. Additionally, such forward-looking statements are subject to a number of known and unknown risks, uncertainties and assumptions, and actual results may differ materially from those expressed or implied in the forward-looking statements due to various factors, including, but not limited to, those identified in Part I. Item 1A. “Risk Factors” and Part II. Item 7. “Management’s Discussion and Analysis of Financial Condition and Results of Operations.” These risks and uncertainties include, but are not limited to:

- risks related to our dependence on our lead product candidate, ELX-02 and our ability to progress any of our product candidates in preclinical or clinical trials;
- the length and expense of preclinical and clinical trial development and the uncertain outcomes from such trials;
- risk related to doing business with collaborators, healthcare professionals, principal investigators, consultants, vendors, customers, and third-party payors;
- risks that our product candidates may cause adverse events or other properties that delay or prevent regulatory approval or market acceptance;
- risks related to the scope, rate and progress of our preclinical studies and clinical trials and other research and development activities;
- risks related to patient recruitment and enrollment in our clinical trials;
- the impact of the global COVID-19 pandemic or other public health epidemics and other factors beyond our control on our clinical trials, operations, vendors, suppliers and employees;
- risks related to regulatory approvals and other requirements applicable to our product candidates;
- risks related to our ability to obtain the capital necessary to fund our operations;
- risks relating to the cost of filing, prosecuting, defending and enforcing any patent claims and other intellectual property rights;
- risks related to our ability to obtain adequate funding to finance our operations;
- our and our stockholders ability to realize benefits from our strategic initiatives, including our acquisition of Zikani; and
- general business conditions, regulatory environment, competition and market for our products.

Moreover, we operate in an evolving environment. New risk factors and uncertainties may emerge from time to time, and it is not possible for management to predict all risks and uncertainties.

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.

MARKET AND INDUSTRY DATA

This Report and the other documents incorporated herein by reference include 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 and disclaim responsibility for its content.

RISK FACTOR SUMMARY

The following is a summary of the principal risks of an investment in our common stock. This summary does not list all the risks that we face. Additional discussion of the risks summarized below follow directly under the heading “Risk Factors” and should be carefully considered, together with other information in our Annual Report on Form 10-K filed with the U.S. Securities and Exchange Commission (the “SEC”) on March 12, 2021 and our other filings with the SEC before making an investment decision regarding our common stock.

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

- The success of our lead product candidate, ELX-02, is critical to our business. If ELX-02 fails during development, it may adversely impact the commercial viability of ELX-02 and our business.
- Positive results from preclinical testing of ELX-02 are not necessarily predictive of the results of clinical trials of ELX-02. If we cannot achieve positive results in our clinical trials, we may be unable to successfully develop, obtain regulatory approval for and commercialize ELX-02.
- Our product candidates, including ELX-02, may cause adverse events or have other properties that could delay or prevent their regulatory approval or limit the scope of any approved label or market acceptance.
- Our clinical trials are costly, 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.
- 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.
- 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 beyond our control, which could impair our clinical development programs.
- We are subject to extensive governmental regulation including the requirements of the U.S. Food and Drug Administration (“FDA”) and comparable foreign regulatory authorities for development and approval of our product candidates before they can be marketed.
- We may not obtain the necessary FDA, European Medicines Agency (or “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.
- 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.
- Even though we have received orphan drug designation from the FDA for ELX-02 for the treatment of cystic fibrosis, cystinosis, MPS I, and Rett syndrome, we may not be able to obtain orphan drug marketing exclusivity for ELX-02 or any of our other potential product candidates for other indications.
- 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.

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

Risks Related to Our Business and Operations

- We may seek 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, collaboration or other strategic transaction.
- 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.
- Our business could be adversely affected by the effects of widespread public health epidemics and other factors beyond our control.
- Security breaches, cyber-attacks, or other disruptions could expose us to liability and affect our business and reputation.
- We 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.
- Our future success depends on our ability to retain key employees, consultants and advisors and to attract, retain and motivate qualified personnel.

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

Risks Related to Our Regional Operations

- Potential political and economic instability in regions where we conduct business may adversely affect our results of operations.
- 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 under certain circumstances, penalties in addition to payment of royalties.

Risks Related to Our Common Stock

- Our stock price may be volatile and may or may not reflect our operations or value, and therefore purchasers of our common stock could incur substantial losses.
- Our directors, executive officers and principal stockholders own a significant percentage of our capital stock, and they may exert significant influence over the direction of the Company and make decisions that an investor may consider to be adverse to such investor's interest.

Future sales and issuances of our securities or rights to purchase securities, whether in connection with a financing transaction or otherwise, could result in dilution of the percentage ownership of our stockholders and could cause the prices of our securities to decrease.

PART I. FINANCIAL INFORMATION

Item 1. Condensed Consolidated Financial Information

ELOXX PHARMACEUTICALS, INC. AND SUBSIDIARIES

UNAUDITED CONDENSED CONSOLIDATED BALANCE SHEETS
(in thousands, except share and per share data)

	March 31, 2021	December 31, 2020
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 18,247	\$ 24,668
Restricted cash	54	56
Prepaid expenses and other current assets	1,659	1,169
Total current assets	19,960	25,893
Property and equipment, net	117	133
Operating lease right-of-use asset	289	421
Other long-term assets	—	30
Total assets	\$ 20,366	\$ 26,477
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	\$ 485	\$ 481
Accrued expenses	2,917	2,886
Current portion of long-term debt	5,562	5,239
Advances from collaboration partners	3,411	805
Current portion of operating lease liability	280	389
Taxes payable	38	38
Total current liabilities	12,693	9,838
Long-term debt	4,913	6,376
Operating lease liability	10	33
Total liabilities	17,616	16,247
Commitments and contingencies		
Stockholders' equity:		
Preferred stock, \$0.01 par value per share, 5,000,000 shares authorized, no shares issued or outstanding as of March 31, 2021 and December 31, 2020	—	—
Common stock, \$0.01 par value per share, 500,000,000 shares authorized, 40,432,492 and 40,350,922 shares issued and 40,214,874 and 40,157,187 shares outstanding as of March 31, 2021 and December 31, 2020, respectively	404	404
Common stock in treasury, at cost, 217,618 and 193,735 shares as of March 31, 2021 and December 31, 2020, respectively	(1,922)	(1,828)
Additional paid-in capital	184,558	183,250
Accumulated deficit	(180,290)	(171,596)
Total stockholders' equity	2,750	10,230
Total liabilities and stockholders' equity	\$ 20,366	\$ 26,477

See accompanying notes to unaudited condensed consolidated financial statements

ELOXX PHARMACEUTICALS, INC. AND SUBSIDIARIES

UNAUDITED CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS
AND COMPREHENSIVE LOSS
(in thousands, except share and per share data)

	Three Months Ended March 31,	
	2021	2020
Operating expenses:		
Research and development	\$ 4,073	\$ 4,767
General and administrative	4,341	5,006
Restructuring charges	—	3,994
Total operating expenses	8,414	13,767
Loss from operations	(8,414)	(13,767)
Other expense, net	280	179
Net loss	\$ (8,694)	\$ (13,946)
Net loss per share, basic and diluted	\$ (0.22)	\$ (0.35)
Weighted average number of shares of common stock used in computing net loss per share, basic and diluted	40,180,131	40,074,275
Comprehensive loss:		
Net loss	\$ (8,694)	\$ (13,946)
Other comprehensive income:		
Change in unrealized gain on available-for-sale securities	—	47
Comprehensive loss	\$ (8,694)	\$ (13,899)

See accompanying notes to unaudited condensed consolidated financial statements

ELOXX PHARMACEUTICALS, INC. AND SUBSIDIARIES
UNAUDITED CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
(in thousands)

	Three Months Ended March 31,	
	2021	2020
Cash flows from operating activities:		
Net loss	\$ (8,694)	\$ (13,946)
Adjustments to reconcile net loss to net cash used in operating activities:		
Stock-based compensation	1,308	3,995
Depreciation	16	19
Amortization of operating lease right-of-use asset	132	102
Amortization of debt discount	110	152
Amortization, net of premiums and discounts on investments	—	(2)
Changes in operating assets and liabilities:		
Prepaid expenses and other assets	(460)	(573)
Accounts payable	4	(482)
Accrued expenses	31	(1,087)
Operating lease liabilities	(132)	(102)
Net cash used in operating activities	(7,685)	(11,924)
Cash flows from investing activities:		
Proceeds from maturities of marketable securities	—	15,750
Cash received from long-term deposits	—	39
Net cash provided by investing activities	—	15,789
Cash flows from financing activities:		
Repayment of term loan principal	(1,250)	(833)
Proceeds from advances from collaboration partners	2,606	402
Payment for settlement of taxes upon vesting of restricted stock units	(94)	(116)
Proceeds from exercises of stock options	—	64
Net cash (used in) provided by financing activities	1,262	(483)
Increase (decrease) in cash, cash equivalents and restricted cash	(6,423)	3,382
Cash, cash equivalents and restricted cash at the beginning of the period	24,724	22,536
Cash, cash equivalents and restricted cash at the end of the period	<u>\$ 18,301</u>	<u>\$ 25,918</u>
Reconciliation of cash, cash equivalents and restricted cash to condensed consolidated balance sheets:		
Cash and cash equivalents	\$ 18,247	\$ 25,875
Restricted cash	54	43
Total cash, cash equivalents and restricted cash	<u>\$ 18,301</u>	<u>\$ 25,918</u>
Supplemental disclosure of cash flow activities:		
Cash paid for interest	<u>\$ 144</u>	<u>\$ 272</u>

See accompanying notes to unaudited condensed consolidated financial statements

ELOXX PHARMACEUTICALS, INC. AND SUBSIDIARIES

UNAUDITED CONDENSED CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY
(in thousands, except share data)

	Common stock		Additional paid-in capital	Accumulated other comprehensive income	Treasury stock		Accumulated deficit	Total stockholders' equity
	Shares	Amount			Shares	Amount		
Balance at December 31, 2020	40,157,187	\$ 404	\$ 183,250	\$ —	(193,735)	\$ (1,828)	\$ (171,596)	\$ 10,230
Vesting of restricted stock units	57,687	—	-	—	(23,883)	(94)	—	(94)
Stock-based compensation expense	—	—	1,308	—	—	—	—	1,308
Net loss	—	—	—	—	—	—	(8,694)	(8,694)
Balance at March 31, 2021	40,214,874	\$ 404	\$ 184,558	\$ —	(217,618)	\$ (1,922)	\$ (180,290)	\$ 2,750

ELOXX PHARMACEUTICALS, INC. AND SUBSIDIARIES
UNAUDITED CONDENSED CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY
(in thousands, except share data)

	Common stock			Accumulated other comprehensive income	Treasury stock			Total stockholders' equity
	Shares	Amount	Additional paid-in capital		Shares	Amount	Accumulated deficit	
Balance at December 31, 2019	40,030,763	\$ 402	\$ 174,515	\$ 18	(155,706)	\$ (1,703)	\$ (137,019)	\$ 36,213
Exercise of stock options	10,636	—	64	—	—	—	—	64
Vesting of restricted stock units	84,055	1	(1)	—	(34,874)	(116)	—	(116)
Stock-based compensation expense	—	—	3,995	—	—	—	—	3,995
Change in unrealized gain on investments	—	—	—	47	—	—	—	47
Net loss	—	—	—	—	—	—	(13,946)	(13,946)
Balance at March 31, 2020	40,125,454	\$ 403	\$ 178,573	\$ 65	(190,580)	\$ (1,819)	\$ (150,965)	\$ 26,257

See accompanying notes to unaudited condensed consolidated financial statements

ELOXX PHARMACEUTICALS, INC. AND SUBSIDIARIES
NOTES TO UNAUDITED CONSOLIDATED FINANCIAL STATEMENTS

1. Nature of the Business

Eloxx Pharmaceuticals, Inc., together with its subsidiaries (collectively “Eloxx” or the “Company”), is a clinical-stage biopharmaceutical company developing novel ribonucleic acid (RNA)-modulating drug candidates, each designed to be a eukaryotic ribosomal selective glycoside (ERSG), for the treatment of rare and ultra-rare premature stop codon diseases. Premature stop codons are point mutations that disrupt the stability of the impacted messenger RNA (mRNA) and the protein synthesis from that mRNA. On April 1, 2021, the Company acquired Zikani Therapeutics, Inc. (“Zikani”), an emerging drug developer engaged in the science of ribosome modulation, with complementary technologies that also modulate the human ribosome. For more information see Note 15.

The Company is headquartered in Waltham, Massachusetts, with additional offices in Morristown, New Jersey and Rehovot, Israel.

Liquidity and Going Concern

The Company has a history of net losses and negative cash flows from operating activities since its inception and, as of March 31, 2021, had an accumulated deficit of \$180.3 million. The Company expects to continue to incur net losses and use cash in its operations for the foreseeable future. Further, the Company expects to incur additional costs related to its acquisition of Zikani, as described in Note 15. The Company has not generated revenue from the sale of any product or service and does not expect to generate significant revenue unless it obtains marketing approval for and commercializes one or more of its product candidates currently in development. Successful transition to profitable operations is dependent upon achieving a level of revenue adequate to support the Company’s cost structure.

The Company has financed its operations primarily from the sale of equity securities and, to a lesser extent, loans and grants. The Company may never achieve profitability and, unless it does, the Company will need to continue raising additional capital to fund its operations. The Company believes that its cash and cash equivalents of \$18.2 million at March 31, 2021 will enable it to meet anticipated cash needs into the third quarter of 2021. This amount will not be sufficient to maintain the Company’s current and planned operations for at least the next 12 months following the filing of this Report. The accompanying consolidated financial statements have been prepared assuming that the Company will continue as a going concern, which contemplates the realization of assets and settlement of liabilities in the normal course of business. However, based on the Company’s current working capital, anticipated operating expenses and net losses and the uncertainties surrounding its ability to raise additional capital as needed the Company believes that these conditions, in aggregate, raise substantial doubt about its ability to continue as a going concern.

Management intends to fund future operations through private or public debt or equity financing transactions and may seek additional capital through arrangements with strategic partners or from other sources. The availability of sufficient funding to alleviate the conditions that raise substantial doubt are not within management’s control and cannot be assessed as being probable of occurring. If the Company is unable to obtain adequate financing, it will evaluate options which may include reducing or deferring operating expenses, including curtailing its workforce and certain development programs, which would have a material adverse effect on the Company’s operations and future prospects.

2. Basis of Presentation and Significant Accounting Policies

The Company has prepared the accompanying unaudited interim condensed consolidated financial statements in accordance with accounting principles generally accepted in the United States of America (“U.S. GAAP”) as found in the Accounting Standards Codification (“ASC”) and Accounting Standards Updates (“ASU”) promulgated by the Financial Accounting Standards Board (“FASB”). These interim financial statements, in the opinion of management, reflect all normal recurring adjustments necessary for a fair presentation of the Company’s financial position, results of operations, and cash flows for the interim periods ended March 31, 2021 and 2020.

The Company has reclassified certain items from the prior year’s condensed consolidated financial statements to conform to the current year’s presentation. Specifically, the Company allocated certain facilities and support costs between research and development expenses and general and administrative expenses that were previously reported within general and administrative expenses only. For the three months ended March 31, 2020, \$0.2 million is reclassified from general and administrative expenses to research and development expenses, which resulted in general and administrative expenses decreasing from \$5.2 million to \$5.0 million, and research and development expenses increasing from \$4.5 million to \$4.7 million. This reclassification had no impact on previously reported total operating expenses, loss from operations, net loss, or net cash used in operating activities.

Certain information and footnote disclosures normally included in the Company’s annual consolidated financial statements have been condensed or omitted, as permitted by such rules and regulations. These interim consolidated financial statements, in the opinion of management, reflect all normal recurring adjustments necessary for a fair presentation of the Company’s financial position, results of operations, and cash flows for the interim periods ended March 31, 2021 and 2020.

The results of operations for the interim periods are not necessarily indicative of the results of operations to be expected for the full year. These interim condensed consolidated financial statements should be read in conjunction with the audited consolidated financial statements as of and for the year ended December 31, 2020, and the notes thereto, which are included in the Company’s Annual Report on Form 10-K for the fiscal year ended December 31, 2020, filed with the U.S. Securities and Exchange Commission (the “SEC”) on March 12, 2021 (the “Annual Report”).

The significant accounting policies used in the preparation of these condensed consolidated financial statements are consistent with those described in the Company’s audited consolidated financial statements as of and for the year ended December 31, 2020, and the notes thereto, in the Company’s Annual Report.

Recent Accounting Pronouncements

In June 2016, the FASB issued ASU No. 2016-13, Measurement of Credit Losses on Financial Instruments. This standard requires that for most financial assets, losses must be based on an expected loss approach which includes estimates of losses over the life of exposure that considers historical, current and forecasted information. Expanded disclosures related to the methods used to estimate the losses as well as a specific disaggregation of balances for financial assets are also required. The Company adopted the new standard on January 1, 2020 and adoption did not have a material impact on the consolidated financial statements.

In August 2018, the FASB issued ASU No. 2018-13, Fair Value Measurement (Topic 820): Disclosure Framework-Changes to the Disclosure Requirements for Fair Value Measurement, which modifies the disclosure requirements for certain fair value measurements. The Company adopted the new standard on January 1, 2020 and adoption did not have a material impact on the consolidated financial statements.

Although the FASB has issued several ASUs for which adoption dates are pending, the Company does not expect any to have any impacts on its consolidated financial statements.

3. Prepaid Expenses and Other Current Assets

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

	March 31, 2021	December 31, 2020
Research and development	\$ 929	\$ 631
Insurance	297	170
Other	433	368
Total	<u>\$ 1,659</u>	<u>\$ 1,169</u>

4. Property and Equipment

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

	March 31, 2021	December 31, 2020
Computers and software	\$ 124	\$ 124
Office furniture and equipment	164	164
Leasehold improvements	158	158
	446	446
Less accumulated depreciation	(329)	(313)
Property and equipment, net	<u>\$ 117</u>	<u>\$ 133</u>

Depreciation expense was \$16 thousand and \$19 thousand for the three months ended March 31, 2021 and 2020, respectively.

5. Accrued Expenses

Accrued expenses consisted of the following (in thousands):

	March 31, 2021	December 31, 2020
Research and development expenses	\$ 1,065	\$ 802
Payroll, bonus and other employee-related expenses	688	1,315
Professional services	1,062	415
Interest on debt	53	57
Other	49	39
Restructuring	—	258
Total	<u>\$ 2,917</u>	<u>\$ 2,886</u>

6. Debt

Term Loan

On January 30, 2019, the Company entered into a Loan and Security Agreement (the “Loan Agreement”) in the amount of \$15.0 million with Silicon Valley Bank (“SVB”) and WestRiver Innovation Lending Fund VIII, L.P. (“WestRiver”, and together with SVB, the “Lenders”).

Outstanding principal on the loan accrues interest at a floating rate equal to the greater of (i) 5.25% per annum and (ii) the sum of 2.5% plus the prime rate, as published in the Wall Street Journal. Interest payments are payable monthly. On March 31, 2021, the interest rate was 5.75%. The Company commenced making payments on the outstanding principal balance of the loan on February 1, 2020, which is payable in 36 equal monthly installments. Amounts outstanding under the loan are due and payable on January 1, 2023.

In conjunction with the initial loan advance, the Company issued warrants to the Lenders to purchase an aggregate of 40,834 shares of the Company’s common stock at a price of \$11.02 (subject to certain adjustments).

The Company may prepay the outstanding principal balance of the loans advanced in whole but not in part, subject to a prepayment fee ranging from 1% to 3% of any amount prepaid, depending upon when the prepayment occurs. The Company will also pay a final payment fee equal to 6% of the total loans advanced, due upon the earlier of maturity or termination of the Loan Agreement.

Under the terms of the Loan Agreement, the Company granted first priority liens and a security interest in substantially all of the Company’s assets, excluding all of its intellectual property, which is subject to a negative pledge, and a pledge by the Company of the shares of one of its wholly-owned subsidiaries as collateral for the obligations thereunder. The Loan Agreement also contains customary covenants, including limitations on other indebtedness, liens, acquisitions, investments and dividends, and events of default, including payment defaults, breaches of covenants, a material impairment in the perfection or priority of the security interest in the collateral, and events relating to bankruptcy or insolvency.

As of March 31, 2021, the carrying value of the outstanding loan consists of \$9.2 million in principal less an unamortized debt discount of \$0.4 million. The debt issuance costs, the valuation of the warrants, and the final maturity payment of \$0.9 million, have been recorded as a debt discount which are being accreted to interest expense through the maturity date of the loan. Interest expense relating to the loan for the three months ended March 31, 2021 and 2020 was \$0.3 million and \$0.4 million, respectively. Interest expense is calculated using the effective interest method and is inclusive of non-cash amortization of the debt discount. At March 31, 2021, the effective interest rate was 10.85%.

PPP Loan

In April 2020, the Company entered into a loan agreement with SVB under the U.S. Small Business Administration (the “SBA”) Paycheck Protection Program (the “PPP”) pursuant to the Coronavirus Aid, Relief and Economic Security Act of 2020 (the “CARES Act”) and received loan proceeds of \$0.8 million (the “PPP Loan”). The Company used the loan proceeds for payroll and other covered costs in accordance with the relevant terms and conditions of the CARES Act. The PPP Loan has a maturity date of April 21, 2022 and an interest rate of 1.0% per annum. Monthly payments of principal and interest are due beginning on September 21, 2021, although interest accrues from the issuance date. A PPP loan may be partially or entirely forgiven based on employee retention for the 24-week period starting on the loan date through October 2020, and the use of loan proceeds for payroll or other specified costs during the same period. Forgiveness is also based on the employer maintaining or restoring headcount and maintaining salary levels. Forgiveness is reduced if headcount declines or if salaries decrease. Any loan forgiveness will be made subject to SVB approval in accordance with SBA requirements.

The Company’s scheduled future principal payments for the long-term debt are as follows (in thousands):

	March 31, 2021
Remainder of 2021	\$ 4,148
2022	5,398
2023	417
Total future principal payments	9,963
Less unamortized discount	(388)
Carrying value of long-term debt	9,575
Less current portion	(5,562)
Add final fee due at maturity in 2023	900
Long-term portion	<u>\$ 4,913</u>

7. Legal and Other Contingencies

From time to time, the Company may become involved in various lawsuits and legal proceedings, which arise in the ordinary course of business. The Company is currently unaware of any material pending legal proceedings to which it is a party or of which its property is the subject.

The Company accounts for its contingent liabilities in accordance with ASC Topic 450, “Contingencies”.

During 2019, the Company received a funding award from the Cystic Fibrosis Foundation (“CFF”) and entered into an agreement relating to the award, which agreement was amended in December 2020 providing for an additional award amount. Payment of award amounts are subject to the achievement of certain milestones in connection with the Company’s cystic fibrosis development program. The Company will be required to repay amounts received from the CFF (or specified multiples of such amounts) in certain circumstances, including as royalties on net sales, and, in the event of a disposition of the underlying asset. The funding provided to the Company is accounted for as an advance from a collaboration partner within the scope of ASC Topic 730, “Research and Development.” As of March 31, 2021, and December 31, 2020, the Company received payments of \$3.4 million and \$0.8 million, respectively, which are recorded as liabilities captioned ‘Advances from collaboration partners’ in the accompanying condensed consolidated financial statements.

8. Stockholders' Equity

Warrants

As of March 31, 2021 and December 31, 2020, 323,892 warrants to purchase common stock were outstanding, with a weighted average exercise price of \$4.31 per share. The weighted average remaining contractual life at March 31, 2021 was 2.49 years.

9. Stock-based Compensation

Summary of Stock Option Activity

Transactions related to stock options awarded to employees and directors during the three months ended March 31, 2021 were as follows:

	Shares	Weighted average exercise price	Weighted average remaining contractual life (years)	Aggregate intrinsic value
Options outstanding at December 31, 2020	3,803,061	\$ 10.16	8.20	\$ 1,936,183
Granted	677,729	4.02		
Forfeited	(86,507)	(6.56)		
Options outstanding at March 31, 2021	4,394,283	\$ 9.28	8.04	\$ 841,840
Options exercisable at March 31, 2021	2,142,864	\$ 12.66	7.24	\$ 764,096

The aggregate intrinsic value represents the total intrinsic value (the difference between the fair value of the common stock as of March 31, 2021 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 March 31, 2021. This amount is impacted by changes in the fair value of the common stock.

Summary of Restricted Stock Unit Activity

Activity related to restricted stock units awarded to employees during the three months ended March 31, 2021 were as follows:

	Shares	Weighted average grant date fair value per share
Unvested at December 31, 2020	349,725	\$ 4.67
Vested	(81,569)	4.36
Unvested at March 31, 2021	268,156	\$ 4.76

Stock-based Compensation Expense

Stock-based compensation relates, non-employee directors and non-employees, time-based restricted stock units granted and performance-based stock options and restricted stock units granted. On February 24, 2020, the Company's Board of Directors approved a leadership and organizational realignment, which accelerated the vesting of certain awards, resulting in additional stock-based compensation of \$2.1 million, which was recorded in restructuring charges. Total equity-based compensation expense related to all of the Company's stock-based awards was recognized as follows (in thousands):

	Three Months Ended March 31,	
	2021	2020
Research and development	\$ 241	\$ 219
General and administrative	1,067	1,652
Restructuring charges	—	2,124
Total stock-based compensation expense	\$ 1,308	\$ 3,995

10. Marketable Securities

Cash and cash equivalents at March 31, 2021 and December 31, 2020 had an amortized cost as well as fair value of \$18.2 million and \$24.7 million, respectively. As of March 31, 2021 and December 31, 2020, no credit losses were identified related to the cash equivalents or marketable securities.

11. Fair Value of Financial Instruments

At March 31, 2021 and December 31, 2020, the Company's financial assets valued based on Level 1 inputs consisted of cash and cash equivalents. During the three months ended March 31, 2021, the Company did not have any transfers of financial assets between levels, as defined in the significant accounting policies note in our Annual Report.

Some assets and liabilities are required to be recorded at fair value on a recurring basis, while other assets and liabilities are recorded at fair value on a nonrecurring basis. The carrying amounts of current financial instruments, which include accounts payable, accrued expenses, lease obligation liability and debt, approximate their fair values due to the short-term nature of these instruments.

12. Other Expense, Net

Other expense, net consisted of the following (in thousands):

	Three Months Ended March 31,	
	2021	2020
Interest and other expense	\$ 260	\$ 412
Interest and other income	-	(245)
Foreign currency exchange losses	20	14
Investment income	-	(2)
Total other expense, net	\$ 280	\$ 179

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 periods, are as follows (amounts in thousands, except share and per share data):

	Three Months Ended March 31,	
	2021	2020
Numerator:		
Net loss	\$ (8,694)	\$ (13,946)
Denominator:		
Weighted average number of shares of common stock used in computing net loss per share, basic and diluted	40,180,131	40,074,275
Net loss per share, basic and diluted	<u>\$ (0.22)</u>	<u>\$ (0.35)</u>

The following potentially dilutive securities have been excluded from the computation of diluted weighted average shares outstanding as their effect would be anti-dilutive:

	Three Months Ended March 31,	
	2021	2020
Options to purchase common stock	4,394,283	4,890,957
Restricted stock units	268,156	378,039
Warrants	323,892	323,894
Total potential common stock equivalents	<u>4,986,331</u>	<u>5,592,890</u>

14. Restructuring

On February 24, 2020, the Company's Board of Directors approved a leadership and organizational realignment aimed at supporting its efforts to improve operating performance and concentrate development efforts on its core programs. The organizational realignment reduced managerial layers and consolidated roles across the organization, resulting in the elimination of 13 full-time positions during the first quarter of 2020. This resulted in a charge of \$4.0 million, including \$2.1 million in stock-based compensation expense, with a severance portion being paid out over one year.

The accrued charges and associated payments for the three months ended March 31, 2021, are as follows (amounts in thousands):

	Beginning Balance	Additions	Deductions	Ending Balance
Severance and related costs	\$ 258	\$ —	\$ (258)	\$ —
Total restructuring charges	<u>\$ 258</u>	<u>\$ —</u>	<u>\$ (258)</u>	<u>\$ —</u>

The accrued charges and associated payments for the three months ended March 31, 2020 are as follows (amounts in thousands):

	Beginning Balance	Additions	Deductions	Ending Balance
Severance and related costs	\$ —	\$ 1,705	\$ (379)	\$ 1,326
Contract termination costs	—	165	(165)	—
Total restructuring charges	<u>\$ —</u>	<u>\$ 1,870</u>	<u>\$ (544)</u>	<u>\$ 1,326</u>

15. Subsequent Events

On April 1, 2021, the Company, acquired Zikani, pursuant to an Agreement and Plan of Merger (the "Merger Agreement"). Zikani is an emerging drug developer in the science of ribosome modulation, leveraging its innovative TURBO-ZM™ chemistry technology platform to develop novel Ribosome Modulating Agents (RMAs) as potential

therapeutics for people with limited treatment options. The TURBO-ZMTM platform is designed to enable rapid synthesis of novel compounds that can be optimized to modulate the ribosome in a disease specific manner. Zikani is in pre-clinical development, with a plan to target rare diseases including genetic diseases and cancers caused by nonsense mutations.

Under the terms of the Merger Agreement, the Company issued 7,596,810 shares of common stock, in exchange for all of the issued and outstanding equity interests of Zikani (the “Merger Consideration”).

The Company is in the process of determining the purchase price allocation for the Merger Consideration and other net assets acquired, which is expected to be determined in the second quarter of 2021.

In connection with the acquisition, on April 1, 2021, Martijn Kleijwegt, Silvia Noiman and Gregory Williams resigned from the Board of Directors. The Company expects to incur a one-time pre-tax charge, during the second quarter of 2021, consisting of employee separation costs of \$1.0 million, primarily relating to severance costs. The Company also expects to incur a one-time non-cash stock compensation charge, relating to accelerated vesting of executive stock awards of \$2.4 million. Pursuant to the terms of the Merger Agreement, Sumit Aggarwal, Alan Walts and Rajesh Parekh were appointed to the Board of Directors. Sumit Aggarwal was also appointed President and Chief Executive Officer, and Vijay Modur, M.D., Ph.D. was appointed the Head of Research and Development. The Company also appointed Daniel Geffken to serve as interim Chief Financial Officer.

Item 2. Management’s Discussion and Analysis of Financial Condition and Results of Operations

The following discussion and analysis of our financial condition and results of operations should be read in conjunction with our financial statements and the related notes included elsewhere in this Quarterly Report, as well as the audited financial statements and the related notes thereto, and the discussion under “Management’s Discussion and Analysis of Financial Condition and Results of Operations” and “Business” included in our Annual Report on Form 10-K for the fiscal year ended December 31, 2020 (the “Annual Report”). Some of the information contained in this discussion and analysis or set forth elsewhere in this Quarterly Report, including information with respect to our plans and strategy for our business, includes forward-looking statements that involve risks, uncertainties and other factors that could cause actual results to differ materially from those made, projected or implied in the forward-looking statements. Please see the sections “Forward-Looking Statements,” “Summary Risk Factors,” and Part I, Item 1A. “Risk Factors” herein.

Company Overview

We are a clinical-stage biopharmaceutical company developing novel ribonucleic acid (RNA)-modulating drug candidates, each designed to be a eukaryotic ribosomal selective glycoside (ERSG), for the treatment of rare and ultra-rare premature stop codon diseases. Premature stop codons are point mutations that disrupt the stability of the impacted messenger RNA (mRNA) and the protein synthesis from that mRNA.

Our lead clinical program, ELX-02, is currently in Phase 2 clinical development for the treatment of cystic fibrosis in patients with diagnosed nonsense mutations.

Our Phase 2 clinical trial for ELX-02 is being conducted at leading global investigator sites in Europe, Israel and the United States. On March 25, 2020, we announced that enrollment in these trials had been paused temporarily in response to the global COVID-19 pandemic in order to avoid unnecessary exposure in at-risk populations, to maintain the integrity of our study data and to support global healthcare providers in their commitment to ensure patient safety. On June 17, 2020, we announced that enrollment had been resumed in Israel and Europe and, on August 12, 2020, we announced that enrollment had been resumed in the United States. The COVID-19 pandemic continues to evolve, and we continue to work closely with our clinical sites and investigators. We are also evaluating additional clinical sites in other countries where patient enrollment may be feasible. We expect to complete enrollment of the first four treatment arms by mid-2021 and report data in the second half of 2021. The safety review committee for the trial has allowed dose escalation up to the top dose level with no drug-related serious adverse events reported to date. Multiple patients have progressed through the four-dose escalation range set forth in the trial protocol. The Cystic Fibrosis Foundation (“CF Foundation”) is providing funding for a portion of the clinical trial program.

The FDA has granted orphan drug designation to ELX-02 for the treatment of nephropathic cystinosis, MPS I, Rett syndrome, and cystic fibrosis.

Acquisition of Zikani Therapeutics, Inc.

On April 1, 2021, the Company acquired Zikani Therapeutics, Inc. (“Zikani”), pursuant to an Agreement and Plan of Merger (the “Merger Agreement”). Zikani is engaged in the science of ribosome modulation, leveraging its innovative TURBO-ZM™ chemistry technology platform to develop novel Ribosome Modulating Agents (RMAs) as potential therapeutics for people with limited treatment options. The TURBO-ZM™ platform is designed to enable rapid synthesis of novel compounds that can be optimized to modulate the ribosome in a disease specific manner. The TURBO-ZM synthetic chemistry platform can design oral novel macrolide-based small molecules that are potent oral modulators with favorable therapeutic indices. Macrolides are antibiotics that inhibit protein synthesis in bacteria. Zikani is in pre-clinical development, with a plan to target rare diseases including genetic diseases and cancers caused by nonsense mutations.

We expect the combined company to emerge as a leader in the science of ribosome modulation through our complementary platforms and continued development of our library of RMAs and Eukaryotic Ribosome Selective Glycosides (ERSGs). ELX-02, is a small molecule drug candidate designed to restore production of full-length functional proteins. The investigational therapy has shown strong activity across a full range of mutations in CF preclinical models. In Phase 1 testing, ELX-02 was generally well tolerated and demonstrated high bioavailability with consistent pharmacokinetics across both single and multiple-dose studies. The Phase 2 trials are designed to validate the safety of ELX-02 and assess its biological activity. We look forward to completing enrollment in the first four treatment arms by mid-year and reporting data

from these treatment arms in the second half of this year. ELX-02 is an investigational drug that has not been approved by any global regulatory body.

With the strength of our ELX-02 program for CF, the acquisition of Zikani provides us with the opportunity to amplify the potential of our innovative science by developing a new class of therapies to treat diseases with limited to no treatment options. Our preclinical programs are focused on select rare diseases including inherited diseases, cancer caused by nonsense mutations, kidney diseases, including autosomal dominant polycystic kidney disease, as well as rare ocular genetic disorders. In addition, we plan to file an IND in 2022 for what could potentially become the first oral therapy for protein restoration for patients with nonsense mutations in Recessive Dystrophic Epidermolysis Bullosa (RDEB) and Junctional Epidermolysis Bullosa (JEB). RDEB is an incurable, extremely painful and often fatal skin blistering condition caused by a lack of collagen type VII that is estimated to affect more than 3,000 people worldwide. JEB is the most severe form of EB, with most patients dying in infancy. By extending the application of ribosomal RNA modulation to the readthrough of nonsense mutations in tumor suppressor genes, we are also rapidly advancing preclinical research for familial adenomatous polyposis (FAP), an inherited pre-cancerous colorectal disease frequently caused by nonsense mutations in the adenomatous polyposis coli (APC) gene.

Nonsense mutations cause approximately 10-12 percent of rare inherited diseases. ELX-02 along with the TURBO-ZM™ library of compounds are anticipated to significantly expand to include the treatment of many other rare diseases and certain cancers.

Under the terms of the Merger Agreement, the Company issued 7,596,810 shares of common stock in exchange for all of the issued and outstanding equity interests of Zikani. (the “Merger Consideration”).

The Company is in the process of determining the purchase price allocation for the Merger Consideration and other assets acquired, which it expects to finalize in the second quarter of 2021.

In connection with the acquisition, on April 1, 2021, Martijn Kleijwegt, Silvia Noiman and Gregory Williams resigned from the Board of Directors. Pursuant to the terms of the Merger Agreement, Sumit Aggarwal, Alan Walts and Rajesh Parekh were appointed to the Board of Directors. Sumit Aggarwal was also appointed President and Chief Executive Officer, and Vijay Modur, M.D., Ph.D., was appointed the Head of Research and Development. The Company also appointed Daniel Geffken to serve as interim Chief Financial Officer. For more information concerning the acquisition of Zikani and the appointment of officers and directors, see the Company’s Current Report on Form 8-K filed with the SEC on April 1, 2021.

COVID-19

The ongoing COVID-19 pandemic and the measures that we, our employees, consultants, suppliers, contract research organizations (“CROs”), and other partners or governments may take in response to the pandemic may significantly disrupt our business operations. We are working to ensure that we can operate with minimal disruption, and mitigate the impact of the pandemic on the health and safety of our employees and the patients and healthcare professionals that participate in our clinical trials. However, given the significant uncertainty regarding the ongoing impact of the COVID-19 pandemic, there remains a risk that we or our employees, contractors, suppliers, and other partners may be prevented or prohibited from conducting business activities for indefinite periods of time, for example due to a substantial percentage of personnel contracting the virus or due to government-mandated shutdowns.

We continue to focus on the operational challenges resulting from the COVID-19 pandemic. The pandemic has not had a material adverse impact on our financial condition, and we have not had to furlough any employees. Operations have continued, though our clinical trials were temporarily paused. Both Phase 2 clinical trials have now resumed. We are evaluating various alternatives to remain flexible and adapt to changing circumstances that may arise in the near and long term. We continue to monitor our operations, states of affairs in the regions in which we and our business partners operate and conduct research and clinical trial activities, and applicable government recommendations. As a result, we have made modifications to our normal operations, including restrictions on business travel and meetings, permitting employees to work remotely and the implementation of COVID-19 workplace safety guidelines.

The extent and severity of the impact of the pandemic on our business and clinical trials will be determined largely by the ability of patients and prospective patients in our clinical trials to access trial sites, the ability of personnel from our CROs to oversee the administration of our drug candidates in accordance with trial protocols and our ability to monitor and communicate effectively with our CROs, staff at clinical trial sites and principal investigators.

Results of Operations

The following table summarizes our results of operations for the periods presented (in thousands):

	Three Months Ended March 31,		Change	
	2021	2020	\$	%
Operating expenses:				
Research and development	\$ 4,073	\$ 4,767	\$ (694)	(15) %
General and administrative	4,341	5,006	(665)	(13) %
Restructuring charges	—	3,994	(3,994)	—
Total operating expenses	8,414	13,767	(5,353)	(39) %
Loss from operations	(8,414)	(13,767)	5,353	(39) %
Other expense, net	280	179	101	56 %
Net loss	\$ (8,694)	\$ (13,946)	\$ 5,252	(38) %

Research and development expense

Research and development expenses were \$4.1 million for the three months ended March 31, 2021 compared to \$4.8 million for the same period in 2020, a decrease of \$0.7 million. The decrease was primarily related to a decrease in salaries and other personnel related costs of \$0.5 million, and a \$0.2 million decrease in expenses related to subcontractors, consultants and advisors in connection with continued development of ELX-02 due to the impact of the COVID-19 pandemic as well as realignment actions taken by our Board of Directors in February 2020, including reductions in research and development headcount and in external spending.

General and administrative expenses

General and administrative expenses were \$4.3 million for the three months ended March 31, 2021, compared to \$5.0 million for the same period in 2020, a decrease of \$0.7 million. The decrease was primarily related to a \$0.6 million decrease in stock-based compensation expense and a \$0.3 million decrease in salaries and other personnel related costs, partially offset by a \$0.2 million increase in expenses attributable principally to infrastructure related costs including legal, accounting and other professional fees. These decreases were all primarily related to realignment actions taken by our Board of Directors in February 2020, which included reductions in general and administrative headcount and in external spending.

Restructuring charges

Restructuring charges of \$4.0 million for the three months ended March 31, 2020 resulted from the leadership and organizational realignment during the first quarter of 2020. The total included \$1.9 million related to contract termination and employee separation costs, primarily severance and benefits, and \$2.1 million of stock-based compensation, relating to accelerated vesting of stock awards. There were no similar charges during the three months ended March 31, 2021.

Other expense, net

We recorded \$0.3 million in other expense, net for the three months ended March 31, 2021, compared to \$0.2 million for the same period in 2020. The increase in other expense, net was primarily due to lower interest income.

Liquidity and Capital Resources

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. We have not generated revenue from sales of any product or service.

We have incurred significant operating losses to date and have not generated revenue from sales of any products or services. Our net losses were \$8.7 million and \$13.9 million for the three months ended March 31, 2021, and 2020. As of March 31, 2021, we had an accumulated deficit of \$180.3 million. Further, we expect to incur additional costs related to our acquisition of Zikani. We have financed our operations primarily through the issuance of equity instruments, and to a lesser extent, from loans and grants. We have devoted substantially all of our financial resources and efforts to the development of our product candidates. We expect that it may be several 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 operating losses for the foreseeable future. A successful transition to profitable operations is dependent upon achieving a level of revenue adequate to support our cost structure. Our net losses may fluctuate significantly from quarter to quarter and year to year. We anticipate that our expenses may increase if, and as, we:

- advance ELX-02 and/or other product candidates further into clinical development;
- experience additional delays in enrollment and completion of our clinical trials due to the COVID-19 pandemic;
- continue the preclinical development of our research programs and advance candidates into clinical trials;
- pursue regulatory authorization to conduct clinical trials of additional product candidates;
- seek marketing approvals for our product candidates;
- 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, management and scientific personnel;
- add operational, financial and management information systems and personnel;
- acquire or in-license other product candidates and technologies; and
- operate as a public company.

We may never achieve profitability and until we do, we will continue to need to raise additional cash to fund our operations. Our cash and cash equivalents are highly liquid investments with original maturities of one year or less at the date of purchase and consist of cash in operating accounts and secured investments, primarily money market funds.

Although the impact of the COVID-19 pandemic on clinical operations and trial enrollment cannot fully be determined, we believe that our cash and cash equivalents of \$18.2 million at March 31, 2021, will enable us to meet anticipated cash needs into the third quarter of 2021. This amount will not be sufficient to maintain our current and planned operations for at least the next twelve months following the filing of this Report. Therefore, we will need to raise additional capital to finance our operations, which cannot be assured. We have concluded that these conditions, in the aggregate, raise substantial doubt about our ability to continue as a going concern without additional funding.

Management intends to fund future operations through private or public debt or equity financing transactions and may seek additional capital through arrangements with strategic partners or from other sources. The availability of sufficient funding to alleviate the conditions that raise substantial doubt are not within management's control and cannot be assessed as being probable of occurring. If we are unable to obtain adequate financing, we will evaluate alternatives which may include reducing or deferring operating expenses, including by downsizing our workforce and curtailing certain development programs, which could have a material adverse effect on our operations and future prospects.

Principal Financing Activities

In April 2020, we entered into a loan agreement with SVB under the U.S. Small Business Administration (the "SBA") Paycheck Protection Program (the "PPP") pursuant to the Coronavirus Aid, Relief and Economic Security Act of 2020 (the "CARES Act") and received loan proceeds of \$0.8 million (the "PPP Loan"). We used the loan proceeds for payroll and other covered costs in accordance with the relevant terms and conditions of the CARES Act. The PPP Loan has a maturity date of April 21, 2022 and an interest rate of 1.0% per annum. Monthly payments of principal and interest are due beginning on September 21, 2021, although interest accrues from the issuance date. A PPP loan may be partially or entirely forgiven based on employee retention for the 24-week period starting on the loan date through October 2020, and the use of loan proceeds for payroll or other specified costs during the same period. Forgiveness is also based on the employer maintaining

or restoring headcount and maintaining salary levels. Forgiveness is reduced if headcount declines or if salaries decrease. Any loan forgiveness will be made subject to SVB approval in accordance with SBA requirements.

Cash Flows

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

	Three Months Ended March 31,	
	2021	2020
Net cash used in operating activities	\$ (7,685)	\$ (11,924)
Net cash provided by investing activities	-	15,789
Net cash (used in) provided by financing activities	1,262	(483)

Our operating activities used cash of \$7.7 million and \$11.9 million during the three months ended March 31, 2021 and 2020, respectively. For the three months ended March 31, 2021, net cash used in operating activities resulted primarily from our net loss of \$8.7 million and changes in working capital of \$0.5 million, partially offset by total non-cash charges of \$1.5 million. Non-cash charges primarily related to \$1.3 million of stock-based compensation, \$0.1 million of amortization of lease assets, and \$0.1 million of debt discount amortization. Changes in working capital were primarily related to decreases of \$0.4 million in prepaid expenses, and \$0.1 million in operating lease liabilities. For the three months ended March 31, 2020, net cash used in operating activities resulted primarily from our net loss of \$13.9 million and total changes in working capital of \$2.2 million, partially offset by total non-cash charges of \$4.3 million. Non-cash charges primarily related to \$4.0 million of stock-based compensation, \$0.1 million of amortization of lease assets, and \$0.2 million of debt discount amortization. Changes in working capital were primarily related to decreases in accrued expenses and accounts payable of \$1.1 million and \$0.5 million, respectively, and an increase in prepaid expenses and other current assets of \$0.6 million.

Our investing activities provided cash of \$15.8 million during the three months ended March 31, 2020. For the three months ended March 31, 2020, cash provided in investing activities was primarily related to \$15.8 million of proceeds from the maturity of marketable securities. No investing activities occurred during the three months ended March 31, 2021.

Our financing activities provided cash of \$1.3 million during the three months ended March 31, 2021 and used cash of \$0.5 million during the three months ended March 31, 2020. For the three months ended March 31, 2021, net cash provided by financing activities consisted primarily of \$2.6 million in advances received from collaboration partners, offset by \$1.3 million in term loan principal repayments. For the three months ended March 31, 2020, net cash used in financing activities consisted primarily of \$0.8 million in term loan principal repayments, net of \$0.4 million in advances received from collaboration partners.

Off-balance Sheet Arrangements

We do not have any off-balance sheet arrangements, as defined by applicable regulations of the SEC, that are reasonably likely to have a current or future material effect on our financial condition, results of operations, liquidity, capital expenditures or capital resources.

Critical Accounting Policies and Use of Estimates

Our management's discussion and analysis of financial condition and results of operations is based on our unaudited condensed consolidated financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States, or U.S. GAAP. The preparation of these condensed 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 condensed consolidated financial statements, as well as the reported expense during the reporting periods. We monitor and analyze these items for changes in facts and circumstances, and material changes in these estimates could occur in the future. 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. Changes in estimates are reflected in reported results for the period in which they become known. Actual results may differ materially from these estimates under different assumptions or conditions.

The critical accounting policies that we believe impact significant judgments and estimates used in the preparation of our condensed consolidated financial statements presented in this Report are described in “Management’s Discussion and Analysis of Financial Condition and Results of Operations” in our Annual Report. There have been no material changes to our critical accounting policies through March 31, 2021 from those discussed in our Annual Report filed with the SEC on March 12, 2021.

Item 3. Quantitative and Qualitative Disclosures about Market Risk

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

Item 4. Controls and Procedures***Limitations on Effectiveness of Controls and Procedures***

We maintain disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act) that are designed to ensure that information required to be disclosed in the reports that we file or submit under the Exchange Act is (1) recorded, processed, summarized, and reported within the time periods specified in the SEC’s rules and forms and (2) accumulated and communicated to our management, including our principal executive officer and principal financial officer, to allow timely decisions regarding required disclosure.

In designing and evaluating our disclosure controls and procedures, management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives. In addition, the design of disclosure controls and procedures must reflect that there are resource constraints and the management is required to apply judgment in evaluating the benefits of possible controls and procedures relative to their costs.

Management’s Evaluation of Disclosure Controls and Procedures

Our management, with the participation of our Chief Executive Officer and interim Chief Financial Officer, evaluated, as of the end of the period covered by this Report, the effectiveness of our disclosure controls and procedures. Based on that evaluation, our Chief Executive Officer and interim Chief Financial Officer concluded that our disclosure controls and procedures were effective at the reasonable assurance level as of March 31, 2021.

Changes in Internal Control over Financial Reporting

There were no changes in our internal controls over financial reporting (as defined in Rules 13a-15(f) and 15(d)-15(f) under the Exchange Act) during the quarter ended March 31, 2021 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

PART II. OTHER INFORMATION

Item 1. Legal Proceedings

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. 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.

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, together with all other information 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. Additional risks that we currently do not know about, or that we currently believe immaterial, may also impair our business.

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. We have invested substantial efforts and financial resources in the research and development of ELX-02, which is currently our only product candidate in clinical development. We have increased investment in our preclinical candidate portfolio but have yet to advance other molecules into clinical development.

Our ability to achieve and sustain profitability depends on obtaining regulatory approvals for, and successfully commercializing ELX-02 and any future product candidates, either alone or with third parties. The success of ELX-02 and any other product candidates will depend on several factors, including the following:

- our ability to continue our business operations and product candidate research and development, and adapt to any changes in the regulatory approval process, manufacturing supply or clinical trial requirements and timing due to the ongoing COVID-19 pandemic;
- successful completion of preclinical studies;
- receipt of authorization to proceed under investigational new drug applications ("INDs") and similar filings outside the United States for our planned clinical trials or future clinical trials;
- successful patient enrollment in and completion of clinical trials;
- safety and efficacy data for our product candidates that are satisfactory to the FDA, European Medicines Agency ("EMA"), or any other comparable foreign regulatory authority for marketing approval;
- receipt of marketing approvals for our product candidates from applicable regulatory authorities;
- completion of any required post-marketing approval commitments to applicable regulatory authorities;
- obtaining and maintaining patent and trade secret protection and regulatory exclusivity for our product candidates;
- making arrangements with third-party manufacturers, or establishing manufacturing capabilities, for both clinical and commercial supplies of our product candidates, if any product candidates are approved;
- establishing sales, marketing and distribution capabilities and launching commercial sales of our products, if and when approved, whether alone or in collaboration with others;
- acceptance of our products, if and when approved, by patients, the medical community and third-party payors;
- obtaining and maintaining third-party coverage and adequate reimbursement; and
- maintaining a continued acceptable safety profile of our products following any approval.

Many of these factors are beyond our control, and it is possible that we may never obtain regulatory approval for ELX-02 or any other product candidates even if we expend substantial time and resources seeking their development and approval. If we do not achieve regulatory approval in a timely manner or at all, we could experience significant delays or an inability to commercialize our current or future product candidates, which would materially adversely affect our business.

The success of our business, including our ability to finance our Company and generate revenue from products in the future, which we do not expect will occur for several years, if ever, will depend heavily on the successful development and eventual commercialization of the product candidates we develop. Our current product candidates, and any future product candidates we develop, will require additional preclinical and clinical development, management of clinical, preclinical and manufacturing activities, marketing approval in the United States and other markets, demonstrating cost-effectiveness to pricing and reimbursement authorities, obtaining sufficient manufacturing supply for both clinical development and commercial production in accordance with current Good Manufacturing Practices (“cGMP”) or similar regulatory requirements outside the United States, building of a commercial organization, and substantial investment and significant marketing efforts before we generate any revenue from product sales. We may also experience delays in developing a sustainable, reproducible and scalable manufacturing process or transferring that process to commercial partners, which may prevent us from completing our clinical trials or commercializing our product candidates on a timely or profitable basis, if at all.

Preclinical and clinical drug development is a lengthy and expensive process, with an uncertain outcome. Our preclinical and clinical programs may experience delays or may never advance, which would adversely affect ability to obtain regulatory approvals or commercialize our product candidates on a timely basis or at all, which could have an adverse effect on our business

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 of our product candidates in humans to the satisfaction of the FDA, EMA and other applicable regulatory agencies in the jurisdictions in which we intend to market our product candidates. Clinical testing is expensive, time-consuming, and subject to uncertainty. Of the large number of drugs in development, only a small percentage successfully complete clinical testing and an even smaller portion obtain FDA or similar foreign regulatory authority approval 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.

The results of preclinical studies and early clinical trials of our product candidates may not be predictive of the results of later-stage clinical trials. Product candidates in later stages of clinical development may fail to show the desired safety and efficacy traits despite having progressed through preclinical studies and initial clinical trials. A number of companies in the biopharmaceutical industry have suffered significant setbacks in advanced clinical trials due to lack of efficacy or safety profiles, notwithstanding promising results in earlier trials. Accordingly, we, or any development partners, may ultimately be unable to provide regulatory agencies with satisfactory data on clinical safety and efficacy sufficient to obtain approval for any indication.

Further, we may experience delays in clinical trials of our product candidates. We do not know whether ongoing clinical trials will be completed on schedule or at all, or whether planned clinical trials will begin on time, need to be redesigned, enroll patients on time or be completed on schedule, if at all. We also cannot be sure that submission of an IND or similar application will result in the FDA, or other regulatory authority allowing clinical trials to begin in a timely manner, if at all. Moreover, issues may arise that could cause regulatory authorities to suspend or terminate such clinical trials. Clinical trials can be delayed for a variety of reasons, including delays related to:

- inability to generate sufficient preclinical, toxicology or other *in vivo* or *in vitro* data to support the initiation or continuation of clinical trials;
- reaching a consensus with regulatory authorities on study design or implementation of the clinical trials;
- failure in obtaining regulatory authorization to commence a clinical trial;
- reaching agreement on acceptable terms with prospective contract research organizations (“CROs”), and clinical trial sites, the terms of which can be subject to extensive negotiation and may vary significantly among different CROs and clinical trial sites;
- obtaining institutional review board (“IRB”), or ethics committee approval at each clinical trial site;
- identifying, recruiting and training suitable clinical investigators;
- manufacturing, testing, releasing, validating or importing/exporting sufficient stable quantities of our product candidates for use in clinical trials;

- insufficient or inadequate supply or quality of product candidates or other materials necessary for use in clinical trials;
- recruiting, screening and enrolling suitable patients to participate in a clinical trial;
- having patients complete a clinical trial or return for post-treatment follow-up;
- clinical trial sites deviating from trial protocol or dropping out of a clinical trial;
- adding new clinical trial sites;
- failure by our CROs, other third parties or us to adhere to clinical trial protocols;
- failure to perform in accordance with the FDA's good clinical practice requirements ("GCPs"), or similar regulatory guidelines in other countries;
- occurrence of adverse events associated with the product candidate that are viewed to outweigh its potential benefits, or occurrence of adverse events in clinical trials of the same class of agents conducted by other companies;
- changes in regulatory requirements or guidance that require amending or submitting new clinical trial protocols;
- changes to the standard of care on which a clinical development plan was based, which may require new or additional studies or clinical trials;
- selection of clinical endpoints that require prolonged periods of observation or analyses of resulting data;
- costs of clinical trials of our product candidates being greater than we anticipate;
- clinical trials of our product candidates producing negative or inconclusive results, which may result in our deciding, or regulators requiring us, to conduct additional clinical trials or abandon development of such product candidates;
- transfer of manufacturing processes to larger-scale facilities operated by a contract manufacturing organization ("CMO") and delays or failure by our CMOs or us to make any necessary changes to such manufacturing processes;
- third parties being unwilling or unable to satisfy their contractual obligations to us; or
- unforeseen factors beyond our control, including public health concerns such as the COVID-19 pandemic.

In addition, disruptions caused by the COVID-19 pandemic may increase the likelihood that we encounter such difficulties or delays in initiating, enrolling, conducting or completing our planned and ongoing clinical trials. For example, on March 25, 2020, we announced that enrollment in our clinical trials had been paused temporarily in response to the COVID-19 pandemic. On June 17, 2020, we announced that enrollment in our Phase 2 clinical trial in cystic fibrosis had resumed in Israel and Europe and, on August 12, 2020, we announced that enrollment had resumed in the United States. COVID-19 is continuing to evolve and we continue to work closely with our clinical trial sites and investigators to ensure that patient enrollment will continue as quickly as is feasible in a safe environment for our patients. While we remain committed to completing enrollment in the first four treatment arms by mid-2021 and reporting data in the second half of 2021, contingent on no further disruptions due to the COVID-19 pandemic, we cannot provide assurances as to when this will be accomplished or whether we will incur significant additional costs, expend additional resources or be subject to additional regulatory requirements, including COVID-19 related disruptions, any of which may have a material adverse impact on our financial condition and results of operations.

Clinical trials must be conducted in accordance with the FDA and other applicable regulatory authorities' legal requirements, regulations or guidelines, and are subject to oversight by these governmental agencies and ethics committees or IRBs at the medical institutions where the clinical trials are conducted. We could encounter delays if a clinical trial is suspended or terminated by us, by the data safety monitoring board for such clinical trial or by the FDA or any other regulatory authority, or if the IRBs or ethics committees of the institutions in which such trials are being conducted suspend or terminate the participation of their clinical investigators and sites subject to their review. Such authorities may suspend or terminate a clinical trial due to a number of factors, including failure to conduct the clinical trial in accordance with regulatory requirements or our clinical protocols, inspection of the clinical trial operations or trial site by the FDA or other regulatory authorities resulting in the imposition of a clinical hold, unforeseen safety issues or adverse side effects, failure to demonstrate a benefit from using a product candidate, changes in governmental regulations or administrative actions or lack of adequate funding to continue the clinical trial.

In addition, significant adverse events with respect to individuals who are not enrolled in any of our clinical trials but who receive our drug candidate under our compassionate use policy (typically under a single-patient IND administered by the individual's treating physician) may result in a partial or full clinical hold on our ongoing clinical trials. A clinical hold may result in the inability to enroll new patients in our studies until the hold is removed and may make it more difficult to enroll patients thereafter. Additionally, a clinical hold may also result in, among other things, protocol redesign, changes in eligibility criteria and increased costs, any of which could adversely affect our projected development timelines and jeopardize successful completion of our clinical programs.

If we experience delays in the completion of any clinical trial of our product candidates, the commercial prospects of our product candidates may be impaired and our ability to generate product revenues from such product candidates may be delayed. In addition, any delays in completing our clinical trials may increase our costs, slow down our product development and approval process and may jeopardize our ability to commence product sales and generate revenues. Any of these occurrences may have an adverse impact on our business, financial condition and prospects. Further, the factors that cause, or lead to, a delay in the commencement or completion of clinical trials may also ultimately lead to the denial of regulatory approval of our product candidates.

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 U.S., 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 the Health Insurance Portability and Accountability Act ("HIPAA"). These laws may adversely impact, among other things, our proposed sales, marketing and education programs.

- The U.S. federal Anti-Kickback Statute, which prohibits, among other things, persons or entities from knowingly and willfully soliciting, offering, receiving, or providing any remuneration (including any kickback, bribe, or certain rebate), directly or indirectly, overtly or covertly, in cash or in kind, to induce or reward, or in return for, either the referral of an individual for, or the purchase, lease, order or recommendation of, any good, facility, item or service, for which payment may be made, in whole or in part, under any U.S. federal healthcare program, such as Medicare and Medicaid. The term "remuneration" has been broadly interpreted to include anything of value, including stock options. The federal Anti-Kickback Statute has also been interpreted to apply to arrangements between pharmaceutical manufacturers on the one hand and prescribers, purchasers and formulary managers on the other hand. There are a number of statutory exceptions and regulatory safe harbors protecting some common activities from prosecution, but the exceptions and safe harbors are drawn narrowly and require strict compliance in order to offer protection. Any arrangements with prescribers must be for bona fide services and compensated at fair market value. There are a number of statutory exceptions and regulatory safe harbors protecting some common activities from prosecution, but the exceptions and safe harbors are drawn narrowly and require strict compliance in order to offer protection. A person or entity does not need to have actual knowledge of the statute or specific intent to violate it in order to have committed a violation.
- The U.S. federal civil and criminal false claims laws, including without limitation, the civil False Claims Act, which can be enforced by private citizens on behalf of the U.S. federal government through civil whistleblower or qui tam actions, and the federal civil monetary penalties law which prohibit, among other things, individuals or entities from knowingly presenting, or causing to be presented, to the U.S. federal government, claims for payment or approval that are false or fraudulent, knowingly making, using, or causing to be made or used, a false record or statement material to a false or fraudulent claim, or from knowingly making a false statement to avoid, decrease, or conceal an obligation to pay money to the U.S. federal government. Pharmaceutical manufacturers can cause false claims to be presented to the U.S. federal government by, among other things, engaging in impermissible marketing practices, such as the off-label promotion of a product for an indication for which it has not received FDA approval. Further, pharmaceutical manufacturers can be held liable under the civil False Claims Act even when they do not submit claims directly to government payors if they are deemed to "cause" the submission of false or fraudulent claims. In addition, the government may assert that a claim including items and 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.
- HIPAA, which imposes criminal and civil liability for, among other things, knowingly and willfully executing, or attempting to execute, a scheme to defraud any healthcare benefit program, or knowingly and willfully falsifying, concealing, or covering up a material fact or making any materially false statement, in connection with the delivery of, or payment for, healthcare benefits, items, or services. Similar to the federal Anti-Kickback Statute, a person or

entity does not need to have actual knowledge of the statute or specific intent to violate it in order to have committed a violation;

- analogous U.S. state laws and regulations, including: state anti-kickback and false claims laws, which may apply to our business practices, including but not limited to, research, distribution, sales and marketing arrangements, and claims involving healthcare items or services reimbursed by any third-party payor, including private insurers; state laws that require pharmaceutical companies to comply with the pharmaceutical industry's voluntary compliance guidelines and the relevant compliance guidance promulgated by the U.S. federal government, or otherwise restrict payments that may be made to healthcare providers and other potential referral sources; state laws and regulations that require drug manufacturers to file reports relating to pricing and marketing information, which requires tracking gifts and other remuneration and items of value provided to healthcare professionals and entities; and state and local laws requiring the registration of pharmaceutical sales representatives, and similar healthcare laws and regulations in foreign jurisdictions, including reporting requirements detailing interactions with and payments to healthcare providers.

Ensuring that our internal operations and future business arrangements with third parties comply with applicable healthcare laws and regulations will involve substantial costs. It is not always possible to identify and deter employee misconduct or business noncompliance, and the precautions we take to detect and prevent inappropriate conduct may not be effective in controlling unknown or unmanaged risks or losses or in protecting us from governmental investigations or other actions or lawsuits stemming from a failure to comply with such laws or regulations.

If our operations are found to be in violation of any of the laws described above or any other governmental laws and regulations that may apply to us, we may be subject to significant penalties, including civil, criminal, and administrative penalties, damages, fines, exclusion from government-funded healthcare programs, such as Medicare and Medicaid, or similar programs in other countries or jurisdictions, integrity oversight and reporting obligations to resolve allegations of noncompliance, disgorgement, imprisonment, contractual damages, reputational harm, diminished profits, and the curtailment or restructuring of our operations. Further, defending against any such actions can be costly, time-consuming and may require significant personnel resources. Therefore, even if we are successful in defending against any such actions that may be brought against us, our business may be impaired.

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 ongoing and 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 or regulatory agencies require us to undertake significant additional studies as a result of our data, the development timeline, regulatory approval and commercialization prospects for our lead product candidate, and, correspondingly, our business and financial prospects, would be materially adversely affected, which may result in termination of development activities, the inability to raise additional needed capital and/or a precipitous decline in our stock price, as well as impair our ability to enter into collaboration arrangements or damage existing strategic partnerships.

Our product candidates, including ELX-02, may cause adverse events 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 or other product candidates, results of our clinical trials (or significant adverse events experienced by individuals receiving drug under our compassionate use policy) could reveal an unacceptable severity and prevalence of 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. If we are required to delay, suspend or terminate any clinical trial or commercialization efforts, the commercial prospects of such product candidates may be harmed, and our ability to generate product revenues from them or other product candidates that we develop may be delayed or eliminated.

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 the form of a new or modified risk evaluation and mitigation strategy;
- regulatory authorities may require additional labeling, such as additional warnings or contraindications, which may negatively impact sales;
- regulatory authorities may issue safety alerts, letters to healthcare providers, press releases or other communications containing warnings or other safety information about the product;
- we may be required to change the way the product is administered or to conduct additional clinical studies;
- we may be required to create a risk evaluation and mitigation strategy (“REMS”) which could include a medication guide outlining the risks of such side effects for distribution to patients;
- we may be subject to fines, injunctions or the imposition of criminal penalties;
- 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, 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 nonsense mutation cystic fibrosis;
- determination of dosing levels and corresponding effect analysis;
- 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 IRBs to follow our clinical protocols;

- unforeseen factors beyond our control, including public health concerns such as the COVID-19 pandemic; and
- lack of sufficient funding to finance the clinical trials.

Even though we have received orphan drug designation from the FDA for ELX-02 for the treatment of cystic fibrosis, cystinosis, MPS I, and Rett syndrome, we may not be able to obtain orphan drug marketing exclusivity for ELX-02 or any of our other potential product candidates for other indications.

Regulatory authorities in some jurisdictions, including the United States and European Union (“EU”), may designate drugs for relatively small patient populations as orphan drugs in the U.S. and orphan medicinal products in the EU. Under the Orphan Drug Act, the FDA may designate a drug as an orphan drug if it is intended to treat a rare disease or condition, which is generally defined as a patient population of fewer than 200,000 individuals in the U.S., or a patient population greater than 200,000 in the United States where there is no reasonable expectation that the cost of developing the drug will be recovered from sales in the United States. Orphan drug designation must be requested before submitting an NDA.

Similarly, in the EU, a medicinal product may receive orphan designation. This applies to products that are intended for the diagnosis, prevention or treatment of a life-threatening or chronically debilitating condition and either the condition affects no more than five in 10,000 persons in the EU when the application is made, or the product, without the benefits derived from orphan status, would unlikely generate sufficient return in the EU to justify the necessary investment. Moreover, in order to obtain orphan designation in the EU, it is necessary to demonstrate that there exists no satisfactory method of diagnosis, prevention or treatment of the condition authorized for marketing in the EU, or if such a method exists, that the product will be of significant benefit to those affected by the condition. The applicable exclusivity period is ten years in the EU. The European exclusivity period can be reduced to six years, if, at the end of the fifth year a drug no longer meets the criteria for orphan drug designation or if the drug is sufficiently profitable so that market exclusivity is no longer justified.

The FDA has granted orphan drug designation for ELX-02 for the treatment of cystic fibrosis, MPS I, Rett syndrome, and cystinosis. We may seek orphan drug designation for our other product candidates, and with respect to other indications. In the United States, orphan drug designation entitles a party to financial incentives such as opportunities for grant funding towards clinical trial costs, tax advantages and application fee waivers. After the FDA grants orphan drug designation, the generic identity of the drug and its potential orphan use are disclosed publicly by the FDA.

In addition, if a drug with an orphan drug designation subsequently receives the first FDA marketing approval for the indication for which it has such designation, the drug is entitled to a period of marketing exclusivity, which precludes the FDA from approving another marketing application for the same drug for the same indication for that time period. The applicable period is seven years in the U.S. Orphan drug exclusivity may be lost in limited circumstances, such as a showing of clinical superiority over the product with orphan exclusivity, if the underlying NDA authorizing the sale of the drug is withdrawn, or if the manufacturer is unable to assure sufficient quantity of the drug to meet the needs of patients with the rare disease or condition.

Even if we obtain orphan drug exclusivity for a product candidate, that exclusivity may not effectively protect the drug candidate from competition because different drugs can be approved for the same condition. In addition, even after an orphan drug is approved, the applicable regulatory authority can subsequently approve the same or a similar drug from another sponsor for the same condition if it concludes that the later drug is clinically superior in that it is shown to be safer, more effective or makes a major contribution to patient care. Orphan drug designation neither shortens the development time or regulatory review time of a drug nor gives the drug any advantage in the regulatory review or approval process.

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.

Successful and timely completion of clinical trials will require that we enroll a sufficient number of subjects. These trials and other trials we conduct may be subject to delays for a variety of reasons, including as a result of enrollment taking longer than anticipated, subject withdrawal or adverse events. These types of developments could cause us to delay the trial or halt further development. Our clinical trials will compete with other clinical trials that are in the same therapeutic areas as our product candidates, and this competition reduces the number and types of patients available to us, as some patients who might have opted to enroll in our trials may instead opt to enroll in a trial being conducted by one of our competitors. The protocols for our clinical trials generally require that patients may not be enrolled in more than one clinical trial for the same indication, which will limit the pool of available subjects.

In addition to the rarity of some diseases, the eligibility criteria of our clinical studies will further limit the pool of available study participants as we will require that patients have specific characteristics that we can measure and that their

disease is not too advanced. Specifically, some of the diseases that our product candidates are designed 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, potentially secure regulatory approval for, and if approved, successfully commercialize ELX-02.

We cannot guarantee that any of our programs will identify a sufficient number of patients to complete clinical development, pursue regulatory approval and market our product candidates, if approved. The combined number of patients in the U.S., 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. Patient enrollment depends on many factors, including:

- the size and nature of the patient population;
- the severity of the disease under investigation;
- eligibility criteria for the trial;
- the proximity of patients to clinical sites;
- the design of the clinical protocol;
- the ability to obtain and maintain patient consents;
- the ability to recruit clinical trial investigators with the appropriate competencies and experience;
- the risk that patients enrolled in clinical trials will drop out of the trials before the administration of our product candidates or trial completion;
- the availability of competing clinical trials;
- the availability of new drugs approved for the indication the clinical trial is investigating; and
- clinicians' and patients' perceptions as to the potential advantages of the drug being studied in relation to other available therapies.

In addition, the ongoing COVID-19 pandemic has and may continue to adversely affect enrollment in our clinical trials. On March 25, 2020, we announced that enrollment in our clinical trials had been paused temporarily in response to the COVID-19 pandemic in order to avoid unnecessary exposure in at-risk populations, to maintain the integrity of our study data and to support global healthcare providers in their commitment to ensure patient safety. On June 17, 2020, enrollment in our Phase 2 clinical trial in cystic fibrosis had resumed in Israel and Europe and, on August 12, 2020 had resumed in the United States. COVID-19 is continuing to evolve and we continue to work closely with our clinical trial sites and investigators to ensure that patient enrollment will continue as quickly as is feasible in a safe environment for our patients. We are also evaluating additional clinical sites in other countries where patient enrollment may be feasible. Additionally, significant additional costs as a result of this delay in enrollment or failure to complete enrollment in accordance with our objectives may have a material adverse impact on our financial condition and results of operations.

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, toxicologists and a small number of medical institutions and third-party contract research 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 and services 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 authorization of INDs and clinical trial applications (“CTAs”) and the approval of anticipated new drug applications (“NDAs”) and other marketing applications, and our introduction of new drugs, if any, may be delayed or impeded, which could impair our clinical development programs and would have a material adverse effect on our business and results of operations. These 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. The extent to which the COVID-19 pandemic and municipalities’ efforts to combat it through temporary quarantines, containment zones and limitations on travel, as well as other restrictions, may create business disruptions within the organizations of our third-party researchers, scientists and consultants, as well as CROs, clinical trial sites and patient assistance groups, that result in the unavailability of personnel needed to successfully conduct and complete our clinical trials, may have a material adverse impact on our business and financial condition.

Interim, “topline” and preliminary data from our clinical trials that we announce or publish from time to time may change as more patient data become available and are subject to audit and verification procedures that could result in material changes in the final data.

From time to time, we may publicly disclose preliminary or top-line data from our preclinical studies and clinical trials, which is based on a preliminary analysis of then-available data, and the results and related findings and conclusions are subject to change following a more comprehensive review of the data related to the particular study or trial. We also make assumptions, estimations, calculations and conclusions as part of our analyses of data, and we may not have received or had the opportunity to fully and carefully evaluate all data. As a result, the top-line or preliminary results that we report may differ from future results of the same studies, or different conclusions or considerations may qualify such results, once additional data have been received and fully evaluated. Top-line and preliminary data also remain subject to audit and verification procedures that may result in the final data being materially different from the top-line or preliminary data we previously published. As a result, top-line and preliminary data should be viewed with caution until the final data are available.

Further, others, including regulatory agencies, may not accept or agree with our assumptions, estimates, calculations, conclusions or analyses or may interpret or weigh the importance of data differently, which could impact the value of the particular program, the approvability or commercialization of the particular product candidate or product and our Company in general. In addition, the information we choose to publicly disclose regarding a particular study or clinical trial is based on what is typically extensive information, and you or others may not agree with what we determine to be material or otherwise appropriate information to include in our disclosure. If the interim, top-line, or preliminary data that we report differ from actual results, or if others, including regulatory authorities, disagree with the conclusions reached, our ability to obtain approval for, and commercialize, our product candidates may be harmed, which could negatively impact our business, operating results, prospects or financial condition.

The regulatory approval processes of the FDA and comparable regulatory authorities are lengthy, time consuming and inherently unpredictable, and if we are ultimately unable to obtain regulatory approval for our product candidates, our business will be substantially harmed.

The time required to obtain approval by the FDA and comparable regulatory authorities is unpredictable but typically takes many years following the commencement of clinical trials and depends upon numerous factors, including the substantial discretion of the regulatory authorities. In addition, approval policies, regulations, or the type and amount of clinical data necessary to gain approval may change during the course of a product candidate’s clinical development and may vary among jurisdictions. Neither we nor any future collaborator is permitted to market any of our product candidates in the United States until we receive regulatory approval of an NDA from the FDA. Similarly, in the EU, our product candidates can only be placed on the market after obtaining a marketing authorization.

Prior to obtaining approval to commercialize a product candidate in the United States, Europe or other jurisdictions, we or our collaborators must demonstrate with substantial evidence from well-controlled clinical trials, and to the satisfaction of the FDA or other regulatory agencies, that such product candidates are safe and effective for their intended uses. Results from nonclinical studies and clinical trials can be interpreted in different ways. Even if we believe the nonclinical or clinical data for our product candidates are promising, such data may not be sufficient to support approval by the FDA and other regulatory authorities. The FDA or other regulatory authority may also require us to conduct additional preclinical studies or

clinical trials for our product candidates either prior to or post-approval, or it may object to elements of our clinical development program.

The FDA or any foreign regulatory authorities or bodies can delay, limit or deny approval of our drug product candidates or require us to conduct additional nonclinical or clinical testing or abandon a program for a variety of reasons, including the following:

- regulatory authorities may disagree with the design or implementation of our clinical trials;
- we may be unable to demonstrate to the satisfaction of the applicable regulatory authority that a product candidate is safe or effective for its proposed indication;
- the results of clinical trials may not meet the level of statistical significance required by regulatory authorities for approval;
- serious and unexpected drug-related side effects experienced by participants in our clinical trials or by individuals using drugs similar to our product candidates;
- we may be unable to demonstrate that a product candidate's clinical and other benefits outweigh its safety risks;
- regulatory authorities may disagree with our interpretation of data from preclinical studies or clinical trials;
- the data collected from clinical trials of our product candidates may not be acceptable or sufficient to support the submission of an NDA or other submission or to obtain regulatory approval in the United States, the EU, or elsewhere, and we may be required to conduct additional clinical studies;
- the applicable foreign regulatory authority may disagree regarding the formulation, labeling and/or the specifications of our product candidates;
- applicable regulatory authorities may fail to approve the manufacturing processes or facilities of third-party manufacturers with which we contract for clinical and commercial supplies; and
- the approval policies or regulations of the FDA or comparable regulatory authorities may significantly change in a manner rendering our clinical data insufficient for approval.

Of the large number of drugs in development, only a small percentage successfully complete the regulatory approval processes and are commercialized. The lengthy approval process as well as the unpredictability of future clinical trial results may result in our failing to obtain regulatory approval to market our product candidates, which would significantly harm our business, results of operations and prospects.

In addition, even if we were to obtain approval, regulatory authorities may approve our product candidates for fewer or more limited indications than we request, may not approve the price we intend to charge for our products, may grant approval contingent on the performance of costly post-marketing clinical trials, including Phase 4 clinical trials, and/or the implementation of a REMS program, which may be required to assure safe use of the drug after approval. Regulatory authorities may also approve a product candidate for a more limited indication or patient population than we originally requested, or may approve a product candidate with a label that does not include the labeling claims necessary or desirable for the successful commercialization of that product candidate. Any of the foregoing scenarios could materially harm the commercial prospects for our product candidates.

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 pharmaceutical 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 potential 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, for acquisitions and joint venture 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:

- 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 safe or 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.

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 United States, 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 March 2010. This law substantially changed the way healthcare is financed by both governmental and private insurers in the United States, 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. 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. The issuance of regulations and coverage expansion by various governmental agencies relating to the Medicaid Drug Rebate Program has increased 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 generate or increase future product sales, if any, 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 approved products, if any, and materially harm our business, financial condition and results of operations.

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.

We have a history of net losses and negative cash flows from operating activities since inception and, as of March 31, 2021, had an accumulated deficit of \$180.3 million. We have financed our operations primarily through equity securities, and to a lesser extent from loans and grants. We have devoted substantially all of our financial resources and efforts to research and development. We expect that it will be several years, if ever, before we receive regulatory approval for commercialization of a product candidate. We expect to continue to incur significant expenses and 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 and/or other product candidates further into clinical development;
- continue to experience delays in enrollment and completion of our clinical trials due to the COVID-19 pandemic or otherwise;
- continue the preclinical development of our research programs and advance candidates into clinical trials;
- pursue regulatory authorization to conduct clinical trials of additional product candidates;
- seek marketing approvals for our product candidates;
- 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, management and scientific personnel;

- add operational, financial and management information systems and personnel;
- 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 product candidates 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 for which we may obtain marketing approval, 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 the company could also cause investors to lose all or part of their 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 sales, marketing, manufacturing and distribution of the approved product. Further, we expect to incur additional costs related to our acquisition of Zikani. 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 and other product candidates;
- the costs, timing and outcome of any regulatory review of ELX-02 and other product candidates;
- 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 or 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 several years, if at all.

Accordingly, despite our prior public equity offerings and debt financing, we will need substantial additional funding in connection with our continuing operations and to achieve our goals. 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. If we are unable to obtain adequate financing, we will evaluate options, which may include reducing or deferring operating expenses, including by downsizing our workforce and curtailing certain development programs, which could have a material adverse effect on our operations and financial results.

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. To the extent that we raise additional capital through the sale of equity or convertible debt securities, an investor's ownership interest will be diluted, and the terms of these securities may include liquidation or other preferences that may adversely affect an investor's 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 with third parties, we may have to relinquish valuable rights to our technologies, future revenue streams, research programs or product candidates or 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 Our Business and Operations

Our stockholders may not realize a benefit from our acquisition of Zikani (the "Merger") commensurate with the ownership dilution they will experience in connection with the Merger.

If we are unable to realize the strategic and financial benefits currently anticipated from the Merger, our stockholders will have experienced substantial dilution of their ownership interest without receiving any commensurate benefit. Significant management attention and resources will be required to integrate the two companies and we may not manage these processes successfully. We are making substantial investments of resources to support this acquisition, which will result in significant ongoing operating expenses and may divert resources and management attention from other areas of our business. Delays in this process could adversely affect the combined company's business, financial results, financial condition and stock price. Even if we are able to integrate the business operations successfully, there can be no assurance that this integration will result in the realization of the full benefits of synergies, innovation and operational efficiencies that may be possible from this integration and that these benefits will be achieved within a reasonable period of time.

We continue to seek opportunities 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, collaboration or other strategic transaction.

Our business strategy includes expanding our product candidates 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 or development programs.

We may engage in future strategic transactions that could cause us to incur additional liabilities, commitments or significant expense. Any such transactions will be dependent on our ability to appropriately evaluate the potential risks and uncertainties, integrate any new technology, product and/or business, and generate revenues (including through up-front payments, milestones and/or royalties) sufficient to meet our underlying objectives.

Any strategic transaction undertaken, including the Merger, may result in unforeseen development costs, timeline delays, regulatory approval challenges and uncertainties relating to the commercial market opportunity, any of which could cause us to fail to realize the anticipated value of the transaction and may have a material adverse effect on our business and financial condition.

To manage effectively our current and future potential growth, we must also 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, or securities convertible into our capital stock, which could dilute current stockholders' ownership interest in our company.

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. Any of these actions or proceedings may result in significant costs, fines, penalties or imposition of burdensome restrictions on the company, any of which could have a material adverse effect on our business, results of operations and financial condition.

We could be subject to additional tax liabilities.

We are subject to federal, state and local taxes in the United States and Israel. Significant judgment is required in evaluating our tax positions and our worldwide provision for taxes. During the ordinary course of business, there are many activities and transactions for which the ultimate tax determination is uncertain. In addition, our tax obligations and effective tax rates could be adversely affected by changes in the relevant tax, accounting and other laws, regulations, principles and interpretations, including those relating to income tax nexus, by our earnings being lower than anticipated in jurisdictions where we have lower statutory rates and higher than anticipated in jurisdictions where we have higher statutory rates, by changes in foreign currency exchange rates, or by changes in the valuation of our deferred tax assets and liabilities. We may be audited in various jurisdictions, and such jurisdictions may assess additional taxes against us. Although we believe our tax estimates are reasonable, the final determination of any tax audits or litigation could be materially different from our historical tax provisions and accruals, which could have a material adverse effect on our operating results or cash flows in the period or periods for which a determination is made.

Our business could be adversely affected by the effects of widespread public health epidemics and other factors beyond our control.

Public health epidemics or widespread outbreaks of contagious diseases could adversely impact our business. Any outbreak of contagious diseases, and other adverse public health developments, such as the recent novel strain of COVID-19, initially limited to a region in China and now affecting the global community, could impact our operations depending on future developments, which are highly uncertain, largely beyond our control and cannot be predicted with certainty. These uncertain factors include the duration of the outbreak, new information which may emerge concerning the severity of the disease and the actions to contain or treat its impact, could adversely impact our operations, including among others, conduct of our clinical trials, employee mobility and productiveness, temporary closure of facilities, including clinical trial sites, our manufacturing capabilities, and third party service providers such as CROs, any of which could have an adverse impact on our business and our financial results. The COVID-19 pandemic has also adversely affected the conduct of our clinical trials. For example, on March 25, 2020, we announced that enrollment in our clinical trials had been paused temporarily in response to the COVID-19 pandemic in order to avoid unnecessary exposure in at-risk populations, to maintain the integrity of our study data and to support global healthcare providers in their commitment to ensure patient safety. On June 17, 2020, we announced that enrollment in our Phase 2 clinical trial in cystic fibrosis had resumed in Israel and Europe, and on August 12, 2020, had resumed in the United States. As the COVID-19 pandemic continues in the United States and elsewhere, we may experience additional disruptions that could severely impact our business, preclinical studies and clinical trials.

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 is 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 also developed, or are developing, laws governing the collection, use and transmission of personal information. EU member states and other jurisdictions have adopted data protection laws and regulations, which

impose significant compliance obligations. For example, in May 2016, the EU formally adopted the General Data Protection Regulation, or GDPR, which applies to all EU member states as of May 25, 2018 and replaces the former EU Data Protection Directive. The regulation introduces new data protection requirements in the EU and imposes substantial fines for breaches of the data protection rules. The GDPR must be implemented into national laws by the EU member states and imposes 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 EU, and guidance on implementation and compliance practices are often updated or otherwise revised. Any failure to comply with the rules arising from the GDPR 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. The GDPR 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 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, “hacktivists,” 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 also implemented information security measures to protect patients’ personal information against the risk of inappropriate and unauthorized external use and disclosure. The COVID-19 pandemic has caused us to modify our business practices, including permitting our employees to work from home. As a result, we are increasingly dependent upon our technology systems to operate our business and our ability to effectively manage our business depends on the security, reliability and adequacy of our technology systems and data, which includes use of cloud technologies. This increased remote usage of information systems increases the risks that our business may be disrupted due to a variety of reasons, including security breaches, power outages, unavailability of employees, use of non-company secured equipment and increased phishing and hack activity. 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, patient and other data and information may become compromised, we could lose sales for approved products, if any, and suffer reputational damage and loss of confidence by patients, investors and business partners. 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, or similar events occurring through one of our vendors that maintain such information on our behalf, could cause our business to be materially harmed and our results of operations to be adversely impacted.

We currently rely, and plan to rely on in the future, third parties to conduct and support our preclinical studies and clinical trials. If these third parties do not properly and successfully carry out their contractual duties or meet expected deadlines, we may not be able to obtain regulatory approval of or commercialize our product candidates.

We have utilized and plan to continue to utilize and depend upon independent investigators and collaborators, such as medical institutions, CROs, CMOs and strategic partners to conduct and support our preclinical studies and clinical trials. As a result, we will have less direct control over the conduct, timing and completion of these preclinical studies and clinical trials and the management of data developed. Nevertheless, we are responsible for ensuring that each of our studies is conducted in accordance with applicable protocol, legal and regulatory requirements and scientific standards, and our reliance on third parties does not relieve us of our regulatory responsibilities. We and these third parties are required to comply with GCP requirements, which are regulations and guidelines enforced by the FDA and comparable foreign regulatory authorities for product candidates in clinical development. Regulatory authorities enforce these GCP requirements through periodic inspections of trial sponsors, principal investigators and trial sites. If we or any of these third parties fail to comply with applicable GCP regulations, the clinical data generated in our clinical trials may be deemed unreliable and the FDA or comparable foreign regulatory authorities may require us to perform additional clinical trials before approving our marketing applications. We cannot assure you that, upon inspection, such regulatory authorities will determine that any of our clinical trials comply with the GCP regulations. In addition, our clinical trials must be conducted with pharmaceutical product produced under cGMP regulations. Our failure or any failure by these third parties to comply with these regulations may require us to repeat clinical trials, which would delay the regulatory approval process. Moreover, our business may be implicated if any of these third parties violates federal or state fraud and abuse or false claims laws and regulations or healthcare privacy and security laws.

We contract with third parties for the manufacture of our product candidates for preclinical studies and our ongoing clinical trials, and expect to continue to do so for additional clinical trials and ultimately for commercialization. This reliance on third parties increases the risk that we will not have sufficient quantities of our product candidates or drugs or such quantities at an acceptable cost, which could delay, prevent or impair our development or commercialization efforts.

We do not currently have the infrastructure or internal capability to manufacture supplies of our product candidates for use in development, or if approved, eventual commercialization. We rely, and expect to continue to rely, on third-party manufacturers for the production of our product candidates for preclinical studies and clinical trials. We do not have long-term supply agreements with these manufacturers. Furthermore, the raw materials for our product candidates are sourced, in some cases, from a single-source supplier. If we were to experience an unexpected loss of supply of any of our product candidates or any of our future product candidates for any reason, whether as a result of manufacturing, supply or storage issues or otherwise, we could experience delays, disruptions, suspensions or terminations of, or be required to restart or repeat, any pending or ongoing clinical trials. For example, the extent to which the COVID-19 pandemic impacts our ability to procure sufficient supplies for the development of our products and product candidates will depend on the severity and duration of the spread of the virus, and the actions undertaken to contain COVID-19 or treat its effects.

We expect to continue to rely on third-party manufacturers for the commercial supply of any of our product candidates for which we obtain marketing approval. We may be unable to maintain or establish required agreements with third-party manufacturers or to do so on acceptable terms. Even if we are able to establish agreements with third-party manufacturers, reliance on third-party manufacturers entails additional risks, including:

- the failure of the third party to manufacture our product candidates according to our schedule;
- the reduction or termination of production or deliveries by suppliers, or the raising of prices or renegotiation of terms;
- the termination or nonrenewal of agreements at a time that is costly or inconvenient for us;
- the failure to comply with contractual obligations;
- the failure to comply with applicable regulatory requirements;
- the failure to manufacture our product candidates according to our specifications;
- clinical supplies not being delivered to clinical sites on time;
- disruptions to the operations of our third-party manufacturers or suppliers, testing facilities, or research sites caused by conditions unrelated to our business or operations, including unrelated regulatory action against or the bankruptcy of the manufacturer or supplier, testing facility, or research site, or the unavailability of essential personnel to conduct or complete our research or clinical trials, such as, for example, a result of the COVID-19 pandemic; and
- the misappropriation of our proprietary information, including our trade secrets and know-how.

Any of these events could lead to clinical trial delays, 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 or testing. 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 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 may face difficulty in attracting and retaining key talent for a number of reasons, including management changes, the underperformance or discontinuation of one or more late-stage programs, recruitment by competitors or delays in the recruiting and hiring process as a result of the COVID-19 pandemic. We cannot ensure that we will be able to hire or retain the personnel necessary for our operations or that the loss of any such personnel will not have a material impact on our financial condition and results of operations.

We are highly dependent on principal members of our senior management. 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. Recruiting and retaining other qualified employees, consultants and advisors for our business, including scientific and technical personnel, will also be critical to our success. 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 product candidates.

We have experienced recent changes in management and other key personnel in critical functions across our organization, including in connection with the Merger. Changes in management and other key personnel have the potential to disrupt our business, and any such disruption could adversely affect our operations, programs, growth, financial condition or results of operations. In addition, new members of management may have different perspectives on programs and opportunities for our business, which may cause us to focus on new business opportunities or reduce or change emphasis on our existing business programs. Further, if members of our management and other key personnel in critical functions across our organization are unable to perform their duties or have limited availability due to COVID-19, we may not be able to execute on our business strategy and/or our operations may be negatively impacted.

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 March 31, 2021, we owned or licensed 30 issued patents and 45 pending patent applications in the U.S. and abroad, not including U.S. provisional applications. However, with regard to the pending provisional applications, 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 currently pending patent application may delay the approval of such patent application which could 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 current or future issued patents to become invalid or unenforceable or that could cause our pending patent applications to not be granted, including known or unknown prior art, deficiencies in the patent application or lack of originality of the technology. Our competitive position and future revenue 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. 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 owned or 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 lives of our patents are limited. With regard to our lead compound ELX-02, patents that have issued or that may issue in the future from our primary composition of matter patent family are currently set to expire in 2031. We have pending patent families directed to specific methods of manufacturing ELX-02 and using ELX-02 to treat various ocular

conditions, and any patents that may issue from these families would be expected to expire in 2038 and 2039, respectively. However, these applications may not issue, and even if they do issue the resultant patents may not provide adequate coverage to meaningfully block competitors from launching their products. We will likely pursue additional patent protection relating to ELX-02 in the future, including for example additional methods of use or manufacture, specific formulations, or combinations of ELX-02 with other therapeutic agents. However, as with our pending patent families, any applications we file in the future may not issue or may not result in adequate coverage to adequately protect our assets.

Depending upon the timing, duration, and conditions of any FDA marketing approval for ELX-02, one or more of our patents may be eligible for patent term extension of up to five years under the Hatch-Waxman Act. However, we may not receive an extension if we fail to exercise due diligence during the testing phase or regulatory review process, fail to apply for an extension within applicable deadlines, or otherwise fail to satisfy applicable requirements. Moreover, the length of the extension could be less than we request. Only one patent per approved product can be extended, the extension cannot extend the total patent term beyond 14 years from approval and only those claims covering the approved drug, an approved method of using the approved drug, or a method of manufacturing the approved drug may be extended. If we are unable to obtain patent term extension or the term of any such extension is less than we request, the period during which we can enforce our patent rights for ELX-02 will be shortened and our competitors may obtain approval to market competing products sooner. As a result, our revenue from applicable products could be reduced. Further, if this occurs, our competitors may take advantage of our investment in development and trials by referencing our clinical and preclinical data and launch their product earlier than might otherwise be the case, and our business could be harmed.

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 may be harmed.

Our success will depend in part on our ability to obtain and maintain patent and regulatory protections for our product candidates, 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 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 product candidates. If we cannot obtain a

license, we may be prevented from the manufacture, sale or development of our product candidates, 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, which could significantly impede development and impair or block our ability to secure regulatory approval of any redesigned product or process;
- 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 develop or 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 belong 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 product candidates, 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.

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

Competitors or other third parties may infringe, misappropriate or otherwise violate our patents or other intellectual property. If we or one of our licensors were to initiate legal proceedings against a third party to enforce a patent covering one of our products or product candidates, the defendant could counterclaim that our patent is invalid or unenforceable. In patent litigation in the United States and in Europe, defendant counterclaims alleging invalidity or unenforceability are commonplace. Grounds for a validity challenge could be an alleged failure to meet any of several statutory requirements, for example, lack of novelty, obviousness, lack of written description, or non-enablement. Third parties might allege unenforceability of our patents because during prosecution of the patent an individual connected with such prosecution withheld relevant information or made a misleading statement. Interference or derivation proceedings provoked by third parties or brought by us or declared by the USPTO may be necessary to determine the priority of inventions with respect to our patents or patent applications. The outcome of proceedings involving assertions of invalidity and unenforceability during patent litigation is unpredictable. If a defendant were to prevail on a legal assertion of invalidity or unenforceability, we would lose at least part, and perhaps all, of the patent protection on our products and product candidates, which may allow third parties to commercialize our technology or products and compete directly with us, without payment to us, or could require us to obtain license rights from the prevailing party in order to be able to manufacture or commercialize our products, product candidates or technologies without infringing third-party patent rights. Even if a defendant does not prevail on a legal assertion of invalidity or unenforceability, our patent claims may be construed in a manner that would limit our ability to enforce such claims against the defendant and others. Moreover, if the breadth or strength of protection provided by our patents and patent applications is threatened, it could dissuade companies from collaborating with us to license, develop or commercialize our product candidates. Accordingly, despite our efforts, we may not be able to prevent third parties from infringing upon, misappropriating or otherwise violating our intellectual property rights. Thus, even if we were to ultimately prevail, or to settle at an early stage, such litigation could burden us with substantial unanticipated costs. Our patents and other intellectual property rights also will not protect our technology if competitors design around our protected technology without infringing our patents or other intellectual property rights.

We may be subject to third-party claims including infringement, interference or derivation proceedings, post-grant review and inter partes review before the USPTO or similar adversarial proceedings or litigation in other jurisdictions. Even if we believe such claims are without merit, a court could hold that these third-party patents are valid, enforceable and infringed, and the holders of any such patents may be able to block our ability to commercialize the applicable product or product candidates unless we obtained a license under the applicable patents, or until such patents expire or are finally determined to be invalid or unenforceable. Because patent applications can take many years to issue, there may be currently pending patent applications which may later result in issued patents that our products, product candidates or technologies may infringe. In addition, third parties may obtain patents in the future and claim that use of our technologies infringes upon these patents. If any third-party patents were held by a court to cover aspects of our products, product candidates or technologies, the holders of any such patents may be able to prohibit our commercialization of the applicable product or product candidate until such patent expires or is finally determined to be invalid or unenforceable or unless we obtained a license.

In addition, defending such claims would cause us to incur substantial expenses and, if successful, could cause us to pay substantial damages if we are found to be infringing a third party's patent rights. These damages potentially include royalties, increased damages (possibly treble damages) and attorneys' fees if we are found to have infringed such rights willfully. Further, if a patent infringement suit is brought against us, our development, manufacturing or sales activities relating to the product, product candidate or technology that is the subject of the suit may be delayed or terminated, as parties making claims against us may obtain injunctive or other equitable relief. As a result of patent infringement claims, or in order to avoid potential infringement claims, we may choose to seek, or be required to seek, a license from the third party, which may require payment of substantial royalties or fees, or require us to grant a cross-license under our intellectual property rights. These licenses may not be available on reasonable terms or at all. If we are unable to enter into a license on acceptable terms, we could be prevented from commercializing one or more of our products or product candidates, or forced to modify such products or product candidates, or to cease some aspect of our business operations, which could harm our business.

significantly. We might also be forced to redesign or modify our products, product candidates or technologies so that we no longer infringe the third-party intellectual property rights, which may result in significant cost or delay to us, or which redesign or modification could be impossible or technically infeasible.

Even if we were ultimately to prevail, any of these events could require us to divert substantial financial and management resources that we would otherwise be able to devote to our business. Intellectual property litigation, regardless of its outcome, may cause negative publicity, adversely impact prospective customers, cause product shipment delays, or prohibit us from manufacturing, importing, marketing or otherwise commercializing our products or product candidates. Such litigation or proceedings could substantially increase our operating losses and reduce our resources available for development activities. We may not have sufficient financial or other resources to adequately conduct such litigation or proceedings. Some of our competitors may be able to sustain the costs of such litigation or proceedings more effectively than we can because of their substantially greater financial resources. Uncertainties resulting from the initiation and continuation of patent litigation or other proceedings could have an adverse effect on our ability to compete in the marketplace and could have an adverse impact on our business and financial condition.

Risks Related to Our Regional Operations

Potential political and economic instability in regions where we conduct business may adversely affect our results of operations.

In addition to our operations in the United States, we currently conduct certain research and clinical development activities through our regional operations located in Israel, and may, in the future, expand operations to other regional locations in Europe and elsewhere as circumstances require. Accordingly, political and economic conditions in Israel and the surrounding region in particular, may directly affect our operations. Regional instability may lead to a deterioration in the political and trade relationships that exist between countries in the region, making it more difficult to conduct operations.

In addition, 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 provide assurance that this government coverage will be maintained or, if maintained, will be sufficient to compensate us fully for damages incurred.

Furthermore, in the past, Israel and Israeli companies have been subjected to economic boycotts. Several countries still restrict business with Israel and with Israeli companies. These restrictive laws and policies, even though we are a U.S.-based company, may have an adverse impact on our operating results, financial conditions or the expansion of our business.

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 under certain circumstances, penalties in addition to payment of royalties.

Our research and development efforts were initially financed, in part, through royalty-bearing grants from the Israel Innovation Authority, or IIA. We received an aggregate of \$2.6 million from the IIA for the development of our technologies. With respect to such grants we are required to pay certain royalties (including accrued 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 R&D Law, with respect to these past grants. If we fail to comply with the R&D 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.

With respect to such grants we are obligated to pay royalties at a rate in the low to middle single digit percentage from the revenue generated from the sale of any products or services developed using IIA grants up to a maximum amount equal to repayment of the grant proceeds received plus accrued interest. We have not commenced the payment obligation of these royalties since we have not yet generated revenue, and we have a contingent obligation with respect to such future royalty payments including interest, of \$2.7 million.

The R&D Law and terms of the prior grants restrict the transfer of certain know-how, and the transfer of manufacturing or manufacturing rights of products developed with grant funds, 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 and may result in payment of increased royalties and/or payment of additional amounts to the IIA. Furthermore, the IIA may impose certain conditions on any arrangement under which it permits us to transfer technology or development outside of Israel. Such approvals may not be granted by the IIA and any conditions imposed may not be acceptable to the Company.

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 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, 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. Previous decisions by the Committee have created uncertainty in this area regarding whether the right to receive remuneration for service inventions can be voluntarily waived by an employee and whether such waiver is enforceable. In addition, the Committee determined that even if such right to receive compensation and royalties for service inventions may be waived, the waiver should be specific. Subsequent court cases have not provided significant clarity on these matters.

General Risk Factors

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, regulatory, tax or intellectual property laws, intellectual property developments, acquisitions or other strategic transactions (including the Merger), changes in financial or operational estimates or projections and the perceptions of our investors that we are not performing or meeting expectations. The market price of our common stock may decline as a result of the Merger for a number of reasons, including, our failure to achieve the perceived benefits of the Merger as rapidly or to the extent anticipated by financial or industry analysts, or investors react negatively to the Merger and its impact on our business and prospects. 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.

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.

As a public company, we are subject to the reporting requirements of the Exchange Act, the Sarbanes-Oxley Act of 2002 (the “Sarbanes-Oxley Act”), and Nasdaq stock 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 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.

Our ability to use our net operating losses to offset future taxable income may be subject to certain limitations.

As of December 31, 2020, we had U.S. federal and state net operating loss carryforwards, or “NOL,” of \$108.9 million and \$13.7 million, respectively, and federal research tax credit carryforwards of \$3.6 million. Certain U.S. NOLs will begin to expire, beginning in 2021 through 2037, and research tax credits will expire beginning in 2026 through 2040. Included in these U.S. federal NOLs are \$34.9 million of NOLs generated after January 1, 2018, which are not subject to expiration. Federal NOLs generated in 2018 and future years may be carried forward indefinitely but may not be carried back and are only eligible to offset up to a maximum of 80% of taxable income generated in a given year. It is uncertain if and to what extent various U.S. states will conform their NOL rules to the federal rules.

In general, under Section 382 of the U. S. Internal Revenue Code of 1986, as amended, (the “Code”), a corporation that undergoes an “ownership change” is subject to limitations on its ability to utilize its pre-ownership change NOLs to offset future taxable income. We may have experienced ownership changes in the past, 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 a material adverse effect on our consolidated financial statements. As of December 31, 2020, we had Israeli NOLs of \$86.9 million, which carry forward indefinitely.

Our 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, a significant percentage of our common stock, giving effect to options and other derivative securities that are held by such persons. 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 our 2018 Equity Incentive Plan, our management is authorized to grant stock options and other equity-based awards to our employees, directors and consultants. As of March 31, 2021, individuals held share awards to purchase or receive an aggregate of 4,986,331 shares of our common stock. 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 have a negative effect on our share price.

Item 6. Exhibits

The following is a list of exhibits filed as part of this Report. Where so indicated, exhibits that were previously filed are incorporated by reference. For exhibits incorporated by reference, the location of the exhibit in the previous filing is indicated.

Exhibit Number	Exhibit Description	Incorporated by Reference			
		Form	File No.	Exhibit	Filing Date
2.1	<u>Agreement and Plan of Merger, dated April 1, 2021, by and among Eloxx Pharmaceuticals, Inc., Delta Merger Sub Acquisition Corporation and Zikani Therapeutics, Inc.</u>	8-K	001-31326	2.1	April 1, 2021
3.1	<u>Amended and Restated Certificate of Incorporation of Senesco Technologies, Inc. filed with the State of Delaware on January 22, 2007</u>	10-Q	001-31326	3.1	February 14, 2007
3.2	<u>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</u>	10-Q	001-31326	3.1	February 14, 2008
3.3	<u>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</u>	10-K	001-31326	3.3	September 28, 2009
3.4	<u>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</u>	8-K	001-31326	3.1	May 28, 2010
3.5	<u>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</u>	10-Q	001-31326	3.1	February 14, 2011
3.6	<u>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</u>	10-Q	001-31326	3.1	May 15, 2013
3.7	<u>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</u>	8-K	001-31326	3.1	October 21, 2013
3.8	<u>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</u>	8-K	001-31326	3.1	October 3, 2014
3.9	<u>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</u>	8-K	001-31326	3.1	December 22, 2017
3.10	<u>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</u>	8-K	001-31326	3.2	December 22, 2017

Exhibit Number	Exhibit Description	Incorporated by Reference			
		Form	File No.	Exhibit	Filing Date
3.11	Certificate of Designations to the Company's Certificate of Incorporation. (Series A)	8-K	001-31326	3.1	March 29, 2010
3.12	Certificate of Designations to the Company's Certificate of Incorporation. (0% Series C Convertible Preferred Stock)	8-K	001-31326	3.1	May 6, 2015
3.13	Amended and Restated Bylaws of Eloxx Pharmaceuticals, Inc.	8-K	001-31326	3.2	December 27, 2017
10.1*	Employment offer letter between Eloxx Pharmaceuticals, Inc. and Gary D Rakers dated March 26, 2021				
10.2	Employment Agreement, dated as of April 1, 2021, by and between Sumit Aggarwal and Eloxx Pharmaceuticals, Inc.	8-K	001-31326	10.1	April 1, 2021
10.3	Employment Agreement, dated as of April 1, 2021, by and between Vijay Modur and Eloxx Pharmaceuticals, Inc.	8-K	001-31326	10.2	April 1, 2021
10.4*	Lease agreement by and between Zikani Therapeutics, Inc. and ARE-480 Arsenal Street, LLC, dated July 28, 2015				
10.5*	First Amendment to Lease agreement by and between Zikani Therapeutics, Inc. and ARE-480 Arsenal Street, LLC, dated June 30, 2020				
31.1*	Certification of the Company's Principal 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 Principal 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 Principal 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 Principal Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.				
101.INS*	Inline XBRL Instance Document – the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the XBRL document.				
101.SCH*	Inline XBRL Taxonomy Extension Schema Document.				
101.CAL*	Inline XBRL Taxonomy Extension Calculation Linkbase Document.				

Exhibit Number	Exhibit Description	Incorporated by Reference			
		Form	File No.	Exhibit	Filing Date
101.DEF*	Inline XBRL Taxonomy Extension Definition Linkbase Document.				
101.LAB*	Inline XBRL Taxonomy Extension Label Linkbase Document.				
101.PRE*	Inline XBRL Taxonomy Extension Presentation Linkbase Document.				
104	Cover Page Interactive Data File (embedded within the Inline XBRL document)				

* Filed herewith.

*** This certification is being furnished solely to accompany this Quarterly Report on Form 10-Q pursuant to 18 U.S.C. Section 1350, and is not being filed for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, or otherwise subject to the liability of that section, nor shall it be deemed incorporated by reference into any filing of the registrant under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended, whether made before or after the date hereof, regardless of any general incorporation language in such filing.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

ELOXX PHARMACEUTICALS, INC.

Date: May 7, 2021

by: /s/ Daniel E. Geffken
Daniel E. Geffken
Interim Chief Financial Officer
(Principal Financial Officer)

EMPLOYMENT OFFER LETTER

March 26, 2021

Gary Rakers
[ADDRESS]

Dear Gary:

On behalf of Eloxx Pharmaceuticals, Inc. ("Eloxx" or the "Company"), I am pleased to offer you the position of Executive Director, Finance and Accounting, and Treasurer, reporting to the Chief Executive Officer (CEO) or as otherwise designated by the Company, effective March 26, 2021, subject to the approval of the Board of Directors.

The terms of the offer are as follows and supersede all prior terms of employment, except that all confidentiality, inventions, trade secrets and non-disclosure agreements remain in full force and effect:

Base Salary: Your starting salary will be \$250,000 per year, paid semi-monthly (\$10,416.67) less all applicable deductions required by law consistent with the Company's current payroll practice. Your salary is subject to periodic review and adjustment in accordance with the Company's policies in effect.

Bonus: You will be eligible to participate in Eloxx's Bonus Plan, which provides you a target bonus of 28% of your base salary per financial year, pro-rated for that portion of 2021 that you were employed in this position. Actual bonus payout will be based on Company and individual performance, and actual salary paid during the year based on the discretion of the CEO.

Equity/Stock Option Program: You will be eligible to participate in the Eloxx Equity Incentive Program. Your stock option grant of 16,000 options to purchase shares of Eloxx common stock will be confirmed and priced in accordance with the 2018 Eloxx Equity Incentive Plan and relevant Company policies.

Vacation: You will be eligible for 3 weeks of vacation annually. In addition, the Company provides a holiday schedule of 15 days per year. Vacations and holidays will be pro-rated for partial years of employment.

Benefit Programs and Coverage: You will be eligible to participate in the Company's medical, dental, 401(k), vision, life insurance, and disability insurance benefits program.

Employment at-will: In accordance with state law, your employment is "at-will," which means that there is no promise of any particular duration of your employment, and either party can terminate the employment relationship at any time, with or without cause, with or without notice, and with or without prior counseling or discipline, subject to the other terms and conditions of this offer letter.

Acceptance: To formally accept this offer, please sign this letter in the space indicated, keep a copy for your records and return this to Human Resources. Your signature will acknowledge that you have read and understood and agreed to the terms and conditions of this offer letter.

Please feel free to contact the undersigned if you have any questions regarding this offer or any other aspects of your new position with Eloxx.

Sincerely,

/s/ Lori Lavoie
Lori Lavoie
Director, Human Resources

I have read and understood this offer letter and hereby acknowledge, accept and agree to the terms as set forth above and further acknowledge that no other commitments were made to me as part of my employment offer except as specifically set forth herein:

/s/ Gary D Rakers

March 26, 2021

LEASE AGREEMENT

THIS LEASE AGREEMENT (this "**Lease**") is made this 28th day of July, 2015, between **ARE-480 ARSENAL STREET, LLC**, a Delaware limited liability company ("**Landlord**"), and **MACROLIDE PHARMACEUTICALS, INC.**, a Delaware corporation ("**Tenant**").

Building: 480 Arsenal Street, Watertown, Massachusetts

Premises: That portion of the Building containing approximately 12,991 rentable square feet, as determined by Landlord, as shown on Exhibit A.

Project: The real property on which the Building in which the Premises are located, together with all improvements thereon and appurtenances thereto as described on Exhibit B.

Base Rent: \$44.00 per rentable square foot of the Premises per annum, subject to adjustment pursuant to Section 4 hereof.

Rentable Area of Premises: 12,991 sq. ft.

Rentable Area of Project: 140,744 sq. ft.

Tenant's Share of Operating Expenses: 9 23%

Security Deposit: \$190,534.67

Target Commencement Date: September 1, 2015

Rent Adjustment Percentage: 3%

Base Term: Beginning on the Commencement Date and ending 60 months from the first day of the first full month following the Rent Commencement Date (as defined in Section 2) hereof.

Permitted Use: Research and development laboratory, related office and other related uses consistent with the character of the Project and otherwise in compliance with the provisions of Section 7 hereof.

Address for Rent Payment:

P.O. Box 975383
Dallas, TX 75397-5383

Landlord's Notice Address;

385 E. Colorado Boulevard Suite 299
Pasadena, CA 91101 Attention: Corporate Secretary

Tenant's Notice Address:

480 Arsenal Street, Suite 130
Watertown, MA 02472
Attention: Lease Administrator

The following Exhibits and Addenda are attached hereto and Incorporated herein by this reference:

☒ **EXHIBIT A** - PREMISES DESCRIPTION
☒ **EXHIBIT C** - WORK LETTER
☒ **EXHIBIT E** - RULES AND REGULATIONS
☒ **EXHIBIT G** - EXPANSION SPACE

☒ **EXHIBIT B** - DESCRIPTION OF PROJECT
☒ **EXHIBIT D** - COMMENCEMENT DATE
☒ **EXHIBIT F** - TENANT'S PERSONAL PROPERTY

1. Lease of Premises. Upon and subject to all of the terms and conditions hereof, Landlord hereby leases the Premises to Tenant and Tenant hereby leases the Premises from Landlord.

The portions of the Project which are for the non-exclusive use of tenants of the Project are collectively referred to herein as the "**Common Areas**." Landlord reserves the right to modify Common Areas, provided that such modifications do not materially adversely affect Tenant's use of the Premises for the Permitted Use.

2. Delivery; Acceptance of Premises; Commencement Date. Landlord shall use reasonable efforts to deliver the Premises to Tenant on or before the Target Commencement Date ("**Delivery**" or "**Deliver**"). If Landlord fails to timely deliver the Premises, Landlord shall not be liable to Tenant for any loss or damage resulting therefrom, and this Lease shall not be void or voidable except as provided herein. Notwithstanding the foregoing, Base Rent shall be abated 1 day for each day after the date that is 60 days after the Target Commencement Date (as such date may be extended for Force Majeure delays) that Landlord fails to Deliver the Premises to Tenant. If Landlord does not Deliver the Premises within 90 days of the Target Commencement Date for any reason other than Force Majeure delays, this Lease may be terminated by Landlord or Tenant by written notice to the other, and if so terminated by either: (a) the Security Deposit, or any balance thereof (i.e., after deducting therefrom all amounts to which Landlord is entitled under the provisions of this Lease), shall be returned to Tenant, and neither Landlord nor Tenant shall have any further rights, duties or obligations under this Lease, except with respect to provisions which expressly survive termination of this Lease. If neither Landlord nor Tenant elects to void this Lease within 5 business days of the lapse of such 90 day period, such right to void this Lease shall be waived and this Lease shall remain in full force and effect.

The "**Commencement Date**" shall be the earlier of: (i) the date Landlord Delivers the Premises to Tenant; and (ii) the date Landlord could have Delivered the Premises but for Tenant Delays. The "**Rent Commencement Date**" shall be the date that is 60 days after the Commencement Date. Upon written request of Landlord, Tenant shall execute and deliver a written acknowledgment of the Commencement Date, the Rent Commencement Date and the expiration date of the Term when such are established in the form of the "**Acknowledgement of Commencement Date**" attached to this Lease as Exhibit D; **provided, however**, Tenant's failure to execute and deliver such acknowledgment shall not affect Landlord's rights hereunder. The "**Term**" of this Lease shall be the Base Term, as defined above on the first page, of this Lease and the Extension Term which Tenant may elect pursuant to Section 40 hereof.

Notwithstanding anything to the contrary contained herein, Tenant and Landlord acknowledge and agree that Landlord's obligation to deliver the Premises to Tenant is conditioned on the satisfaction of the following conditions precedent ("**Conditions Precedent**"): that (i) Syros Pharmaceuticals, Inc., ("**Syros**"), the tenant currently leasing a portion of the Premises consisting of approximately 8,023 rentable square feet pursuant to that certain lease agreement between Landlord and Syros ("**Syros Lease**"), enter into a lease termination agreement with Landlord acceptable to Landlord, in its sole and absolute discretion, which provides for the early termination of the Syros Lease, and (ii) 480 Biomedical, Inc. ("**480 Blomed**"), the tenant currently leasing a portion of the Premises consisting of approximately 4,968 rentable square feet pursuant to that certain lease agreement between Landlord and 480 Blomed ("**480 Blomed Lease**"), enter into a lease amendment with Landlord acceptable to Landlord, in its sole and absolute discretion, which provides for the early termination of the 480 Biomed Lease with respect to such 4,968 rentable square feet of space. Neither Landlord nor Tenant shall have any liability whatsoever to each other relating to or arising from Landlord's inability or failure to cause either of the Conditions Precedent to be satisfied,

Tenant acknowledges that Landlord shall require access to the Premises following the Commencement Date in order to complete Landlord's Work (as defined in the Work Letter attached hereto as Exhibit C). Landlord and its contractors and agents shall have the right to enter the Premises following the Commencement Date in order to perform Landlord's Work. Tenant acknowledges that Landlord's completion of Landlord's Work may adversely affect Tenant's use and occupancy of the Premises. Tenant waives all claims against Landlord for rent abatement in connection with the Tenant Improvements.

Except as set forth in the Work Letter attached hereto as Exhibit C: (i) Tenant shall accept the Premises in their condition as of the Commencement Date, subject to all applicable Legal Requirements (as defined in Section 7 hereof); (ii) Landlord shall have no obligation for any defects in the Premises; and (iii) Tenant's taking possession of the Premises shall be conclusive evidence that Tenant accepts the Premises and that the Premises were in good condition at the time possession was taken.

Tenant agrees and acknowledges that neither Landlord nor any agent of Landlord has made any representation or warranty with respect to the condition of all or any portion of the Premises or the Project, and/or the suitability of the



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Premises or the Project for the conduct of Tenant's business, and Tenant waives any implied warranty that the Premises or the Project are suitable for the Permitted Use. This Lease constitutes the complete agreement of Landlord and Tenant with respect to the subject matter hereof and supersedes any and all prior representations, inducements, promises, agreements, understandings and negotiations which are not contained herein. Landlord in executing this Lease does so in reliance upon Tenant's representations, warranties, acknowledgments and agreements contained herein.

3. Rent.

(a) **Base Rent.** Base Rent for the month in which the Rent Commencement Date occurs and the Security Deposit shall be due and payable on delivery of an executed copy of this Lease to Landlord. Tenant shall pay to Landlord in advance, without demand, abatement, deduction or set-off, equal monthly installments of Base Rent on or before the first day of each calendar month during the Term hereof, in lawful money of the United States of America, at the office of Landlord' for payment of Rent set forth above, or to such other person or at such other place as Landlord may from time to time designate in writing. Payments of Base Rent for any fractional calendar month shall be prorated. The obligation of Tenant to pay Base Rent and other sums to Landlord and the obligations of Landlord under this Lease are independent obligations. Tenant shall have no right at any time to abate, reduce, or set-off any Rent (as defined in Section 5) due hereunder except for any abatement as may be expressly provided in this Lease.

(b) **Additional Rent.** In addition to Base Rent, Tenant agrees to pay to Landlord as additional rent ("**Additional Rent**"): (i) commencing on the Commencement Date, Tenant's Share of "**Operating Expenses**" (as defined in Section 5), and (ii) any and all other amounts Tenant assumes or agrees to pay under the provisions of this Lease, including, without limitation, any and all other sums that may become due by reason of any default of Tenant or failure to comply with the agreements, terms, covenants and conditions of this Lease to be performed by Tenant, after any applicable notice and cure period.

4. **Base Rent Adjustments.** Base Rent shall be Increased on each annual anniversary of the first day of the first foil month during the Term of this Lease (each an "**Adjustment Date**") by multiplying the Base Rent payable immediately before such Adjustment Date by the Rent Adjustment Percentage and adding the resulting amount to the Base Rent payable immediately before such Adjustment Date. Base Rent, as so adjusted, shall thereafter be due as provided herein, Base Rent adjustments for any fractional calendar month shall be prorated.

5. **Operating Expense Payments.** Landlord shall deliver to Tenant a written estimate of Operating Expenses for each calendar year during the Term (the "**Annual Estimate**"), which may be revised by Landlord from time to time during such calendar year. Commencing on the Commencement Date and continuing on the first day of each month during the Term, Tenant shall pay Landlord an amount equal to 1/12th of Tenant's Share of the Annual Estimate. Payments for any fractional calendar month shall be prorated.

The term "**Operating Expenses**" means all costs and expenses of any kind or description whatsoever Incurred or accrued each calendar year by Landlord with respect to the Project (including, without duplication, Taxes (as defined in Section 9), reasonable reserves consistent with good business practice for future repairs and replacements, the costs of capital repairs and improvements amortized over the lesser of 7 years and the useful life of such capital items, In the case of repairs or improvements to the HVAC system and equipment serving the Premises, or, in the case of any other work, over the useful life of such capital items, the costs of Landlord's third party property manager (not to exceed 3.0% of Base Rent) or, if there is no third party property manager, administration rent in the amount of 3.0% of Base Rent (or, prior to the Rent Commencement Date, 3.0% of the Base Rent that would have been payable during such period if Tenant had been required to pay Base Rent, which amount shall be equal to the Base Rent payable for the 3rd month of the Base Term)), excluding only:

- (a) the original construction costs of the Project and renovation prior to the date of the Lease and costs of correcting defects in such original construction or renovation;
- (b) capital expenditures for expansion of the Project;
- (c) interest, principal payments of Mortgage (as defined in Section 27) debts of Landlord, financing costs and amortization of funds borrowed by Landlord, whether secured or unsecured;

- (d) depreciation of the Project (except for capital improvements, the cost of which are includable in Operating Expenses);
- (e) advertising, legal and space planning expenses and leasing commissions and other costs and expenses incurred in procuring and leasing space to tenants for the Project, including any leasing office maintained in the Project, free rent and construction allowances for tenants;
- (f) legal and other expenses incurred in the negotiation or enforcement of leases;
- (g) completing, fixturing, improving, renovating, painting, redecorating or other work, which Landlord pays for or performs for other tenants within their premises (including, without limitation, costs incurred in fitting out such premises for new tenants), and costs of correcting defects in such work;
- (h) costs to be reimbursed by other tenants of the Project or Taxes to be paid directly by Tenant or other tenants of the Project, whether or not actually paid;
- (i) salaries, wages, benefits and other compensation paid to officers and employees of Landlord who (x) do not have day to day responsibility For the operating, managing or servicing of the Building or the Project or (y) are above the level of senior vice president, provided that the expense of any personnel not dedicated exclusively to the Building or the Project shall be equitably prorated to reflect time spent on operating, managing or otherwise servicing the Building or the Project vis-a-vis time spent on matters unrelated to operating, managing or otherwise servicing the Building or the Project;
- (j) general organizational, administrative and overhead costs relating to maintaining Landlord's existence, either as a corporation, partnership, or other entity, including general corporate, legal and accounting expenses;
- (k) costs (including attorneys' fees and costs of settlement, judgments and payments in lieu thereof) incurred in connection with disputes with tenants, other occupants, or prospective tenants, and costs and expenses, including legal fees, incurred in connection with negotiations or disputes with employees, consultants, management agents, leasing agents, purchasers or mortgagees of the Building;
- (l) costs incurred by Landlord due to the violation by Landlord, its employees, agents or contractors or any tenant of the terms and conditions of any lease of space in the Project or any Legal Requirement (as defined in Section 7);
- (m) penalties, fines or interest incurred as a results of Landlord's inability or failure to make payments of Taxes and/or to file any tax or informational returns when due, or from Landlord's failure to make any payment of Taxes required to be made by Landlord hereunder before delinquency;
- (n) overhead and profit increment paid to Landlord or to subsidiaries or affiliates of Landlord for goods and /or services in or to the Project to the extent the same exceed the costs of such goods and/or services rendered by unaffiliated third parties on a competitive basis;
- (o) costs of Landlord's charitable or political contributions, or of fine art maintained at the Project;
- (p) costs in connection with services (including electricity), items or other benefits of a type which are not standard for the Project and which are not available to Tenant without specific charges therefor, but which are provided to another tenant or occupant of the Project, whether or not such other tenant or occupant is specifically charged therefor by Landlord;
- (q) costs incurred in the sale or refinancing of the Project;
- (r) net income taxes of Landlord or the owner of any interest in the Project, franchise, capital stock, gift, estate or Inheritance taxes or any federal, state or local documentary taxes imposed against the Project or any portion thereof or

interest therein;

(s) reserves (Including reserves for Taxes);

(t) any expenses otherwise includable within Operating Expenses to the extent actually reimbursed by insurance (or would have been reimbursed by insurance required to be carried by Landlord pursuant to Section 17)

(u) costs occasioned by condemnation;

(v) the costs of parties for tenants of the Building and the cost of gifts for prospective tenants, Tenant, other tenants, and occupants of the Project; and

(w) any expenses otherwise includable within Operating Expenses to the extent actually reimbursed by persons other than tenants of the Project under leases for space in the Project.

Within 90 days after the end of each calendar year (or such longer period as may be reasonably required), Landlord shall furnish to Tenant a statement (an "**Annual Statement**") showing in reasonable detail: (a) the total and Tenant's Share of actual Operating Expenses for the previous calendar year, and (b) the total of Tenant's payments in respect of Operating Expenses for such year. If Tenant's Share of actual Operating Expenses for such year exceeds Tenant's payments of Operating Expenses for such year, the excess shall be due and payable by Tenant as Rent within 30 days after delivery of such Annual Statement to Tenant. If Tenant's payments of Operating Expenses for such year exceed Tenant's Share of actual Operating Expenses for such year Landlord shall pay the excess to Tenant within 30 days after delivery of such Annual Statement, except that after the expiration, or earlier termination of the Term or if Tenant is delinquent in its obligation to pay Rent, Landlord shall pay the excess to Tenant after deducting all other amounts due Landlord.

The Annual Statement shall be final and binding upon Tenant unless Tenant, within 90 days after Tenant's receipt thereof, shall contest any item therein by giving written notice to Landlord, specifying each item contested and the reason therefor. If, during such 90 day period, Tenant reasonably and in good faith questions or contests the accuracy of Landlord's statement of Tenant's Share of Operating Expenses, Landlord will provide Tenant with access to Landlord's books and records relating to the operation of the Project and such information as Landlord reasonably determines to be responsive to Tenant's questions (the "**Expense Information**"). If after Tenant's review of such Expense Information, Landlord and Tenant cannot agree upon the amount of Tenant's Share of Operating Expenses, then Tenant shall have the right to have an independent regionally recognized public accounting firm selected by Tenant and approved by Landlord (which approval shall not be unreasonably withheld or delayed), working pursuant to a fee arrangement other than a contingent fee {at Tenant's sole cost and expense), audit and/or review the Expense Information for the year in question (the "**Independent Review**"). The results of any such Independent Review shall be binding on Landlord and Tenant. If the Independent Review shows that the payments actually made by Tenant with respect to Operating Expenses for the calendar year in question exceeded Tenant's Share of Operating Expenses for such calendar year, Landlord shall at Landlord's option either (i) credit the excess amount to the next succeeding installments of estimated Operating Expenses or (ii) pay the excess to Tenant within 30 days after delivery of such statement, except that after the expiration or earlier termination of this Lease or if Tenant is delinquent in its obligation to pay Rent, Landlord shall pay the excess to Tenant after deducting all other amounts due Landlord. If the Independent Review shows that Tenant's payments with respect to Operating Expenses for such calendar year were less than Tenant's Share of Operating Expenses for the calendar year, Tenant shall pay the deficiency to Landlord within 30 days after delivery of such statement. If the Independent Review shows that Tenant has overpaid with respect to Operating Expenses by more than 5% then Landlord shall reimburse Tenant for all costs incurred by Tenant for the Independent Review. Operating Expenses for the calendar years in which Tenant's obligation to share therein begins and ends shall be prorated. Notwithstanding anything set forth herein to the contrary, if the Project is not at least 95% occupied on average during any year of the Term, Tenant's Share of Operating Expenses for such year shall be computed as though the Project had been 95% occupied on average during such year.

"**Tenant's Share**" shall be the percentage set forth on the first page of this Lease as Tenant's Share as reasonably adjusted by Landlord for changes in the physical size of the Premises or the Project occurring thereafter. Landlord may equitably increase Tenant's Share for any item of expense or cost reimbursable by Tenant that relates to a repair, replacement, or service that benefits only the Premises or only a portion of the Project that includes the Premises or that

varies with occupancy or use. Base Rent, Tenant's Share of Operating Expenses and all other amounts payable by Tenant to Landlord hereunder are collectively referred to herein as "**Rent.**"

6. Security Deposit. Tenant shall deposit with Landlord, upon delivery of an executed copy of this Lease to Landlord, a security deposit (the "**Security Deposit**") for the performance of all of Tenant's obligations hereunder in the amount set forth on page 1 of this Lease, which Security Deposit shall be in the form of an unconditional and irrevocable letter of credit (the "**Letter of Credit**"): (i) In form and substance satisfactory to Landlord, (ii) naming Landlord as beneficiary, (iii) expressly allowing Landlord to draw upon it at any time from time to time by delivering to the issuer notice that Landlord is entitled to draw thereunder, (iv) issued by an FDIC-insured financial institution satisfactory to Landlord, and (v) redeemable by presentation of a sight draft in the state of Landlord's choice. If Tenant does not provide Landlord with a substitute Letter of Credit complying with all of the requirements hereof at least 10 days before the stated expiration date of any then current Letter of Credit, Landlord shall have the right to draw the full amount of the current Letter of Credit and hold the funds drawn in cash without obligation for interest thereon as the Security Deposit. The Security Deposit shall be held by Landlord as security for the performance of Tenant's obligations under this Lease. The Security Deposit is not an advance rental deposit or a measure of Landlord's damages in case of Tenant's default. Upon each occurrence of a Default (as defined in Section 20), Landlord may use all or any part of the Security Deposit to pay delinquent payments due under this Lease, future rent damages, and the cost of any damage, injury, expense or liability caused by such Default, without prejudice to any other remedy provided herein or provided by law. Landlord's right to use the Security Deposit under this Section 8 includes the right to use the Security Deposit to pay future rent damages following the termination of this Lease pursuant to Section 21(c) below. Upon any use of all or any portion of the Security Deposit, Tenant shall pay Landlord on demand the amount that will restore the Security Deposit to the amount set forth on Page 1 of this Lease. Tenant hereby waives the provisions of any law, now or hereafter in force which provide that Landlord may claim from a security deposit only those sums reasonably necessary to remedy defaults in the payment of Rent, to repair damage caused by Tenant or to clean the Premises, it being agreed that Landlord may, in addition, claim those sums reasonably necessary to compensate Landlord for any other loss or damage, foreseeable or unforeseeable, caused by the act or omission of Tenant or any officer, employee, agent or invitee of Tenant. Upon bankruptcy or other debtor-creditor proceedings against Tenant, the Security Deposit shall be deemed to be applied first to the payment of Rent and other charges due Landlord for periods prior to the filing of such proceedings. Upon any such use of all or any portion of the Security Deposit, Tenant shall, within 5 days after demand from Landlord, restore the Security Deposit to its original amount. If Tenant shall fully perform every provision of this Lease to be performed by Tenant, the Security Deposit, or any balance thereof (i.e., after deducting therefrom all amounts to which Landlord is entitled under the provisions of this Lease), shall be returned to Tenant (or, at Landlord's option, to the last assignee of Tenant's interest hereunder) within 60 days after the expiration or earlier termination of this Lease.

If Landlord transfers its interest in the Project or this Lease, Landlord shall either (a) transfer any Security Deposit then held by Landlord to a person or entity assuming Landlord's obligations under this Section 6, or (b) return to Tenant any Security Deposit then held by Landlord and remaining after the deductions permitted herein. Upon such transfer to such transferee or the return of the Security Deposit to Tenant, Landlord shall have no further obligation with respect to the Security Deposit, and Tenant's right to the return of the Security Deposit shall apply solely against Landlord's transferee. The Security Deposit is not an advance rental deposit or a measure of Landlord's damages in case of Tenant's default. Landlord's obligation respecting the Security Deposit is that of a debtor, not a trustee, and no interest shall accrue thereon.

If, as of the expiration of the 36th month of the Base Term, Tenant (i) is not in Default of this Lease, (ii) has not been in Default of this Lease at any time during the Term, and (iii) has not assigned this Lease in whole or in part nor sublet the Premises in whole or in part (collectively, the "**Reduction Requirement**"), then the Security Deposit shall be reduced to \$142,901.00 (the "**Reduced Security Deposit**"). If Tenant has met the Reduction Requirement and delivers a written request to Landlord for such reduction of the Security Deposit, Landlord shall cooperate with Tenant, at no cost, expense or liability to Landlord, to reduce the Letter of Credit then held by Landlord to the amount of the Reduced Security Deposit. If the Security Deposit is reduced as provided herein, then from and after the date of such reduction, the "**Security Deposit**" shall be deemed to be the Reduced Security Deposit, for all purposes of this Lease.

7. Use. The Premises shall be used solely for the Permitted Use set forth in the basic lease provisions on page 1 of this Lease, and in compliance with all laws, orders, judgments, ordinances, regulations, codes, directives, permits, licenses, covenants and restrictions now or hereafter applicable to the Premises, and to the use and occupancy thereof,

including, without limitation, the Americans With Disabilities Act, 42 U.S.C. § 12101, et seq. (together with the regulations promulgated pursuant thereto, "**ADA**") (collectively, "**Legal Requirements**" and each, a "**Legal Requirement**"). Tenant shall, upon 5 days' written notice from Landlord, discontinue any use of the Premises which is declared by any Governmental Authority (as defined in Section 9) having jurisdiction to be a violation of a Legal Requirement. Tenant will not use or permit the Premises to be used for any purpose or in any manner that would void Tenant's or Landlord's insurance, increase the insurance risk, or cause the disallowance of any sprinkler or other credits. Tenant shall not permit any part of the Premises to be used as a "place of public accommodation", as defined in the ADA or any similar legal requirement. Tenant shall reimburse Landlord promptly upon demand for any additional premium charged for any such insurance policy by reason of Tenant's failure to comply with the provisions of this Section or otherwise caused by Tenant's use and/or occupancy of the Premises. Tenant will use the Premises in a careful, safe and proper manner and will not commit or permit waste, overload the floor or structure of the Premises, subject the Premises to use that would damage the Premises or obstruct or interfere with the rights of Landlord or other tenants or occupants of the Project, including conducting or giving notice of any auction, liquidation, or going out of business sale on the Premises, or using or allowing the Premises to be used for any unlawful purpose. Tenant shall cause any equipment or machinery to be installed in the Premises so as to reasonably prevent sounds or vibrations from the Premises from extending into Common Areas, or other space in the Project. Tenant shall not place any machinery or equipment which would overload the floor in or upon the Premises or transport or move such items through the Common Areas of the Project or in the Project elevators without the prior written consent of Landlord, which consent shall not be unreasonably withheld, conditioned or delayed. Except as may be provided under the Work Letter attached hereto as Exhibit C, Tenant shall not, without the prior written consent of Landlord, use the Premises in any manner which will require ventilation, air exchange, heating, gas, steam, electricity or water beyond the existing capacity of the Project as proportionately allocated to the Premises based upon Tenant's Share as usually furnished for the Permitted Use.

Landlord has disclosed to Tenant that the Project is the subject of an Activity and Use Limitation, which is incorporated herein by reference, and Tenant acknowledges receipt of a copy of such Activity and Use Limitation prior to execution of this Lease.

Landlord shall be responsible for the compliance of the Premises and the Common Areas of the Project with the ADA as of the Commencement Date. Following the Commencement Date, Landlord shall, as an Operating Expense (to the extent such Legal Requirement is generally applicable to similar buildings in the area in which the Project is located) and at Tenant's expense (to the extent such Legal Requirement is triggered by reason of Tenant's, as compared to other tenants of the Project, specific use of the Premises or Tenant's Alterations) make any alterations or modifications to the Common Areas or the exterior of the Building that are required by Legal Requirements. Except as provided in the 2 immediately preceding sentences, Tenant, at its sole expense, shall make any alterations or modifications to the interior or the exterior of the Premises or the Project that are required by Legal Requirements (including, without limitation, compliance of the Premises with the ADA) related to Tenant's use or occupancy of the Premises. Notwithstanding any other provision herein to the contrary, Tenant shall be responsible for any and all demands, claims, liabilities, losses, costs, expenses, actions, causes of action, damages or judgments, and all reasonable expenses incurred in investigating or resisting the same (including, without limitation, reasonable attorneys' fees, charges and disbursements and costs of suit) (collectively, "**Claims**") arising out of or in connection with Legal Requirements, and Tenant shall indemnify, defend, hold and save Landlord harmless from and against any and all Claims arising out of or in connection with any failure of the Premises to comply with any Legal Requirement.

8. Holding Over. If, with Landlord's express written consent, Tenant retains possession of the Premises after the termination of the Term, (i) unless otherwise agreed in such written consent, such possession shall be subject to immediate termination by Landlord at any time, (ii) all of the other terms and provisions of this Lease (including, without limitation, the adjustment of Base Rent pursuant to Section 4 hereof) shall remain in full force and effect (excluding any expansion or renewal option or other similar right or option) during such holdover period, (iii) Tenant shall continue to pay Base Rent in the amount payable upon the date of the expiration or earlier termination of this Lease or such other amount as Landlord may indicate, in Landlord's sole and absolute discretion, in such written consent, and (iv) all other payments shall continue under the terms of this Lease. If Tenant remains in possession of the Premises after the expiration or earlier termination of the Term without the express written consent of Landlord, (A) Tenant shall become a tenant at sufferance upon the terms of this Lease except that the (i) for the first 30 days of such hold over, monthly rental shall be equal to 150% of Rent during the last 30 days of the Term, and (ii) if Tenant holds over in excess of 30 days, then monthly rental shall be equal to 200% of Rent in effect during the last 30 days of the Term, and (B) if Tenant holds over in excess of 30 days.

Tenant shall be responsible for all damages suffered by Landlord following such first 30 days of such holdover resulting from or occasioned by Tenant's holding over, including consequential damages; provided, however, that if Tenant delivers a written inquiry to Landlord within 30 days prior to the expiration or earlier termination of the Term, Landlord will notify Tenant whether the potential exists for consequential damages. No holding over by Tenant, whether with or without consent of Landlord, shall operate to extend this Lease except as otherwise expressly provided, and this Section B shall not be construed as consent for Tenant to retain possession of the Premises. Acceptance by Landlord of Rent after the expiration of the Term or earlier termination of this Lease shall not result in a renewal or reinstatement of this Lease.

9. Taxes. Landlord shall pay, as part of Operating Expenses, all taxes, levies, fees, assessments and governmental charges of any kind, existing as of the Commencement Date or thereafter enacted (collectively referred to as "**Taxes**"), imposed by any federal, state, regional, municipal, local or other governmental authority or agency, including, without limitation, quasi-public agencies (collectively, "**Governmental Authority**") during the Term, including, without limitation, all Taxes: (i) imposed on or measured by or based, in whole or in part, on rent payable to (or gross receipts received by) Landlord under this Lease and/or from the rental by Landlord of the Project or any portion thereof, or (ii) based on the square footage, assessed value or other measure or evaluation of any kind of the Premises or the Project, or (iii) assessed or imposed by or on the operation or maintenance of any portion of the Premises or the Project, including parking, or (iv) assessed or imposed by, or at the direction of, or resulting from Legal Requirements, or interpretations thereof, promulgated by any Governmental Authority, or (v) imposed as a license or other fee, charge, tax, or assessment on Landlord's business or occupation of leasing space in the Project. Landlord may contest by appropriate legal proceedings the amount, validity, or application of any Taxes or liens securing Taxes. Taxes shall not include any net income taxes imposed on Landlord except to the extent such net income taxes are in substitution for any Taxes payable hereunder. If any such Tax is levied or assessed directly against Tenant, then Tenant shall be responsible for and shall pay the same at such times and in such manner as the taxing authority shall require. Tenant shall pay, prior to delinquency, any and all Taxes levied or assessed against any personal property or trade fixtures placed by Tenant in the Premises, whether levied or assessed against Landlord or Tenant. If any Taxes on Tenant's personal property or trade fixtures are levied against Landlord or Landlord's property, or if the assessed valuation of the Project is increased by a value attributable to improvements in or alterations to the Premises, whether owned by Landlord or Tenant and whether or not affixed to the real property so as to become a part thereof, higher than the base valuation on which Landlord from time-to-time allocates Taxes to all tenants in the Project, Landlord shall have the right, but not the obligation, to pay such Taxes. Landlord's determination of any excess assessed valuation shall be binding and conclusive, absent manifest error. The amount of any such payment by Landlord shall constitute Additional Rent due from Tenant to Landlord immediately upon demand.

10. Parking. Subject to all matters of record, Force Majeure, a Taking (as defined in Section 19 below) and the exercise by Landlord of its rights hereunder, Tenant shall have the right, at no additional cost to Tenant during the Base Term, in common with other tenants of the Project pro rata in accordance with the rentable area of the Premises and the rentable areas of the Project occupied by such other tenants, to park in those areas designated for non-reserved parking, subject in each case to Landlord's rules and regulations. As of the date of this Lease, Tenant's pro rata share of parking is equal to 35 parking spaces (2.7 parking spaces per 1,000 rentable square feet of the Premises). Landlord may allocate parking spaces among Tenant and other tenants in the Project pro rata as described above if Landlord determines that such parking facilities are becoming crowded. Landlord shall not be responsible for enforcing Tenant's parking rights against any third parties, including other tenants of the Project.

11. Utilities, Services. Landlord shall provide, subject to the terms of this Section 11, water, electricity, heat, light, power, sewer, and other utilities (including gas and fire sprinklers to the extent the Project is plumbed for such services), and, with respect to the Common Areas, refuse and trash collection and janitorial services (collectively, "**Utilities**"). Landlord shall pay, as Operating Expenses or subject to Tenant's reimbursement obligation, for all Utilities used on the Premises, all maintenance charges for Utilities, and any storm sewer charges or other similar charges for Utilities imposed by any Governmental Authority or Utility provider (including, without limitation, maintaining the MWRA Wastewater Discharge Permits applicable to the Project and the operation of the multi-tenant discharge system to which Tenant's non-hazardous waste shall be discharged), and any taxes, penalties, surcharges or similar charges thereon. Landlord may cause, at Tenant's expense, any Utilities to be separately metered or charged directly to Tenant by the provider. Tenant shall pay directly to the Utility provider, prior to delinquency, any separately metered Utilities and services which may be furnished to Tenant or the Premises during the Term. Tenant shall pay, as part of Operating Expenses, its share of all charges for jointly metered Utilities based upon consumption, as reasonably determined by Landlord. No Interruption or

failure of Utilities, from any cause whatsoever other than Landlord's willful misconduct, shall result in eviction or constructive eviction of Tenant, termination of this Lease or the abatement of Rent. Tenant may elect upon delivery of written notice to Landlord to obtain and pay directly for its own janitorial services for the Premises. Unless Tenant delivers Landlord written notice that it has elected to retain a third party to provide janitorial services to the Premises pursuant to the immediately following sentence, Landlord shall provide janitorial services to the Premises and Landlord shall charge Tenant directly for such janitorial services. Tenant agrees to limit use of water and sewer with respect to Common Areas to normal restroom use.

Landlord's sole obligation for either providing emergency generators or providing emergency back-up power to Tenant shall be: (i) to provide emergency generators with not less than the capacity of the emergency generators located in the Building as of the Commencement Date, and (ii) to contract with a third party to maintain the emergency generators as per the manufacturer's standard maintenance guidelines. Landlord shall have no obligation to provide Tenant with operational emergency generators or back-up power or to supervise, oversee or confirm that the third party maintaining the emergency generators is maintaining the generators as per the manufacturer's standard guidelines or otherwise. During any period of replacement, repair or maintenance of the emergency generators when the emergency generators are not operational, including any delays thereto due to the inability to obtain parts or replacement equipment, Landlord shall have no obligation to provide Tenant with an alternative backup generator or generators or alternative sources of back-up power. Tenant expressly acknowledges and agrees that Landlord does not guaranty that such emergency generators will be operational at all times or that emergency power will be available to the Premises when needed.

12. Alterations and Tenant's Property. Any alterations, additions, or improvements made to the Premises by or on behalf of Tenant, including additional locks or bolts of any kind or nature upon any doors or windows in the Premises, but excluding installation, removal or realignment of furniture systems, office equipment or telecommunications cabling {other than removal of furniture systems, office equipment or telecommunications cabling owned **or** paid for by Landlord) not involving any modifications to the structure or connections (other than by ordinary plugs or jacks) to Building Systems (as defined in Section 13) ("**Alterations**") shall be subject to Landlord's prior written consent, which may be given or withheld in Landlord's sole discretion if any such Alteration affects the structure or Building Systems and shall not be otherwise unreasonably withheld, conditioned or delayed, if Landlord approves any Alterations. Landlord may Impose such conditions on Tenant in connection with the commencement, performance and completion of such Alterations as Landlord may deem appropriate in Landlord's reasonable discretion. Any request for approval shall be in writing, delivered not less than t5 business days In advance of any proposed construction, and accompanied by plans, specifications, bid proposals, work contracts and such other information concerning the nature and cost of the alterations as may be reasonably requested by Landlord, including the identities and mailing addresses of all persons performing work or supplying materials. Landlord's right to review plans and specifications and to monitor construction shall be solely for its own benefit, and Landlord shall have no duty to ensure that such plans and specifications or construction comply with applicable Legal Requirements. Tenant shall cause, at its sole cost and expense, all Alterations to comply with insurance requirements and with Legal Requirements and shall implement at its sole cost and expense any alteration or modification required by Legal Requirements as a result of any Alterations. Tenant shall pay to Landlord, as Additional Rent, on demand an amount equal to 3% of all charges incurred by Tenant or its contractors or agents in connection with any Alteration to cover Landlord's overhead and expenses for plan review, coordination, scheduling and supervision. Before Tenant begins any Alteration, Landlord may post on and about the Premises notices of non-responsibility pursuant to applicable law. Tenant shall reimburse Landlord for, and indemnify and hold Landlord harmless from, any expense incurred by Landlord by reason of faulty work done by Tenant or its contractors, delays caused by such work, or inadequate cleanup.

Tenant shall furnish security or make other arrangements satisfactory to Landlord to assure payment for the completion of all Alterations work free and dear of liens, and shall provide (and cause each contractor or subcontractor to provide) certificates of insurance for workers' compensation and other coverage in amounts and from an insurance company satisfactory to Landlord protecting Landlord against liability for personal injury or property damage during construction. Upon completion of any Alterations, Tenant shall deliver to Landlord. (i) sworn statements setting forth the names of all contractors and subcontractors who did the work and final lien waivers from all such contractors and subcontractors: and (ii) "as built" plans for any such Alteration.

Except for Removable Installations (as hereinafter defined), all Installations (as hereinafter defined) shall be and shall remain the property of Landlord during the Term and following the expiration or earlier termination of the Term, shall not be removed by Tenant at any time during the Term, and shall remain upon and be surrendered with the Premises as a part thereof. Notwithstanding the foregoing, Landlord may, at the time its approval of any such Installation is requested, notify Tenant that Landlord requires that Tenant remove such Installation upon the expiration or earlier termination of the Term, in which event Tenant shall remove such Installation in accordance with the immediately succeeding sentence. Upon the expiration or earlier termination of the Term, Tenant shall remove (i) all wires, cables or similar equipment which Tenant has installed in the Premises or in the risers or plenums of the Building, (ii) any Installations for which Landlord has given Tenant notice of removal in accordance with the immediately preceding sentence, and (iii) all of Tenant's Property (as hereinafter defined), and Tenant shall restore and repair any damage caused by or occasioned as a result of such removal, including, without limitation, capping off all such connections behind the walls of the Premises and repairing any holes. During any restoration period beyond the expiration or earlier termination of the Term, Tenant shall pay Rent to Landlord as provided herein as if said space were otherwise occupied by Tenant. If Landlord is requested by Tenant or any lender, lessor or other person or entity claiming an interest in any of Tenant's Property to waive any lien Landlord may have against any of Tenant's Property, and Landlord consents to such waiver, then Landlord shall be entitled to be paid as administrative rent a fee of \$1,000 per occurrence for its time and effort in preparing and negotiating such a waiver of lien.

For purposes of this Lease, (x) "**Removable Installations**" means any items listed on Exhibit F attached hereto and any items agreed by Landlord in writing to be included on Exhibit F in the future, (y) "**Tenant's Property**" means Removable Installations and, other than Installations, any personal property or equipment of Tenant that may be removed without material damage to the Premises, and (z) "**Installations**" means all of the Tenant Improvements, property of any kind paid for by Landlord, all Alterations, all fixtures, and all partitions, hardware, built-in machinery, built-in casework and cabinets and other similar additions, equipment, property and improvements built into the Premises so as to become an integral part of the Premises, including, without limitation, fume hoods which penetrate the roof or plenum area, built-in cold rooms, built-in warm rooms, walk-in cold rooms, walk-in warm rooms, deionized water systems, glass washing equipment, autoclaves, chillers, built-in plumbing, electrical and mechanical equipment and systems, and any power generator and transfer switch.

13. Landlord's Repairs. Landlord, as an Operating Expense (except to the extent excluded from Operating Expenses pursuant to Section 5), shall maintain all of the structural, exterior, parking and other Common Areas of the Project, including the roof, HVAC, plumbing, fire sprinklers, elevators and all other building systems serving the Premises and other portions of the Project ("**Building Systems**"), in good repair, reasonable wear and tear and uninsured losses and damages caused by Tenant, or by any of Tenant's agents, servants, employees, invitees and contractors (collectively, "**Tenant Parties**") excluded. Subject to the provisions of the penultimate paragraph of Section 17, losses and damages caused by Tenant or any Tenant Party shall be repaired by Landlord, to the extent not covered by insurance, at Tenant's sole cost and expense. Landlord reserves the right to stop Building Systems services when necessary (i) by reason of accident or emergency, or (ii) for planned repairs, alterations or improvements, which are, in the judgment of Landlord, desirable or necessary to be made, until said repairs, alterations or improvements shall have been completed. Landlord shall have no responsibility or liability for failure to supply Building Systems services during any such period of interruption; provided, however, that Landlord shall, except in case of emergency, make a commercially reasonable effort to give Tenant 24 hours advance written notice of any planned stoppage of Building Systems services for routine maintenance, repairs, alterations or improvements. Tenant shall promptly give Landlord written notice of any repair required by Landlord pursuant to this Section 13 of which Tenant becomes aware, after which Landlord shall make a commercially reasonable effort to effect such repair. Landlord shall not be liable for any failure to make any repairs or to perform any maintenance unless such failure shall persist for an unreasonable time after Tenant's written notice of the need for such repairs or maintenance. Tenant waives its rights under any state or local law to terminate this Lease or to make such repairs at Landlord's expense and agrees that the parties' respective rights with respect to such matters shall be solely as set forth herein. Repairs required as the result of fire, earthquake, flood, vandalism, war, or similar cause of damage or destruction shall be controlled by Section 18.

14. Tenant's Repairs. Subject to Section 13 hereof, Tenant, at its expense, shall repair, replace and maintain in good condition, all portions of the Premises, including, without limitation, entries, doors, ceilings, interior windows, interior walls, and the interior side of demising walls. Such repair and replacement may include capital expenditures and repairs whose benefit may extend beyond the Term.

Should Tenant fail to make any such repair or replacement or fail to maintain the Premises, Landlord shall give Tenant notice of such failure. If Tenant fails to commence cure of such failure within 10 days of Landlord's notice, and thereafter diligently prosecute such cure to completion, Landlord may perform such work and shall be reimbursed by Tenant within 10 days after demand therefor; provided, however, that if such failure by Tenant creates or could create an emergency, Landlord may immediately commence cure of such failure and shall thereafter be entitled to recover the costs of such cure from Tenant. Subject to Sections 17 and 18, Tenant shall bear the full uninsured cost of any repair or replacement to any part of the Project that results from damage caused by Tenant or any Tenant Party and any repair that benefits only the Premises.

15. Mechanic's Liens. Tenant shall discharge, by bond or otherwise, any mechanic's lien filed against the Premises or against the Project for work claimed to have been done for, or materials claimed to have been furnished to, Tenant within 10 business days after the filing thereof, at Tenant's sole cost and shall otherwise keep the Premises and the Project free from any liens arising out of work performed, materials furnished or obligations incurred by Tenant. Should Tenant fail to discharge any lien described herein, Landlord shall have the right, but not the obligation, to pay such claim or post a bond or otherwise provide security to eliminate the lien as a claim against title to the Project and the cost thereof shall be immediately due from Tenant as Additional Rent, if Tenant shall lease or finance the acquisition of office equipment, furnishings, or other personal property of a removable nature utilized by Tenant in the operation of Tenant's business, Tenant warrants that any Uniform Commercial Code Financing Statement filed as a matter of public record by any lessor or creditor of Tenant will upon its face or by exhibit thereto indicate that such Financing Statement is applicable only to removable personal property of Tenant located within the Premises. In no event shall the address of the Project be furnished on the statement without qualifying language as to applicability of the lien only to removable personal property, located in an identified suite held by Tenant.

16. Indemnification. Tenant hereby Indemnifies and agrees to defend, save and hold Landlord harmless from and against any and all Claims for injury or death to persons or damage to property occurring within or about the Premises, arising directly or Indirectly out of the use or occupancy of the Premises or a breach or default by Tenant in the performance of any of its obligations hereunder, unless caused solely by the willful misconduct or negligence of Landlord. Landlord shall not be liable to Tenant for, and Tenant assumes all risk of damage to, personal property (Including, without limitation, loss of records kept within the Premises). Tenant further waives any and all Claims for Injury to Tenant's business or loss of income relating to any such damage or destruction of personal property (including, without limitation, any loss of records). Landlord shall not be liable for any damages arising from any act, omission or neglect of any tenant in the Project or of any other third party.

17. Insurance. Landlord shall maintain all risk property and, if applicable, sprinkler damage insurance covering the full replacement cost of the Project or such lesser coverage amount as Landlord may elect provided such coverage amount is not less than 90% of such full replacement cost. Landlord shall further procure and maintain commercial general liability insurance with a single loss limit of not less than \$2,000,000 for bodily Injury and property damage with respect to the Project. Landlord may, but is not obligated to, maintain such other insurance and additional coverages as it may deem necessary, including, but not limited to, flood, environmental hazard and earthquake, loss or failure of building equipment, errors and omissions, rental loss during the period of repair or rebuilding, workers' compensation insurance and fidelity bonds for employees employed to perform services and insurance for any improvements installed by Tenant or which are in addition to the standard improvements customarily furnished by Landlord without regard to whether or not such are made a part of the Project. All such Insurance shall be Included as part of the Operating Expenses. The Project may be included in a blanket policy (in which case the cost of such insurance allocable to the Project will be determined by Landlord based upon the insurer's cost calculations). Tenant shall also reimburse Landlord for any increased premiums or additional insurance which Landlord reasonably deems necessary as a result of Tenant's use of the Premises.

Tenant, at its sole cost and expense, shall maintain during the Term: all risk property insurance with business interruption and extra expense coverage, covering the full replacement cost of all property and improvements installed or placed in the Premises by Tenant at Tenant's expense; workers' compensation insurance with no less than the minimum limits required by law; employer's liability Insurance with such limits as required by law; and commercial general liability Insurance, with a minimum limit of not less than \$2,000,000 per occurrence for bodily injury and property damage with respect to the Premises. The commercial general liability insurance policy shall name Alexandria Real Estate Equities, Inc., and Landlord, its officers, directors, employees, managers, agents, invitees and contractors (collectively, "Landlord



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Parties”), as additional insureds; Insure on an occurrence and not a claims-made basis; be issued by insurance companies which have a rating of not less than policyholder rating of A and financial category rating of at least Class X in **“Best’s Insurance Guide”**; shall not be cancelable for nonpayment of premium unless 10 days prior written notice shall have been given to Landlord from the Insurer; not contain a hostile fire exclusion: contain a contractual liability endorsement; and provide primary coverage to Landlord (any policy issued to Landlord providing duplicate or similar coverage shall be deemed excess over Tenant’s policies). Copies of such policies (if requested by Landlord), or certificates of insurance showing the limits of coverage required hereunder and showing Landlord as an additional insured, along with reasonable evidence of the payment of premiums for the applicable period, shall be delivered to Landlord by Tenant prior to (i) the earlier to occur of (x) the Commencement Date, or (y) the date that Tenant accesses the Premises under this Lease, and (ii) each renewal of said insurance. Tenant’s policy may be a “blanket policy” with an aggregate per location endorsement which specifically provides that the amount of insurance shall not be prejudiced by other losses covered by the policy. Tenant shall, at least 5 days prior to the expiration of such policies, furnish Landlord with renewal certificates

In each instance where insurance is to name Landlord as an additional insured, Tenant shall upon written request of Landlord also designate and furnish certificates so evidencing Landlord as additional Insured to: (i) any lender of Landlord holding a security interest in the Project or any portion thereof, (ii) the landlord under any lease wherein Landlord is tenant of the real property on which the Project is located, if the interest of Landlord is or shall become that of a tenant under a ground or other underlying lease rather than that of a fee owner, and/or (iii) any management company retained by Landlord to manage the Project.

The property Insurance obtained by Landlord and Tenant shall include a waiver of subrogation by the insurers and all rights based upon an assignment from its insured, against Landlord or Tenant, and their respective officers, directors, employees, managers, agents, invitees and contractors (**“Related Parties”**), in connection with any loss or damage thereby insured against Neither party nor its respective Related Parties shall be liable to the other for loss or damage caused by any risk insured against under property insurance required to be maintained hereunder, and each party waives any claims against the other party, and its respective Related Parties, for such loss or damage. The failure of a party to Insure its property shall not void this waiver. Landlord and its respective Related Parties shall not be liable for, and Tenant hereby waives all claims against such parties for, business Interruption and losses occasioned thereby sustained by Tenant or any person claiming through Tenant resulting from any accident or occurrence in or upon the Premises or the Project from any cause whatsoever. If the foregoing waivers shall contravene any law with respect to exculpatory agreements, the liability of Landlord or Tenant shall be deemed not released but shall be secondary to the other’s Insurer,

Landlord may require insurance policy limits to be raised to conform with the requirements of Landlord’s lender and/or to bring coverage limits to levels then being generally required of new tenants within the Project; provided, however, that the increased amount of coverage is consistent with coverage amounts then being required by institutional owners of similar projects with tenants occupying similar size premises in the Watertown area.

18. Restoration. If, at any time during the Term, the Project or the Premises are damaged or destroyed by a fire or other insured casualty. Landlord shall notify Tenant within 60 days after discovery of such damage as to the amount of time Landlord reasonably estimates it will take to restore the Project or the Premises, as applicable (the **“Restoration Period”**). If the Restoration Period is estimated to exceed 12 months (the **“Maximum Restoration Period”**), Landlord may, in such notice, elect to terminate this Lease as of the date that is 75 days after the date of discovery of such damage or destruction; provided, however, that notwithstanding Landlord’s election to restore, Tenant may elect to terminate this Lease by written notice to Landlord delivered within 5 business days of receipt of a notice from Landlord estimating a Restoration Period for the Premises longer than the Maximum Restoration Period. Unless either Landlord or Tenant so elects to terminate this Lease, Landlord shall, subject to receipt of sufficient insurance proceeds (with any deductible to be treated as a current Operating Expense), promptly restore the Premises (excluding the improvements installed by Tenant or by Landlord and paid for by Tenant), subject to delays arising from the collection of insurance proceeds, from Force Majeure events or as needed to obtain any license, clearance or other authorization of any kind required to enter into and restore the Premises issued by any Governmental Authority having jurisdiction over the use, storage, handling, treatment, generation, release, disposal, removal or remediation of Hazardous Materials (as defined in **Section 30**) in, on or about the Premises (collectively referred to herein as **“Hazardous Materials Clearances”**); provided, however, that if repair or restoration of the Premises is not substantially complete as of the end of the Maximum Restoration Period or, if longer, the Restoration Period, Landlord may, in its sole and absolute discretion, elect not to proceed with such repair and restoration,

or Tenant may by written notice to Landlord delivered within 5 business days of the expiration of the Maximum Restoration Period or, if longer, the Restoration Period, elect to terminate this Lease, in which event Landlord shall be relieved of its obligation to make such repairs or restoration and this Lease shall terminate as of the date that is 75 days after the later of; (i) discovery of such damage or destruction, or (ii) the date all required Hazardous Materials Clearances are obtained, but Landlord shall retain any Rent paid and the right to any Rent payable by Tenant prior to such election by Landlord or Tenant.

Tenant, at its expense, shall, promptly perform, subject to delays arising from the collection of insurance proceeds, from Force Majeure (as defined in Section 34) events or to obtain Hazardous Material Clearances, all repairs or restoration not required to be done by Landlord and shall promptly reenter the Premises and, following the restoration of the Premises, commence doing business in accordance with this Lease. Notwithstanding the foregoing, either Landlord or Tenant may terminate this Lease upon written notice to the other if the Premises are damaged during the last year of the Term and Landlord reasonably estimates that it will take more than 2 months to repair such damage; provided, however, that such notice is delivered within 10 business days after the date that Landlord provides Tenant with written notice of the estimated Restoration Period. Landlord shall also have the right to terminate this Lease if insurance proceeds are not available for such restoration. Rent shall be abated from the date all required Hazardous Material Clearances are obtained until the Premises are repaired and restored, in the proportion which the area of the Premises, if any, which is not usable by Tenant bears to the total area of the Premises, unless Landlord provides Tenant with other space during the period of repair that is suitable for the temporary conduct of Tenant's business. In the event that no Hazardous Material Clearances are required to be obtained by Tenant with respect to the Premises, rent abatement shall commence on the date of discovery of the damage or destruction. Such abatement shall be the sole remedy of Tenant, and except as provided in this Section 18. Tenant waives any right to terminate the Lease by reason of damage or casualty loss.

The provisions of this Lease, including this Section 18, constitute an express agreement between Landlord and Tenant with respect to any and all damage to, or destruction of, all or any part of the Premises, or any other portion of the Project, and any statute or regulation which is now or may hereafter be in effect shall have no application to this Lease or any damage or destruction to all or any part of the Premises or any other portion of the Project, the parties hereto expressly agreeing that this Section 18 sets forth their entire understanding and agreement with respect to such matters.

19. Condemnation. If the whole or any material part of the Premises or the Project is taken for any public or quasi-public use under governmental law, ordinance, or regulation, or by right of eminent domain, or by private purchase in lieu thereof (a "**Taking**" or "**Taken**"), and the Taking would in Landlord's reasonable judgment, either prevent or materially interfere with Tenant's use of the Premises or materially interfere with or impair Landlord's ownership or operation of the Project, then upon written notice by Landlord this Lease shall terminate and Rent shall be apportioned as of said date. If part of the Premises shall be Taken, and this Lease is not terminated as provided above, Landlord shall promptly restore the Premises and the Project as nearly as is commercially reasonable under the circumstances to their condition prior to such partial Taking and the rentable square footage of the Building, the rentable square footage of the Premises, Tenant's Share of Operating Expenses and the Rent payable hereunder during the unexpired Term shall be reduced to such extent as may be fair and reasonable under the circumstances. Upon any such Taking, Landlord shall be entitled to receive the entire price or award from any such Taking without any payment to Tenant, and Tenant hereby assigns to Landlord Tenant's interest, if any, in such award. Tenant shall have the right, to the extent that same shall not diminish Landlord's award, to make a separate claim against the condemning authority (but not Landlord) for such compensation as may be separately awarded or recoverable by Tenant for moving expenses and damage to Tenant's trade fixtures, if a separate award for such items is made to Tenant. Tenant hereby waives any and all rights it might otherwise have pursuant to any provision of state law to terminate this Lease upon a partial Taking of the Premises or the Project.

20. Events of Default. Each of the following events shall be a default ("**Default**") by Tenant under this Lease:

(a) Payment Defaults. Tenant shall fail to pay any Installment of Rent or any other payment hereunder when due; provided, however, that Landlord will give Tenant notice and an opportunity to cure any failure to pay Rent within 3 days of any such notice not more than once in any 12 month period and Tenant agrees that such notice shall be in lieu of and not in addition to, or shall be deemed to be, any notice required by law.

(b) Insurance. Any insurance required to be maintained by Tenant pursuant to this Lease shall be canceled or terminated or shall expire or shall be reduced or materially changed, or Landlord shall receive a notice of nonrenewal of any



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such insurance and Tenant shall fail to obtain replacement insurance at least 20 days before the expiration of the current coverage.

(c) Abandonment. Tenant shall abandon the Premises. Tenant shall not be deemed to have abandoned the Premises if (i) Tenant provides Landlord with reasonable advance notice prior to vacating and, at the time of vacating the Premises, Tenant completes Tenant's obligations with respect to the Surrender Plan in compliance with Section 28 (ii) Tenant has made reasonable arrangements with Landlord for the security of the Premises for the balance of the Term, and (iii) Tenant continues during the balance of the Term to satisfy all of its obligations under the Lease as they come due

(d) Improper Transfer. Tenant shall assign, sublease or otherwise transfer or attempt to transfer all or any portion of Tenant's interest in this Lease or the Premises except as expressly permitted herein, or Tenant's interest in this Lease shall be attached, executed upon, or otherwise judicially seized and such action is not released within 90 days of the action.

(e) Liens. Tenant shall fail to discharge or otherwise obtain the release of any lien placed upon the Premises in violation of this Lease within 10 business days after any such lien is filed against the Premises.

(f) Insolvency Events. Tenant or any guarantor or surety of Tenant's obligations hereunder shall: (A) make a general assignment for the benefit of creditors; (B) commence any case, proceeding or other action seeking to have an order for relief entered on its behalf as a debtor or to adjudicate it a bankrupt or Insolvent, or seeking reorganization, arrangement, adjustment, liquidation, dissolution or composition of it or its debts or seeking appointment of a receiver, trustee, custodian or other similar official for it or for all or of any substantial part of its property (collectively a "**Proceeding for Relief**"); (C) become the subject of any Proceeding for Relief which is not dismissed within 90 days of its filing or entry; or (D) die or suffer a legal disability (if Tenant, guarantor, or surety is an individual) or be dissolved or otherwise fail to maintain its legal existence (if Tenant, guarantor or surety is a corporation, partnership or other entity).

(g) Estoppel Certificate or Subordination Agreement. Tenant fails to execute any document required from Tenant under Sections 23 or 27 within 5 days after a second notice requesting such document.

(h) Other Defaults. Tenant shall fail to comply with any provision of this Lease other than those specifically referred to in this Section 20, and, except as otherwise expressly provided herein, such failure shall continue for a period of 30 days after written notice thereof from Landlord to Tenant.

Any notice given under Section 20(h) hereof shall: (i) specify the alleged default, (ii) demand that Tenant cure such default, (iii) be in lieu of, and not in addition to, or shall be deemed to be, any notice required under any provision of applicable law, and (iv) not be deemed a forfeiture or a termination of this Lease unless Landlord elects otherwise in such notice; provided that If the nature of Tenant's default pursuant to Section 20(h) is such that it cannot be cured by the payment of money and reasonably requires more than 30 days to cure, then Tenant shall not be deemed to be in default if Tenant commences such cure within said 30 day period and thereafter diligently prosecutes the same to completion; provided, however, that such cure shall be completed no later than 60 days from the date of Landlord's notice.

21. Landlord's Remedies.

(a) Payment By Landlord; Interest. Upon a Default by Tenant hereunder, Landlord may, without waiving or releasing any obligation of Tenant hereunder, make such payment or perform such act. All sums so paid or incurred by Landlord, together with interest thereon, from the date such sums were paid or incurred, at the annual rate equal to 12% per annum or the highest rate permitted by law (the "**Default Rate**"), whichever is less, shall be payable to Landlord on demand as Additional Rent. Nothing herein shall be construed to create or impose a duty on Landlord to mitigate any damages resulting from Tenant's Default hereunder.

(b) Late Payment Rent. Late payment by Tenant to Landlord of Rent and other sums due will cause Landlord to incur costs not contemplated by this Lease, the exact amount of which will be extremely difficult and impracticable to ascertain. Such costs include, but are not limited to, processing and accounting charges and late charges which may be imposed on Landlord under any Mortgage covering the Premises. Therefore, if any installment of Rent due from Tenant is

not received by Landlord within 5 days after the date such payment is due, Tenant shall pay to Landlord an additional sum equal to 6% of the overdue Rent as a late charge. Notwithstanding the foregoing, before assessing a late charge the first time in any calendar year. Landlord shall provide Tenant written notice of the delinquency and will waive the right if Tenant pays such delinquency within 5 days thereafter. The parties agree that this late charge represents a Fair and reasonable estimate of the costs Landlord will incur by reason of late payment by Tenant. In addition to the late charge, Rent not paid when due shall bear interest at the Default Rate from the 5th day after the date due until paid.

(c) **Remedies.** Upon the occurrence of a Default, Landlord, at its option, without further notice or demand to Tenant, shall have in addition to all other rights and remedies provided in this Lease, at law or in equity, the option to pursue any one or more of the following remedies, each and all of which shall be cumulative and nonexclusive, without any notice or demand whatsoever.

(i) Terminate this Lease, or at Landlord's option, Tenant's right to possession only, in which event Tenant shall immediately surrender the Premises to Landlord, and if Tenant fails to do so, Landlord may, without prejudice to any other remedy which it may have for possession or arrearages in rent, enter upon and take possession of the Premises and expel or remove Tenant and any other person who may be occupying the Premises or any part thereof, without being liable for prosecution or any claim or damages therefor;

(ii) Upon any termination of this Lease, whether pursuant to the foregoing Section 21(c)(i) or otherwise, Landlord may recover from Tenant the following:

(A) The worth at the time of award of any unpaid rent which has been earned at the time of such termination; plus

(B) The worth at the time of award of the amount by which the unpaid rent which would have been earned after termination until the time of award exceeds the amount of such rental loss that Tenant proves could have been reasonably avoided; plus

(C) The worth at the time of award of the amount by which the unpaid rent for the balance of the Term after the time of award exceeds the amount of such rental loss that Tenant proves could have been reasonably avoided; plus

(D) Any other amount necessary to compensate Landlord for all the detriment proximately caused by Tenant's failure to perform its obligations under this Lease or which in the ordinary course of things would be likely to result therefrom, specifically including, but not limited to, brokerage commissions and advertising expenses incurred, expenses of remodeling the Premises or any portion thereof for a new tenant, whether for the same or a different use, and any special concessions made to obtain a new tenant; and

(E) At Landlord's election, such other amounts in addition to or in lieu of the foregoing as may be permitted from time to time by applicable law.

The term "rent" as used in this Section 21 shall be deemed to be and to mean all sums of every nature required to be paid by Tenant pursuant to the terms of this Lease, whether to Landlord or to others. As used in Sections 21(c)(ii)(A) and (B), above, the "**worth at the time of award**" shall be computed by allowing interest at the Default Rate. As used in Section 21(c)(ii)(C) above, the "**worth at the time of award**" shall be computed by discounting such amount at the discount rate of the Federal Reserve Bank of San Francisco at the time of award plus 1 %.

(iii) Landlord may continue this Lease in effect after Tenant's Default and recover rent as it becomes due (Landlord and Tenant hereby agreeing that Tenant has the right to sublet or assign hereunder, subject only to reasonable limitations). Accordingly, if Landlord does not elect to terminate this Lease following a Default by Tenant, Landlord may, from time to time, without terminating this Lease, enforce all of its rights and remedies hereunder, including the right to recover all Rent as it becomes due.



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(iv) Whether or not Landlord elects to terminate this Lease following a Default by Tenant, Landlord shall have the right to terminate any and all subleases, licenses, concessions or other consensual arrangements for possession entered into by Tenant and affecting the Premises or may, in Landlord's sole discretion, succeed to Tenant's interest in such subleases, licenses, concessions or arrangements. Upon Landlord's election to succeed to Tenant's interest in any such subleases, licenses, concessions or arrangements, Tenant shall, as of the date of notice by Landlord of such election, have no further right to or interest in the rent or other consideration receivable thereunder.

(v) Independent of the exercise of any other remedy of Landlord hereunder or under applicable law, Landlord may conduct an environmental test of the Premises as generally described in Section 30(d), hereof, at Tenants expense.

(d) **Effect of Exercise.** Exercise by Landlord of any remedies hereunder or otherwise available shall not be deemed to be an acceptance of surrender of the Premises and/or a termination of this Lease by Landlord, it being understood that such surrender and/or termination can be effected only by the express written agreement of Landlord and Tenant. Any law, usage, or custom to the contrary notwithstanding, Landlord shall have the right at all times to enforce the provisions of this Lease in strict accordance with the terms hereof; and the failure of Landlord at any time to enforce its rights under this Lease strictly in accordance with same shall not be construed as having created a custom in any way or manner contrary to the specific terms, provisions, and covenants of this Lease or as having modified the same and shall not be deemed a waiver of Landlord's right to enforce one or more of its rights in connection with any subsequent default. A receipt by Landlord of Rent or other payment with knowledge of the breach of any covenant hereof shall not be deemed a waiver of such breach, and no waiver by Landlord of any provision of this Lease shall be deemed to have been made unless expressed in writing and signed by Landlord. To the greatest extent permitted by law, Tenant waives the service of notice of Landlord's intention to re-enter, re-take or otherwise obtain possession of the Premises as provided in any statute, or to institute legal proceedings to that end, and also waives all right of redemption in case Tenant shall be dispossessed by a judgment or by warrant of any court or Judge. Any reletting of the Premises or any portion thereof shall be on such terms and conditions as Landlord in its sole discretion may determine. Landlord shall not be liable for, nor shall Tenant's obligations hereunder be diminished because of, Landlord's failure to relet the Premises or collect rent due in respect of such reletting or otherwise to mitigate any damages arising by reason of Tenant's Default.

22. Assignment and Subletting.

(a) **General Prohibition.** Without Landlord's prior written consent subject to and on the conditions described in this Section 22, Tenant shall not, directly or indirectly, voluntarily or by operation of law, assign this Lease or sublease the Premises or any part thereof or mortgage, pledge, or hypothecate its leasehold interest or grant any concession or license within the Premises, and any attempt to do any of the foregoing shall be void and of no effect. If Tenant is a corporation, partnership or limited liability company, the shares or other ownership interests thereof which are not actively traded upon a stock exchange or in the over-the-counter market, a transfer or series of transfers whereby 25% or more of the issued and outstanding shares or other ownership interests of such corporation are, or voting control is, transferred (but excepting transfers upon deaths of individual owners) from a person or persons or entity or entities which were owners thereof at time of execution of this Lease to persons or entities who were not owners of shares or other ownership interests of the corporation, partnership or limited liability company at time of execution of this Lease, shall be deemed an assignment of this Lease requiring the consent of Landlord as provided in this Section 22.

(b) **Permitted Transfers.** If Tenant desires to assign, sublease, hypothecate or otherwise transfer this Lease or sublet the Premises other than pursuant to a Permitted Assignment (as defined below), then at least 15 business days before the date Tenant desires the assignment or sublease to be effective (the "**Assignment Date**"), Tenant shall give Landlord a notice (the "**Assignment Notice**") containing such information about the proposed assignee or sublease, including the proposed use of the Premises and any Hazardous Materials proposed to be used, stored handled, treated, generated in or released or disposed of from the Premises, the Assignment Date, any relationship between Tenant and the proposed assignee or sublease, and all material terms and conditions of the proposed assignment or sublease, including a copy of any proposed assignment or sublease in its final form, and such other Information as Landlord may deem reasonably necessary or appropriate to its consideration whether to grant its consent. Landlord may, by giving written notice to Tenant within 15 business days after receipt of the Assignment Notice: (i) grant such consent, (ii) refuse such consent, in its



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reasonable discretion; or (iii) if the Assignment Notice contemplates a sublease term equal to the remaining term of the Lease, terminate this Lease with respect to the space described in the Assignment Notice as of the Assignment Date (an "**Assignment Termination**"). Among other reasons, it shall be reasonable for Landlord to withhold its consent in any of these instances: (1) the proposed assignee or subtenant is a governmental agency; (2) in Landlord's reasonable judgment, the use of the Premises by the proposed assignee or subtenant would entail any alterations that would lessen the value of the leasehold improvements in the Premises, or would require Increased services by Landlord; (3) in Landlord's reasonable judgment, the proposed assignee or subtenant is engaged in areas of scientific research or other business concerns that are controversial; (4) in Landlord's reasonable judgment, the proposed assignee or subtenant tacks the creditworthiness to support the financial obligations it will incur under the proposed assignment or sublease; (5) in Landlord's reasonable judgment, the character, reputation, or business of the proposed assignee or subtenant is inconsistent with the desired tenant-mix or the quality of other tenancies in the Project or is inconsistent with the type and quality of the nature of the Building; (6) Landlord has received from any prior landlord to the proposed assignee or subtenant a negative report concerning such prior landlord's experience with the proposed assignee or subtenant; (7) Landlord has experienced previous defaults by or is In litigation with the proposed assignee or subtenant; (8) the use of the Premises by the proposed assignee or subtenant will violate any applicable Legal Requirement; (9) the proposed assignee or subtenant, or any entity that, directly or indirectly, controls, is controlled by, or is under common control with the proposed assignee or subtenant, is then an occupant of the Project; (10) the proposed assignee or subtenant is an entity with whom Landlord is actively negotiating to lease space in the Project; or (11) the assignment or sublease is prohibited by Landlord's lender. If Landlord delivers notice of its election to exercise an Assignment Termination, Tenant shall have the right to withdraw such Assignment Notice by written notice to Landlord of such election within 5 business days after Landlord's notice electing to exercise the Assignment Termination. If Tenant withdraws such Assignment Notice, this Lease shall continue in full force and effect. If Tenant does not withdraw such Assignment Notice, this Lease, and the term and estate herein granted, shall terminate as of the Assignment Date with respect to the space described in such Assignment Notice. No failure of Landlord to exercise any such option to terminate this Lease, or to deliver a timely notice in response to the Assignment Notice, shall be deemed to be Landlord's consent to the proposed assignment, sublease or other transfer. Tenant shall pay to Landlord a fee equal to One Thousand Five Hundred Dollars (\$1,500) in connection with its consideration of any Assignment Notice and/or its preparation or review of any consent documents. Notwithstanding the foregoing, Landlord's consent to an assignment of this Lease or a subletting of any portion of the Premises to any entity controlling, controlled by or under common control with Tenant (a "**Control Permitted Assignment**") shall not be required, provided that Landlord shall have the right to approve the form of any such sublease or assignment. In addition, Tenant shall have the right to assign this Lease, upon 30 days prior written notice to Landlord but without obtaining Landlord's prior written consent, to a corporation or other entity which is a successor-in-interest to Tenant, by way of merger, consolidation or corporate reorganization, or by the purchase of all or substantially all of the assets or the ownership Interests of Tenant provided that (i) such merger or consolidation, or such acquisition or assumption, as the case may be, is for a good business purpose and not principally for the purpose of transferring the Lease, and (ii) the net worth (as determined in accordance with generally accepted accounting principles ("**GAAP**") of the assignee is not less than the greater of the net worth (as determined in accordance with GAAP) of Tenant as of (A) the Commencement Date, or (B) as of the date of Tenant's most current quarterly or annual financial statements, and (iii) such assignee shall agree in writing to assume all of the terms, covenants and conditions of this Lease (a "**Corporate Permitted Assignment**"). Control Permitted Assignments and Corporate Permitted Assignments are hereinafter referred to as "**Permitted Assignments**."

(c) **Additional Conditions.** As a condition to any such assignment or subletting, whether or not Landlord's consent is required, Landlord may require:

(i) that any assignee or subtenant agree, in writing at the time of such assignment or subletting, that If Landlord gives such party notice that Tenant is in default under this Lease, such party shall thereafter make all payments otherwise due Tenant directly to Landlord, which payments will be received by Landlord without any liability except to credit such payment against those due under the Lease, and any such third party shall agree to attorn to Landlord or its successors and assigns should this Lease be terminated for any reason; provided, however, in no event shall Landlord or its successors or assigns be obligated to accept such attornment; and

(ii) A list of Hazardous Materials, certified by the proposed assignee or sublessee to be true and correct, which the proposed assignee or sublessee intends to use, store, handle, treat, generate in or release or dispose of from the Premises, together with copies of all documents relating to such use, storage, handling, treatment,



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generation, release or disposal of Hazardous Materials by the proposed assignee or subtenant in the Premises or on the Project, prior to the proposed assignment or subletting, including, without limitation: permits; approvals; reports and correspondence; storage and management plans; plans relating to the installation of any storage tanks to be installed in or under the Project (provided, said installation of tanks shall only be permitted after Landlord has given its written consent to do so, which consent may be withheld in Landlord's sole and absolute discretion); and all closure plans or any other documents required by any and all federal, state and local Governmental Authorities for any storage tanks installed in, on or under the Project for the closure of any such tanks. Neither Tenant nor any such proposed assignee or subtenant is required, however, to provide Landlord with any portion(s) of the such documents containing information of a proprietary nature which, in and of themselves, do not contain a reference to any Hazardous Materials or hazardous activities.

(d) No Release of Tenant, Sharing of Excess Rents. Notwithstanding any assignment or subletting, Tenant and any guarantor or surety of Tenant's obligations under this Lease shall at all times remain fully and primarily responsible and liable for the payment of Rent and for compliance with all of Tenant's other obligations under this Lease. Except in connection with a Permitted Assignment, if the Rent due and payable by a sublessee or assignee (or a combination of the rental payable under such sublease or assignment plus any bonus or other consideration therefor or incident thereto in any form) exceeds the sum of the rental payable under this Lease, (excluding however, any Rent payable under this Section) and actual and reasonable brokerage fees, legal costs and any design or construction fees directly related to and required pursuant to the terms of any such sublease)("Excess Rent"), then Tenant shall be bound and obligated to pay Landlord as Additional Rent hereunder 50% of such Excess Rent within 10 days following receipt thereof by Tenant. If Tenant shall sublet the Premises or any part thereof, Tenant hereby immediately and irrevocably assigns to Landlord, as security for Tenant's obligations under this Lease, all rent from any such subletting, and Landlord as assignee and as attorney-in-fact for Tenant, or a receiver for Tenant appointed on Landlord's application, may collect such rent and apply it toward Tenant's obligations under this Lease; except that, until the occurrence of a Default, Tenant shall have the right to collect such rent,

(e) No Waiver. The consent by Landlord to an assignment or subletting shall not relieve Tenant or any assignees of this Lease or any sublessees of the Premises from obtaining the consent of Landlord to any further assignment or subletting nor shall it release Tenant or any assignee or sublessee of Tenant from full and primary liability under the Lease. The acceptance of Rent hereunder, or the acceptance of performance of any other term, covenant, or condition thereof, from any other person or entity shall not be deemed to be a waiver of any of the provisions of this Lease or a consent to any subletting, assignment or other transfer of the Premises.

(f) Prior Conduct of Proposed Transferee. Notwithstanding any other provision of this Section 22, if (i) (he proposed assignee or sublessee of Tenant has been required by any prior landlord, lender or Governmental Authority to take remedial action in connection with Hazardous Materials contaminating a property, where the contamination resulted from such party's action or use of the property in question, (ii) the proposed assignee or sublessee is subject to an enforcement order issued by any Governmental Authority in connection with the use, storage, handling, treatment, generation, release or disposal of Hazardous Materials (including, without limitation, any order related to the failure to make a required reporting to any Governmental Authority), or (iii) because of the existence of a pre-existing environmental condition in the vicinity of or underlying the Project, the risk that Landlord would be targeted as a responsible party in connection with the remediation of such pre-existing environmental condition would be materially increased or exacerbated by the proposed use of Hazardous Materials by such proposed assignee or sublessee, Landlord shall have the absolute right to refuse to consent to any assignment or subletting to any such party.

23. Estoppel Certificate. Tenant shall, within 10 business days of written notice from Landlord, execute, acknowledge and deliver a statement in writing in any form reasonably requested by a proposed lender or purchaser, (i) certifying that this Lease is unmodified and in full force and effect (or, if modified, stating the nature of such modification and certifying that this Lease as so modified is in full force and effect) and the dates to which the rental and other charges are paid in advance, if any, (ii) acknowledging, to Tenant's actual knowledge, that there are not any uncured defaults on the part of Landlord hereunder, or specifying such defaults if any are claimed, and (iii) setting forth such further information with respect to the status of this Lease or the Premises as may be requested thereon. Any such statement may be relied upon by any prospective purchaser or encumbrancer of all or any portion of the real property of which the Premises are a part. Tenant's failure to deliver such statement within such time shall, at the option of Landlord, be conclusive upon Tenant that the Lease is in full force and effect and without modification except as may be represented by Landlord in any certificate prepared by Landlord and delivered to Tenant for execution,



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24. Quiet Enjoyment. So long as Tenant shall perform all of the covenants and agreements herein required to be performed by Tenant, Tenant shall, subject to the terms of this Lease, at all times during the Term, have peaceful and quiet enjoyment of the Premises against any person claiming by, through or under Landlord.

25. Prorations. All prorations required or permitted to be made hereunder shall be made **on** the basis of a 360 day year and 30 day months.

26. Rules and Regulations. Tenant shall, at all times during the Term and any extension thereof, comply with all reasonable rules and regulations at any time or from time to time established by Landlord covering use of the Premises and the Project. The current rules and regulations are attached hereto as Exhibit E. If there is any conflict between said rules and regulations and other provisions of this Lease, the terms and provisions of this Lease shall control. Landlord shall not have any liability or obligation for the breach of any rules or regulations by other tenants in the Project and shall not enforce such rules and regulations in a discriminatory manner.

27. Subordination. This Lease and Tenant's Interest and rights hereunder are hereby made and shall be subject and subordinate at all times to the lien of any Mortgage now existing or hereafter created on or against the Project or the Premises, and all amendments, restatements, renewals, modifications, consolidations, refinancing, assignments and extensions thereof, without the necessity Of any further instrument or act on the part of Tenant; provided, however that so long as there is no Default hereunder, Tenant's right to possession of the Premises shall not be disturbed by the Holder of any such Mortgage. Tenant agrees, at the election of the Holder of any such Mortgage, to attorn to any such Holder. Tenant agrees upon demand to execute, acknowledge and deliver such instruments, confirming such subordination, and such instruments of attornment as shall be requested by any such Holder, provided any such instruments contain appropriate non-disturbance provisions assuring Tenant's quiet enjoyment of the Premises as set forth in Section 24 hereof. Notwithstanding the foregoing, any such Holder may at any time subordinate its Mortgage to this Lease, without Tenant's consent, by notice in writing to Tenant, and thereupon this Lease shall be deemed prior to such Mortgage without regard to their respective dates of execution, delivery or recording and in that event such Holder shall have the same rights with respect to this Lease as though this Lease had been executed prior to the execution, delivery and recording of such Mortgage and had been assigned to such Holder. The term "**Mortgage**" whenever used in this Lease shall be deemed to include deeds of trust, security assignments and any other encumbrances, and any reference to the "**Holder**" of a Mortgage shall be deemed to include the beneficiary under a deed of trust. As of the date of this Lease, there is no existing Mortgage encumbering the Project.

28. Surrender. Upon the expiration of the Term or earlier termination of Tenant's right of possession, Tenant shall surrender the Premises to Landlord in the same condition as received, subject to Landlord's Work, any Alterations or Installations permitted by Landlord to remain in the Premises, free of Hazardous Materials brought upon, kept, used, stored, handled, treated, generated in, or released or disposed of from, the Premises by any person other than a Landlord Party (collectively, "**Tenant HazMat Operations**") and released of all Hazardous Materials Clearances, broom clean, ordinary wear and tear and casualty loss and condemnation covered by Sections 18 and 19 excepted. At least 3 months prior to the surrender of the Premises, Tenant shall deliver to Landlord a narrative description of the actions proposed (or required by any Governmental Authority) to be taken by Tenant in order to surrender the Premises (including any Installations permitted by Landlord to remain in the Premises) at the expiration or earlier termination of the Term, free from any residual Impact from the Tenant HazMat Operations and otherwise released for unrestricted use and occupancy (the "**Surrender Plan**"). Such Surrender Plan shall be accompanied by a current listing of (i) all Hazardous Materials licenses and permits held by or on behalf of any Tenant Party with respect to the Premises, and (ii) all Hazardous Materials used, stored, handled, treated, generated, released or disposed of from the Premises, and shall be subject to the review and approval of Landlord's environmental consultant. Landlord shall endeavor to cause Landlord's environmental consultant to provide Tenant with comments to or approval of the Surrender Plan within a reasonable period of time after Tenant delivers the Surrender Plan to Landlord. In connection with the review and approval of the Surrender Plan, upon the request of Landlord, Tenant shall deliver to Landlord or its consultant such additional non-proprietary information concerning Tenant HazMat Operations as Landlord shall request. On or before such surrender, Tenant shall deliver to Landlord evidence that the approved Surrender Plan shall have been satisfactorily completed and Landlord shall have the right, subject to reimbursement at Tenant's expense as set forth below, to cause Landlord's environmental consultant to inspect the Premises and perform such additional procedures as may be deemed reasonably necessary to confirm that the Premises are, as of the effective date of such surrender or early termination of the Lease, free from any residual impact from Tenant HazMat Operations. Tenant



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shall reimburse Landlord, as Additional Rent, for the actual out-of pocket expense incurred by Landlord for Landlord's environmental consultant to review and approve the Surrender Plan and to visit the Premises and verify satisfactory completion of the same, which cost shall not exceed \$5,000. Landlord shall have the unrestricted right to deliver such Surrender Plan and any report by Landlord's environmental consultant with respect to the surrender of the Premises to third parties.

If Tenant shall fail to prepare or submit a Surrender Plan approved by Landlord, or if Tenant shall fail to complete the approved Surrender Plan, or if such Surrender Plan, whether or not approved by Landlord, shall fail to adequately address any residual effect of Tenant HazMat Operations in, on or about the Premises, Landlord shall have the right to take such actions as Landlord may deem reasonable or appropriate to assure that the Premises and the Project are surrendered free from any residual impact from Tenant HazMat Operations, the cost of which actions shall be reimbursed by Tenant as Additional Rent, without regard to the limitation set forth in the first paragraph of this Section 28.

Tenant shall immediately return to Landlord all keys and/or access cards to parking, the Project, restrooms or all or any portion of the Premises furnished to or otherwise procured by Tenant. If any such access card or key is lost, Tenant shall pay to Landlord, at Landlord's election, either the cost of replacing such lost access card or key or the cost of reprogramming the access security system in which such access card was used or changing the lock or locks opened by such lost key. Any Tenant's Property, Alterations and property not so removed by Tenant as permitted or required herein shall be deemed abandoned and may be stored, removed, and disposed of by Landlord at Tenant's expense, and Tenant waives all claims against Landlord for any damages resulting from Landlord's retention and/or disposition of such property. All obligations of Tenant hereunder not fully performed as of the termination of the Term, including the obligations of Tenant under Section 30 hereof, shall survive the expiration or earlier termination of the Term, including, without limitation, indemnity obligations, payment obligations with respect to Rent and obligations concerning the condition and repair of the Premises.

29. Waiver of Jury Trial. TO THE EXTENT PERMITTED BY LAW, TENANT AND LANDLORD WAIVE ANY RIGHT TO TRIAL BY JURY OR TO HAVE A JURY PARTICIPATE IN RESOLVING ANY DISPUTE, WHETHER SOUNDING IN CONTRACT, TORT, OR OTHERWISE, BETWEEN LANDLORD AND TENANT ARISING OUT OF THIS LEASE OR ANY OTHER INSTRUMENT, DOCUMENT, OR AGREEMENT EXECUTED OR DELIVERED IN CONNECTION HERewith OR THE TRANSACTIONS RELATED HERETO.

30. Environmental Requirements.

(a) Prohibition/Compliance/indemnity. Tenant shall not cause or permit any Hazardous Materials (as hereinafter defined) to be brought upon, kept, used, stored, handled, treated, generated in or about, or released or disposed of from, the Premises or the Project in violation of applicable Environmental Requirements (as hereinafter defined) by Tenant or any Tenant Party. If Tenant breaches the obligation stated in the preceding sentence, or if the presence of Hazardous Materials in the Premises during the Term or any holding over results in contamination of the Premises, the Project or any adjacent property or if contamination of the Premises, the Project or any adjacent property by Hazardous Materials brought into, kept, used, stored, handled, treated, generated in or about, or released or disposed of from, the Premises by anyone other than Landlord and Landlord's employees, agents and contractors otherwise occurs during the Term or any holding over, Tenant hereby indemnifies and shall defend and hold Landlord, its officers, directors, employees, agents and contractors harmless from any and all actions (including, without limitation, remedial or enforcement actions of any kind, administrative or Judicial proceedings, and orders or Judgments arising out of or resulting therefrom), costs, claims, damages (including, without limitation, punitive damages and damages based upon diminution in value of the Premises or the Project, or the loss of, or restriction on, use of the Premises or any portion of the Project), expenses (including, without limitation, attorneys', consultants' and experts' fees, court costs and amounts paid in settlement of any claims or actions), fines, forfeitures or other civil, administrative or criminal penalties, Injunctive or other relief (whether or not based upon personal injury, property damage, or contamination of, or adverse effects upon, the environment, water tables or natural resources), liabilities or losses (collectively, "**Environmental Claims**") which arise during or after the Term as a result of such contamination. This indemnification of Landlord by Tenant includes, without limitation, costs incurred in connection with any investigation of site conditions or any cleanup, treatment, remedial, removal, or restoration work required by any federal, state or local Governmental Authority because of Hazardous Materials present in the air, soil or ground water above, on, or under the Premises. Without limiting the foregoing, if the presence of any Hazardous Materials on the Premises, the Project or any adjacent property caused or permitted by Tenant or any Tenant Party results in any contamination of the



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Premises, the Project or any adjacent property, Tenant shall promptly take all actions at its sole expense and in accordance with applicable Environmental Requirements as are necessary to return the Premises, the Project or any adjacent property to the condition existing prior to the time of such contamination, provided that Landlord's approval of such action shall first be obtained, which approval shall not unreasonably be withheld so long as such actions would not potentially have any material adverse long-term or short-term effect on the Premises or the Project. Notwithstanding anything to the contrary contained in Section 28 or this Section 30, Tenant shall not be responsible for, and the indemnification and hold harmless obligation set forth in this paragraph shall not apply to (i) contamination in the Premises which Tenant can prove to Landlord's reasonable satisfaction existed in the Premises immediately prior to the Commencement Date, or (ii) the presence of any Hazardous Materials in the Premises which Tenant can prove to Landlord's reasonable satisfaction migrated from outside of the Premises into the Premises, unless in either case, the presence of such Hazardous Materials (x) is the result of a breach by Tenant of any of its obligations under this Lease, or (y) was caused, contributed to or exacerbated by Tenant or any Tenant Party.

(b) Business. Landlord acknowledges that it is not the intent of this Section 30 to prohibit Tenant from using the Premises for the Permitted Use. Tenant may operate its business according to prudent industry practices so long as the use or presence of Hazardous Materials is strictly and properly monitored according to all then applicable Environmental Requirements. As a material inducement to Landlord to allow Tenant to use Hazardous Materials in connection with its business, Tenant agrees to deliver to Landlord prior to the Commencement Date a list identifying each type of Hazardous Materials to be brought upon, kept, used, stored, handled, treated, generated on, or released or disposed of from, the Premises and setting forth any and all governmental approvals or permits required in connection with the presence, use, storage, handling, treatment, generation, release or disposal of such Hazardous Materials on or from the Premises (other than products customarily used by tenants in de minimis quantities for ordinary cleaning and office purposes) ("**Hazardous Materials List**"). Tenant shall deliver to Landlord an updated Hazardous Materials List at least once a year and shall also deliver an updated list before any new Hazardous Material is brought onto, kept, used, stored, handled, treated, generated on, or released or disposed of from, the Premises. Tenant shall deliver to Landlord true and correct copies of the following documents (the "**Haz Mat Documents**") relating to the use, storage, handling, treatment, generation, release or disposal of Hazardous Materials prior to the Commencement Date, or if unavailable at that time, concurrent with the receipt from or submission to a Governmental Authority: permits; approvals; reports and correspondence; storage and management plans, notice of violations of any Legal Requirements; plans relating to the installation of any storage tanks to be installed in or under the Project (provided, said installation of tanks shall only be permitted after Landlord has given Tenant its written consent to do so, which consent may be withheld in Landlord's sole and absolute discretion); all closure plans or any other documents required by any and all federal, state and local Governmental Authorities for any storage tanks installed in, on or under the Project for the closure of any such tanks; and a Surrender Plan (to the extent surrender in accordance with Section 28 cannot be accomplished in 3 months). Tenant is not required, however, to provide Landlord with any portion(s) of the Haz Mat Documents containing information of a proprietary nature which, in and of themselves, do not contain a reference to any Hazardous Materials or hazardous activities. It is not the intent of this Section to provide Landlord with information which could be detrimental to Tenant's business should such information become possessed by Tenant's competitors.

(c) Tenant Representation and Warranty. Tenant hereby represents and warrants to Landlord that (i) neither Tenant nor any of its legal predecessors has been required by any prior landlord, lender or Governmental Authority at any time to take remedial action in connection with Hazardous Materials contaminating a property which contamination was permitted by Tenant or such predecessor or resulted from Tenant's or such predecessor's action or use of the property in question, and (ii) Tenant is not subject to any enforcement order issued by any Governmental Authority in connection with the use, storage, handling, treatment, generation, release or disposal of Hazardous Materials (including, without limitation, any order related to the failure to make a required reporting to any Governmental Authority). If Landlord determines that this representation and warranty was not true as of the date of this lease, Landlord shall have the right to terminate this Lease in Landlord's sole and absolute discretion.

(d) Testing. Landlord shall have the right to conduct annual tests of the Premises to determine whether any contamination of the Premises or the Project has occurred as a result of Tenant's use. Tenant shall be required to pay the cost of such annual test of the Premises; provided, however, that if Tenant conducts its own tests of the Premises using third party contractors and test procedures reasonably acceptable to Landlord which tests are certified to Landlord, Landlord shall accept such tests in lieu of the annual tests to be paid for by Tenant. In addition, at any time, and from time to time,



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prior to the expiration or earlier termination of the Term, Landlord shall have the right to conduct appropriate tests of the Premises and the Project to determine if contamination has occurred as a result of Tenant's use of the Premises. In connection with such testing, upon the request of Landlord, Tenant shall deliver to Landlord or its consultant such non-proprietary information concerning the use of Hazardous Materials in or about the Premises by Tenant or any Tenant Party. If contamination has occurred for which Tenant is liable under this Section 30, Tenant shall pay all costs to conduct such tests. If no such contamination is found, Landlord shall pay the costs of such tests (which shall not constitute an Operating Expense). Landlord shall provide Tenant with a copy of all third party, non-confidential reports and tests of the Premises made by or on behalf of Landlord during the Term without representation or warranty and subject to a confidentiality agreement. Tenant shall, at its sole cost and expense, promptly and satisfactorily remediate any environmental conditions identified by such testing in accordance with all Environmental Requirements. Landlord's receipt of or satisfaction with any environmental assessment in no way waives any rights which Landlord may have against Tenant.

(e) Control Areas. Tenant shall be allowed to utilize up to its pro rata share of the Hazardous Materials inventory within any control area or zone (located within the Premises), as designated by the applicable building code, for chemical use or storage. As used in the preceding sentence, Tenant's pro rata share of any control areas or zones located within the Premises shall be determined based on the rentable square footage that Tenant leases within the applicable control area or zone. For purposes of example only, if a control area or zone contains 10,000 rentable square feet and 2,000 rentable square feet of a tenant's premises are located within such control area or zone (while such premises as a whole contains 5,000 rentable square feet), the applicable tenant's pro rata share of such control area would be 20%.

(f) Underground Tanks. If underground or other storage tanks storing Hazardous Materials located on the Premises or the Project are used by Tenant or are hereafter placed on the Premises or the Project by Tenant, Tenant shall install, use, monitor, operate, maintain, upgrade and manage such storage tanks, maintain appropriate records, obtain and maintain appropriate insurance, implement reporting procedures, properly close any underground storage tanks, and take or cause to be taken all other actions necessary or required under applicable state and federal Legal Requirements, as such now exists or may hereafter be adopted or amended in connection with the installation, use, maintenance, management, operation, upgrading and closure of such storage tanks.

(g) Tenant's Obligations. Tenant's obligations under this Section 30 shall survive the expiration or earlier termination of the Lease. During any period of time after the expiration or earlier termination of this Lease required by Tenant or Landlord to complete the removal from the Premises of any Hazardous Materials (including, without limitation, the release and termination of any licenses or permits restricting the use of the Premises and the completion of the approved Surrender Plan). Tenant shall continue to pay the full Rent in accordance with this Lease for any portion of the Premises not relet by Landlord in Landlord's sole discretion, which Rent shall be prorated daily.

(h) Definitions. As used herein, the term "**Environmental Requirements**" means all applicable present and future statutes, regulations, ordinances, rules, codes, judgments, orders or other similar enactments of any Governmental Authority regulating or relating to health, safety, or environmental conditions on, under, or about the Premises or the Project, or the environment, including without limitation, the following: the Comprehensive Environmental Response, Compensation and Liability Act; the Resource Conservation and Recovery Act; and all state and local counterparts thereto, and any regulations or policies promulgated or issued thereunder. As used herein, the term "**Hazardous Materials**" means and includes any substance, material, waste, pollutant, or contaminant listed or defined as hazardous or toxic, or regulated by reason of its impact or potential impact on humans, animals and/or the environment under any Environmental Requirements, asbestos and petroleum, including crude oil or any fraction thereof, natural gas liquids, liquefied natural gas, or synthetic gas usable for fuel (or mixtures of natural gas and such synthetic gas). As defined in Environmental Requirements, Tenant is and shall be deemed to be the "operator" of Tenant's "facility" and the "owner" of all Hazardous Materials brought on the Premises by Tenant or any Tenant Party, and the wastes, by-products, or residues generated, resulting, or produced therefrom.

31. Tenant's Remedies/Limitation of Liability. Landlord shall not be in default hereunder unless Landlord fails to perform any of its obligations hereunder within 30 days after written notice from Tenant specifying such failure (unless such performance will, due to the nature of the obligation, require a period of time in excess of 30 days, then after such period of time as is reasonably necessary). Upon any default by Landlord, Tenant shall give notice by registered or certified mail to any Holder of a Mortgage covering the Premises and to any landlord of any lease of property in or on which the



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Premises are located and Tenant shall offer such Holder and/or landlord a reasonable opportunity to cure the default, including time to obtain possession of the Project by power of sale or a judicial action if such should prove necessary to effect a cure; provided Landlord shall have furnished to Tenant in writing the names and addresses of all such persons who are to receive such notices. All obligations of Landlord hereunder shall be construed as covenants, not conditions; and, except as may be otherwise expressly provided in this Lease, Tenant may not terminate this Lease for breach of Landlord's obligations hereunder.

All obligations of Landlord under this Lease will be binding upon Landlord only during the period of its ownership of the Premises and not thereafter. The term "**Landlord**" in this Lease shall mean only the owner for the time being of the Premises. Upon the transfer by such owner of its interest in the Premises, such owner shall thereupon be released and discharged from all obligations of Landlord thereafter accruing, but such obligations shall be binding during the Term upon each new owner for the duration of such owner's ownership.

32. Inspection and Access. Landlord and its agents, representatives, and contractors may enter the Premises at any reasonable time to inspect the Premises and to make such repairs as may be required or permitted pursuant to this Lease and for any other business propose, Landlord and Landlord's representatives may enter the Premises during business hours on not less than 48 hours advance written notice (except in the case of emergencies in which case no such notice shall be required and such entry may be at any time) for the purpose of effecting any such repairs, inspecting the Premises, showing the Premises to prospective purchasers and, during the last year of the Term, to prospective tenants or for any other business purpose. Landlord may erect a suitable sign on the Premises stating the Premises are available to let or that the Project is available for sale. Landlord may grant easements, make public dedications, designate Common Areas and create restrictions on or about the Premises, provided that no such easement, dedication, designation or restriction materially, adversely affects Tenant's use or occupancy of the Premises for the Permitted Use. At Landlord's request, Tenant shall execute such instruments as may be necessary for such easements, dedications or restrictions. Tenant shall at all times, except in the case of emergencies, have the right to escort Landlord or its agents, representatives, contractors or guests while the same are in the Premises, provided such escort does not materially and adversely affect Landlord's access rights hereunder. Landlord shall use reasonable efforts to comply with Tenant's reasonable security, confidentiality and safety requirements with respect to entering restricted portions of the Premises; provided that Tenant has notified Landlord in writing of such security, confidentiality and safety requirements simultaneously with or prior to Landlord's entry into the Premises.

33. Security. Tenant acknowledges and agrees that security devices and services, if any, while intended to deter crime may not in given instances prevent theft or other criminal acts and that Landlord is not providing any security services with respect to the Premises. Tenant agrees that Landlord shall not be liable to Tenant for, and Tenant waives any claim against Landlord with respect to, any loss by theft of any other damage suffered or incurred by Tenant in connection with any unauthorized entry into the Premises or any other breach of security with respect to the Premises. Tenant shall be solely responsible for the personal safety of Tenant's officers, employees, agents, contractors, guests and invitees while any such person is in, on or about the Premises and/or the Project Tenant shall at Tenant's cost obtain insurance coverage to the extent Tenant desires protection against such criminal acts.

34. Force Majeure. Except for the payment of Rent, neither Tenant nor Landlord shall be responsible or liable for delays in the performance of its obligations hereunder when caused by, related to, or arising out of acts of God, sinkholes or subsidence, strikes, lockouts, or other labor disputes, embargoes, quarantines, weather, national, regional, or local disasters, calamities, or catastrophes, inability to obtain labor or materials (or reasonable substitutes therefor) at reasonable costs or failure of, or inability to obtain, utilities necessary for performance, governmental restrictions, orders, limitations, regulations, or controls, national emergencies, delay in issuance or revocation of permits, enemy or hostile governmental action, terrorism, insurrection, riots, civil disturbance or commotion, fire or other casualty, and other causes or events beyond the reasonable control of such party ("**Force Majeure**").

35. Brokers. Landlord and Tenant each represents and warrants that it has not dealt with any broker, agent or other person (collectively, "**Broker**") in connection with this transaction and that no Broker brought about this transaction, other than Jones Lang LaSalle. Landlord and Tenant each hereby agree to indemnify and hold the other harmless from and against any claims by any Broker, other than the broker, if any named in this Section 35, claiming a commission or other form of compensation by virtue of having dealt with Tenant or Landlord, as applicable, with regard to this leasing transaction.

36. Limitation on Landlord's Liability. NOTWITHSTANDING ANYTHING SET FORTH HEREIN OR IN ANY OTHER AGREEMENT BETWEEN LANDLORD AND TENANT TO THE CONTRARY: (A) LANDLORD SHALL NOT BE LIABLE TO TENANT OR ANY OTHER PERSON FOR (AND TENANT AND EACH SUCH OTHER PERSON ASSUME ALL RISK OF) LOSS, DAMAGE OR INJURY, WHETHER ACTUAL OR CONSEQUENTIAL TO: TENANT'S PERSONAL PROPERTY OF EVERY KIND AND DESCRIPTION, INCLUDING, WITHOUT LIMITATION TRADE FIXTURES, EQUIPMENT, INVENTORY, SCIENTIFIC RESEARCH, SCIENTIFIC EXPERIMENTS, LABORATORY ANIMALS, PRODUCT, SPECIMENS, SAMPLES, AND/OR SCIENTIFIC, BUSINESS, ACCOUNTING AND OTHER RECORDS OF EVERY KIND AND DESCRIPTION KEPT AT THE PREMISES AND ANY AND ALL INCOME DERIVED OR DERIVABLE THEREFROM; (B) THERE SHALL BE NO PERSONAL RECOURSE TO LANDLORD FOR ANY ACT OR OCCURRENCE IN, ON OR ABOUT THE PREMISES OR ARISING IN ANY WAY UNDER THIS LEASE OR ANY OTHER AGREEMENT BETWEEN LANDLORD AND TENANT WITH RESPECT TO THE SUBJECT MATTER HEREOF AND ANY LIABILITY OF LANDLORD HEREUNDER SHALL BE STRICTLY LIMITED SOLELY TO LANDLORD'S INTEREST IN THE PROJECT OR ANY PROCEEDS FROM SALE OR CONDEMNATION THEREOF AND ANY INSURANCE PROCEEDS PAYABLE IN RESPECT OF LANDLORD'S INTEREST IN THE PROJECT OR IN CONNECTION WITH ANY SUCH LOSS; AND (C) IN NO EVENT SHALL ANY PERSONAL LIABILITY BE ASSERTED AGAINST LANDLORD IN CONNECTION WITH THIS LEASE NOR SHALL ANY RECOURSE BE HAD TO ANY OTHER PROPERTY OR ASSETS OF LANDLORD OR ANY OF LANDLORD'S OFFICERS, DIRECTORS, EMPLOYEES, AGENTS OR CONTRACTORS. UNDER NO CIRCUMSTANCES SHALL LANDLORD OR ANY OF LANDLORD'S OFFICERS, DIRECTORS, EMPLOYEES, AGENTS OR CONTRACTORS BE LIABLE FOR INJURY TO TENANT'S BUSINESS OR FOR ANY LOSS OF INCOME OR PROFIT THEREFROM.

37. Severability. If any clause or provision of this Lease is illegal, invalid or unenforceable under present or future laws, then and in that event, it is the intention of the parties hereto that the remainder of this Lease shall not be affected thereby. It is also the intention of the parties to this Lease that in lieu of each clause or provision of this Lease that is illegal, invalid or unenforceable, there be added, as a part of this Lease, a clause or provision as similar in effect to such illegal, invalid or unenforceable clause or provision as shall be legal, valid and enforceable.

38. Signs; Exterior Appearance. Tenant shall not, without the prior written consent of Landlord, which may be granted or withheld in Landlord's sole discretion: (i) attach any awnings, exterior lights, decorations, balloons, flags, pennants, banners, painting or other projection to any outside wall of the Project, (ii) use any curtains, blinds, shades or screens other than Landlord's standard window coverings, (iii) coat or otherwise sunscreen the interior or exterior of any windows, (iv) place any bottles, parcels, or other articles on the window sills, (v) place any equipment, furniture or other items of personal property on any exterior balcony, or (vi) paint, affix or exhibit on any part of the Premises or the Project any signs, notices, window or door lettering, placards, decorations, or advertising media of any type which can be viewed from the exterior of the Premises. Signs on the exterior directory and the interior directory tablet shall be inscribed, painted or affixed for Tenant by Landlord at the sole cost and expense of Landlord, and shall be of a size, color and type acceptable to Landlord. Suite entry signage shall be inscribed, painted or affixed for Tenant by Landlord, at Landlord's cost and expense, and shall be in a allocation and of a size, color and type acceptable to Landlord. Nothing may be placed on the exterior of corridor walls or corridor doors other than Landlord's standard lettering. The directory tablet shall be provided exclusively for the display of the name and location of tenants of the Project,

39. Right to Expand.

(a) Expansion in the Building. Tenant shall, during the Base Term, have the one-time right, but not the obligation, to expand the Premises (the "**Expansion Right**") to include the Expansion Space upon the terms and conditions set forth in this Section. For purposes of this Section 39(a), "**Expansion Space**" shall mean that certain space immediately adjacent to the Premises, consisting of approximately 3,168 rentable square feet, as shown on Exhibit G, which is not occupied by a tenant or which is occupied by a then-existing tenant whose lease is expiring within 9 months or less and such tenant does not wish to renew (whether or not such tenant has a right to renew) its occupancy of such space. If there is any Expansion Space in the Building, Landlord shall, within a reasonable period, deliver to Tenant written notice (the "**Expansion Notice**") of such Expansion Space, together with the terms and conditions on which Landlord is prepared to lease Tenant the Expansion Space; provided that Base Rent for the Available Space shall be at the Market Rate (as defined in Section 40(a) below). Tenant shall be entitled to exercise its right under this Section 39(a) only with respect to the entire Expansion Space. Tenant shall have 10 days following delivery of the Expansion Notice to deliver to Landlord written notification of Tenant's exercise of the Expansion Right ("**Exercise Notice**"). Tenant shall be entitled to lease the Expansion



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Space upon the terms and conditions set forth in the Expansion Notice. If Landlord and Tenant are unable to agree on the Market Rate for the Expansion Space after negotiating in good faith within 5 days after Tenant's delivery of an Exercise Notice, the applicable Market Rate will be determined through arbitration in accordance with Section 40(b) below. Tenant acknowledges that the Term of the Lease with respect to the Expansion Space shall be co-terminous with the Term of the Lease with respect to the then-existing Premises. Notwithstanding anything to the contrary contained herein, Tenant shall have no right to exercise the Expansion Right and the provisions of this Section 39(a) shall no longer apply after the date that is 10 months prior to the expiration of the Base Term if Tenant has not exercised its Extension Right pursuant to Section 40. If Tenant fails to deliver an Exercise Notice to Landlord for the Expansion Space within the required 10 day period, Tenant shall be deemed to have waived its right under this Section 39(a) to lease the Expansion Space, and Landlord shall have the right to lease the Expansion Space to any third party on any terms and conditions acceptable to Landlord; provided, however, that if Landlord has not leased the Expansion Space within 9 months after Tenant's failure to deliver an Exercise Notice then, prior to leasing the Expansion Space to a third party, Landlord shall again give Tenant an Exercise Notice and Tenant shall again have its Expansion Right subject to the terms and conditions of this Section 39.

(b) Amended Lease. If: (i) Tenant fails to timely deliver an Exercise Notice, or (ii) after the expiration of a period of 10 days from the date Tenant delivers an Exercise Notice to Tenant, no lease amendment for the Expansion Space has been executed, and Landlord tenders to Tenant an amendment to this Lease setting forth the terms for the rental of the Expansion Space consistent with those set forth in the Expansion Notice and otherwise consistent with the terms of this Lease and Tenant fails to execute such Lease amendment within 10 business days following such tender, Tenant shall be deemed to have forever waived its right to lease the Expansion Space.

(c) Exceptions. Notwithstanding the above, the Expansion Right shall, at Landlord's option, not be in effect and may not be exercised by Tenant:

(i) during any period of time that Tenant is in Default under any provision of the Lease; or

(ii) if Tenant has been in Default under any provision of the Lease 3 or more times whether or not the Defaults are cured, during the 12 month period prior to the date on which Tenant seeks to exercise the Expansion Right.

(d) Termination. The Expansion Right shall, at Landlord's option, terminate and be of no

further force or effect even after Tenant's due and timely exercise of the Expansion Right, if, after such exercise, but prior to the commencement date of the lease of the Expansion Space, (i) Tenant fails to timely cure any default by Tenant under the Lease; or (ii) Tenant has Defaulted 3 or more times during the period from the date of the exercise of the Expansion Right to the date of the commencement of the lease of the Expansion Space, whether or not such Defaults are cured.

(e) Rights Personal. The Expansion Right is personal to Tenant and are not assignable without Landlord's consent, which may be granted or withheld in Landlord's sole discretion separate and apart from any consent by Landlord to an assignment of Tenant's interest in the Lease, except that it may be assigned in connection with any Permitted Assignment of this Lease.

(f) No Extensions. The period of time within which the Expansion Right may be exercised shall not be extended or enlarged by reason of Tenant's inability to exercise the Expansion Right.

40. Right to Extend Term. Tenant shall have the right to extend the Term of the Lease upon the following terms and conditions:

(a) Extension Rights. Tenant shall have 1 right (an "**Extension Right**") to extend the term of this Lease for 2 years (an "**Extension Term**") on the same terms and conditions as this Lease (other than with respect to Base Rent and the Work Letter attached hereto as Exhibit C) by giving Landlord written notice of its election to exercise the Extension Right at least 10 months prior to the expiration of the Base Term of the Lease.

Upon the commencement of the Extension Term, Base Rent shall be payable at the Market Rate (as defined below). Base Rent shall thereafter be adjusted on each annual anniversary of the commencement of such Extension Term by the Rent Adjustment Percentage. As used herein, "**Market Rate**" shall mean the rate that comparable landlords of comparable buildings have accepted in current transactions from non-equity (i.e., not being offered equity in the buildings) and nonaffiliated tenants of similar financial strength for space of comparable size, quality (including Alterations and other improvements) and floor height in laboratory/office buildings in the vicinity of the Building for a comparable term, with the determination of the Market Rate to take into account all relevant factors, including tenant inducements, percentage of laboratory and office space, project amenities, parking costs, leasing commissions, allowances or concessions, if any. Notwithstanding anything to the contrary contained herein, in no event be less than the Base Rent payable as of the date immediately preceding the commencement of such Extension Term. In addition, Landlord may impose a market rent for the parking rights provided hereunder.

If, on or before the date which is 240 days prior to the expiration of the Base Term of this Lease, Tenant has not agreed with Landlord's determination of the Market Rate during the Extension Term after negotiating in good faith, Tenant shall be deemed to have elected arbitration as described in Section 40(b). Tenant acknowledges and agrees that, if Tenant has elected to exercise the Extension Right by delivering notice to Landlord as required in this Section 40(a), Tenant shall have no right thereafter to rescind or elect not to extend the term of the Lease for the Extension Term.

(b) Arbitration.

(i) Within 10 days of Tenant's notice to Landlord of its election (or deemed election) to arbitrate Market Rate, each party shall deliver to the other a proposal containing the Market Rate that the submitting party believes to be correct ("**Extension Proposal**"). If either party fails to timely submit an Extension Proposal, the other party's submitted proposal shall determine the Base Rent for the Extension Term. If both parties submit Extension Proposals, then Landlord and Tenant shall meet within 7 days after delivery of the last Extension Proposal and make a good faith attempt to mutually appoint a single Arbitrator (and defined below) to determine the Market Rate. If Landlord and Tenant are unable to agree upon a single Arbitrator, then each shall, by written notice delivered to the other within 10 days after the meeting, select an Arbitrator, if either party fails to timely give notice of its selection for an Arbitrator, the other party's submitted proposal shall determine the Base Rent for the Extension Term. The 2 Arbitrators so appointed shall, within 5 business days after their appointment, appoint a third Arbitrator. If the 2 Arbitrators so selected cannot agree on the selection of the third Arbitrator within the time above specified, then either party, on behalf of both parties, may request such appointment of such third Arbitrator by application to any state court of general jurisdiction in the jurisdiction in which the Premises are located, upon 10 days prior written notice to the other party of such intent.

(ii) The decision of the Arbitrators(s) shall be made within 30 days after the appointment of a single Arbitrator or the third Arbitrator, as applicable. The decision of the single Arbitrator shall be final and binding upon the parties. The average of the two closest Arbitrators in a three Arbitrator panel shall be final and binding upon the parties. Each party shall pay the fees and expenses of the Arbitrator appointed by or on behalf of such party and the fees and expenses of the third Arbitrator shall be borne equally by both parties. If the Market Rate is not determined by the first day of the Extension Term, then Tenant shall pay Landlord Base Rent in an amount equal to the Base Rent in effect immediately prior to the Extension Term and increased by the Rent Adjustment Percentage until such determination is made. After the determination of the Market Rate, the parties shall make any necessary adjustments to such payments made by Tenant. Landlord and Tenant shall then execute an amendment recognizing the Market Rate for the first year of the Extension Term.

(iii) An "**Arbitrator**" shall be any person appointed by or on behalf of either party or appointed pursuant to the provisions hereof and: (i) shall be (A) a member of the American Institute of Real Estate Appraisers with not less than 10 years of experience in the appraisal of improved office and high tech industrial real estate in the greater Boston, Massachusetts metropolitan area, or (B) a licensed commercial real estate broker with not less than 15 years experience representing landlords and/or tenants in the leasing of high tech or life sciences space in the greater Boston, Massachusetts metropolitan area, (ii) devoting substantially all of their time to professional appraisal or brokerage work, as applicable, at the time of appointment and (iii) be in all respects impartial and disinterested.

(c) **Rights Personal.** The Extension Right is personal to Tenant and is not assignable without Landlord's consent, which may be granted or withheld in Landlord's sole discretion separate and apart from any consent by Landlord to an assignment of Tenant's interest in the Lease, except that it may be assigned in connection with any Permitted Assignment of this Lease.

(d) **Exceptions.** Notwithstanding anything set forth above to the contrary, at Landlord's option, the Extension Right shall not be in effect and Tenant may not exercise the Extension Right

(i) during any period of time that Tenant is in Default under any provision of this Lease; or

(ii) if Tenant has been in Default under any provision of this Lease 3 or more times, whether or not the Defaults are cured, during the 12 month period immediately prior to the date that Tenant intends to exercise the Extension Right, whether or not the Defaults are cured.

(e) **No Extensions.** The period of time within which the Extension Right may be exercised shall not be extended or enlarged by reason of Tenant's inability to exercise the Extension Right.

(f) **Termination.** The Extension Right shall, at Landlord's option, terminate and be of no further force or effect even after Tenant's due and timely exercise of the Extension Right, if, after such exercise, but prior to the commencement date of the Extension Term, (i) Tenant fails to timely cure any default by Tenant under this Lease; or (ii) Tenant has Defaulted 3 or more times during the period from the date of the exercise of the Extension Right to the date of the commencement of the Extension Term, whether or not such Defaults are cured.

41. **Intentionally Omitted.**

42. **Miscellaneous.**

(a) **Notices.** All notices or other communications between the parties shall be in writing and shall be deemed duly given upon delivery or refusal to accept delivery by the addressee thereof if delivered in person, or upon actual receipt if delivered by reputable overnight guaranty courier, addressed and sent to the parties at their addresses set forth above. Landlord and Tenant may from time to time by written notice to the other designate another address for receipt of future notices.

(b) **Joint and Several Liability.** If and when included within the term "**Tenant**," as used in this instrument, there is more than one person or entity, each shall be jointly and severally liable for the obligations of Tenant.

(c) **Financial Information.** Tenant shall furnish Landlord with true and complete copies of (i) Tenant's most recent audited annual financial statements within 180 days of the end of each of Tenant's fiscal years during the Term, (ii) Tenant's most recent unaudited quarterly management financial statements within 45 days of the end of each of Tenant's first three fiscal quarters and within 60 days of the end of its fourth quarter of each of Tenant's fiscal years during the Term, (iii) at Landlord's request from time to time (but no more than once per 12 month period), updated business plans, including cash flow projections and/or pro forma balance sheets and income statements, (iv) corporate brochures and/or profiles prepared by Tenant for prospective investors, and (v) any other financial information or summaries that Tenant typically provides to its lenders or shareholders. Landlord shall treat Tenant's financial information provided pursuant to this Section 42(c) as confidential information belonging to Tenant and will not disclose the same other than on a need-to-know basis to Landlord's affiliates, legal, financial or tax advisors, consultants, potential lenders, lenders, potential purchasers and purchasers, and as required by Legal Requirements. If Tenant or Tenant's parent entity is or becomes a "public company" and its financial information is publicly available, then the foregoing delivery requirements of this Section 42(c) shall not apply. Notwithstanding the foregoing, in no event shall Tenant be required to provide any financial information to Landlord which Tenant does not otherwise prepare (or cause to be prepared) for its own purposes.

(d) **Recordation.** Neither this Lease nor a memorandum of lease shall be filed by or on behalf of Tenant in any public record. Landlord may prepare and file, and upon request by Landlord Tenant will execute, a memorandum of lease.

(e) **Interpretation.** The normal rule of construction to the effect that any ambiguities are to be resolved against the drafting party shall not be employed in the interpretation of this Lease or any exhibits or amendments hereto. Words of any gender used in this Lease shall be held and construed to include any other gender, and words in the singular number shall be held to include the plural, unless the context otherwise requires. The captions inserted in this Lease are for convenience only and in no way define, limit or otherwise describe the scope or intent of this Lease, or any provision hereof, or in any way affect the interpretation of this Lease.

(f) **Not Binding Until Executed.** The submission by Landlord to Tenant of this Lease shall have no binding force or effect, shall not constitute an option for the leasing of the Premises, nor confer any right or impose any obligations upon either party until execution of this Lease by both parties.

(g) **Limitations on Interest.** It is expressly the intent of Landlord and Tenant at all times to comply with applicable law governing the maximum rate or amount of any interest payable on or in connection with this Lease. If applicable law is ever judicially interpreted so as to render usurious any interest called for under this Lease, or contracted for, charged, taken, reserved, or received with respect to this Lease, then it is Landlord's and Tenant's express intent that all excess amounts theretofore collected by Landlord be credited on the applicable obligation (or, if the obligation has been or would thereby be paid in full, refunded to Tenant), and the provisions of this Lease immediately shall be deemed reformed and the amounts thereafter collectible hereunder reduced, without the necessity of the execution of any new document, so as to comply with the applicable law, but so as to permit the recovery of the fullest amount otherwise called for hereunder.

(h) **Choice of Law.** Construction and interpretation of this Lease shall be governed by the internal laws of the state in which the Premises are located, excluding any principles of conflicts of laws.

(i) **Time.** Time is of the essence as to the performance of Tenant's obligations under this Lease.

(j) **OFAC.** Tenant, and all beneficial owners of Tenant, are currently (a) in compliance with and shall at all times during the Term of this Lease remain in compliance with the regulations of the Office of Foreign Assets Control ("OFAC") of the U.S. Department of Treasury and any statute, executive order, or regulation relating thereto (collectively, the "OFAC Rules"), (b) not listed on, and shall not during the term of this Lease be listed on, the Specially Designated Nationals and Blocked Persons List maintained by OFAC and/or on any other similar list maintained by OFAC or other governmental authority pursuant to any authorizing statute, executive order, or regulation, and (c) not a person or entity with whom a U.S. person is prohibited from conducting business under the OFAC Rules.


(k) **Incorporation by Reference.** All exhibits and addenda attached hereto are hereby incorporated into this Lease and made a part hereof. If there is any conflict between such exhibits or addenda and the terms of this Lease, such exhibits or addenda shall control.

(l) **Entire Agreement.** This Lease, including the exhibits attached hereto, constitutes the entire agreement between Landlord and Tenant pertaining to the subject matter hereof and supersedes all prior and contemporaneous agreements, understandings, letters of intent, negotiations and discussions, whether oral or written, of the parties, and there are no warranties, representations or other agreements, express or implied, made to either party by the other party in connection with the subject matter hereof except as specifically set forth herein.

(m) **No Accord and Satisfaction.** No payment by Tenant or receipt by Landlord of a lesser amount than the monthly installment of Base Rent or any Additional Rent will be other than on account of the earliest stipulated Base Rent and Additional Rent, nor will any endorsement or statement on any check or letter accompanying a check for payment of any Base Rent or Additional Rent be an accord and satisfaction. Landlord may accept such check or payment without prejudice to Landlord's right to recover the balance of such Rent or to pursue any other remedy provided in this Lease.

(n) **Hazardous Activities.** Notwithstanding any other provision of this Lease, Landlord, for itself and its employees, agents and contractors, reserves the right to refuse to perform any repairs or services in any portion of the Premises which, pursuant to Tenant's routine safety guidelines, practices or custom or prudent industry practices, require any form of protective clothing or equipment other than safety glasses. In any such case, Tenant shall contract with parties who are acceptable to Landlord, in Landlord's reasonable discretion, for all such repairs and services, and Landlord shall, to the extent required, equitably adjust Tenant's Share of Operating Expenses in respect of such repairs or services to reflect that Landlord is not providing such repairs or services to Tenant.

[Signatures on next page]


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IN WITNESS WHEREOF, Landlord and Tenant have executed this Lease as of the day and year first above written.

TENANT:


MACROLIDE PHARMACEUTICALS, INC.,
a Delaware corporation

By: 
Its: President

LANDLORD:

ARE-480 ARSENAL STREET, LLC.
a Delaware limited liability company

By: ALEXANDRIA REAL ESTATE EQUITIES, L.P.,
a Delaware limited partnership, managing member
By: ARE-QRS CORP.,
a Maryland corporation,
general partner

By: 
Name: Eric S. Johnson
Title: Senior Vice President
RE Legal Affairs



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EXHIBIT A TO LEASE

DESCRIPTION OF PREMISES

EXHIBIT B TO LEASE**DESCRIPTION OF PROJECT**

The Land in Watertown, Middlesex County, Massachusetts located on Arsenal Street, Cypress Street, Quimby Street and Laurel Street, consisting of the following;

Beginning at a point on the southerly sideline of Cypress Street in the Town of Watertown, Middlesex County, Massachusetts, said point being 224.16 feet west of the intersection of Cypress Street with Quimby Street and being the northeast corner of the herein described parcel;

Thence running along the southerly sideline of Cypress Street N 88°-36'-46" E, 224.16 feet to the easterly sideline of Quimby Street;

Thence turning and running by the easterly sideline of Quimby Street N 01°-20'-07" W, 210.02 feet to a point of the southerly sideline of Laurel Street;

Thence turning and running along a curve to the right of radius 20.00 feet and length 31.40 feet to a point;

Thence continuing along the southerly sideline of Laurel Street N 88°-35'-52" E, 508.35 feet to a point on the easterly sideline of Melendy Avenue;

Thence turning and running along the easterly sideline of Lot 2, S 03°-24'-45" W, 74.28 feet to a point;

Thence turning and running along a curve to the right of radius 371.63 feet and length 152.00 feet to a point;

Thence turning and running S 02°-02'-53" E, 270.00 feet to a point;

Thence turning and running by the Northerly line of Lot 4 S 71°-16'-06" W, 258.22 feet to a point;

Thence turning and running S 77°-33'-41" W, 150.00 feet to a point;

Thence turning and running along a curve to the left of radius 63.85 feet and length 67.42 feet to a point;

Thence turning and running S 17°-03'-32" W, 33.54 feet to a point;

Thence turning and running along a curve to the right of radius 1947.63 feet and length 285.68 feet to a point, by land now or formerly of the Boston & Maine Railroad Company;

Thence turning and running N 01°-23'-14" W, 439.51 feet by land now or formerly of United Electric Controls to the point of beginning.

For title reference see the deed from AMB Property, L.P., a Delaware limited partnership, to ARE-480 Arsenal Street, LLC, a Delaware limited liability company, dated June 19, 2001 and recorded with the Middlesex South Registry of Deeds in Book 33088, Page 527.



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EXHIBIT C TO LEASE

WORK LETTER

THIS WORK LETTER dated July 28, 2015 (this "**Work Letter**") is made and entered into by and between **ARE-480 ARSENAL STREET, LLC**, a Delaware limited liability company ("Landlord"), and **MACROLIDE PHARMACEUTICALS, INC.**, a Delaware corporation ("**Tenant**"), and is attached to and made a part of the Lease Agreement dated July 28, 2015 (the "**Lease**"), by and between Landlord and Tenant. Any initially capitalized terms used but not defined herein shall have the meanings given them in the Lease.

1. **General Requirements.**

(a) **Tenant's Authorized Representative.** Tenant designates Allyson English and Lawrence Miller (either such individual acting alone, "**Tenant's Representative**") as the only persons authorized to act for Tenant pursuant to this Work Letter. Landlord shall not be obligated to respond to or act upon any request, approval, inquiry or other communication ("**Communication**") from or on behalf of Tenant in connection with this Work Letter unless such Communication is in writing from Tenant's Representative. Tenant may change either Tenant's Representative at any time upon not less than 5 business days advance written notice to Landlord. Neither Tenant nor Tenant's Representative shall be authorized to direct Landlord's contractors in the performance of Landlord's Work (as hereinafter defined).

(b) **Landlord's Authorized Representative.** Landlord designates Joseph Maguire, Jo Ann Merlino-Rogers and Jeff Cook (either such individual acting alone, "**Landlord's Representative**") as the only persons authorized to act for Landlord pursuant to this Work Letter. Tenant shall not be obligated to respond to or act upon any request, approval, inquiry or other Communication from or on behalf of Landlord in connection with this Work Letter unless such Communication is in writing from Landlord's Representative. Landlord may change either Landlord's Representative at any time upon not less than 5 business days advance written notice to Tenant. Landlord's Representative shall be the sole persons authorized to direct Landlord's contractors in the performance of Landlord's Work.

(c) **Architects, Consultants and Contractors.** Landlord and Tenant hereby acknowledge and agree that: (i) the general contractor and any subcontractors for the Tenant improvements shall be selected by Landlord, subject to Tenant's approval, which approval shall not be unreasonably withheld, conditioned or delayed, and (ii) R.E. Dineen shall be the architect (the "TI Architect") for the Tenant Improvements.

2. **Tenant Improvements.**

(a) **Tenant Improvements Defined.** As used herein, "**Tenant Improvements**" shall mean all improvements to the Project of a fixed and permanent nature as shown on the TI Construction Drawings, as defined in Section 2(c) below. Other than Landlord's Work (as defined in Section 3(a) below, Landlord shall not have any obligation whatsoever with respect to the finishing of the Premises for Tenant's use and occupancy.

(b) **Tenant's Space Plans.** Landlord and Tenant acknowledge and agree that the plan prepared by the TI Architect attached to this Work Letter as Annex 1 (the "Space Plan") has been approved by both Landlord and Tenant. Landlord and Tenant further acknowledge and agree that any changes to the Space Plan constitute a Change Request the cost of which changes shall be paid for by Tenant.

(c) **Working Drawings.** Not later than 10 business days following (the date of the Lease, Landlord shall cause the TI Architect to prepare and deliver to Tenant for review and comment construction plans, specifications and drawings for the Tenant Improvements ("**TI Construction Drawings**"), which TI Construction Drawings shall be prepared substantially in accordance with the Space Plan. Tenant shall be solely responsible for ensuring that the TI Construction Drawings reflect Tenant's requirements for the Tenant Improvements. Tenant shall deliver its written comments on the TI Construction Drawings to Landlord not later than 10 business days after Tenant's receipt of the same; provided, however, that Tenant may not disapprove any matter that is consistent with the Space Plan without submitting a Change Request. Landlord and the TI Architect shall consider all such comments in good faith and shall, within 10 business days after receipt, notify Tenant



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how Landlord proposes to respond to such comments, but Tenant's review rights pursuant to the foregoing sentence shall not delay the design or construction schedule for the Tenant Improvements. Any disputes in connection with such comments shall be resolved in accordance with Section 2(d) hereof. Provided that the design reflected in the TI Construction Drawings is consistent with the Space Plan, Tenant shall approve the TI Construction Drawings submitted by Landlord, unless Tenant submits a Change Request. Once approved by Tenant, subject to the provisions of Section 4 below, Landlord shall not materially modify the TI Construction Drawings except as may be reasonably required in connection with the issuance of the TI Permit (as defined in Section 3(b) below).

(d) **Approval and Completion.** Upon any dispute regarding the design of the Tenant Improvements, which is not settled within 10 business days after notice of such dispute is delivered by one party to the other, Tenant may make the final decision regarding the design of the Tenant Improvements, provided (i) Tenant acts reasonably and such final decision is either consistent with or a compromise between Landlord's and Tenant's positions with respect to such dispute, (ii) that all costs and expenses resulting from any such decision by Tenant shall be payable by Tenant, and (iii) Tenant's decision will not affect the base Building, structural components of the Building or any Building systems. Any changes to the TI Construction Drawings following Landlord's and Tenant's approval of same requested by Tenant shall be processed as provided in Section 4 hereof.

3. Performance of Landlord's Work

(a) **Definition of Landlord's Work.** As used herein, "Landlord's Work" shall mean (i) the work of constructing the Tenant Improvements, and (ii) the construction of a demising wall in the location reflected on Annex 2 in a manner and using materials reasonably acceptable to Landlord and Tenant.

(b) **Commencement and Permitting.** Landlord shall commence construction of the Tenant Improvements upon obtaining a building permit (the "TI Permit") authorizing the construction of the Tenant Improvements consistent with the TI Construction Drawings approved by Tenant. The cost of obtaining the TI Permit shall be payable by Landlord as part of TI Costs, Tenant shall assist Landlord in obtaining the TI Permit. If any Governmental Authority having Jurisdiction over the construction of Landlord's Work or any portion thereof shall impose terms or conditions upon the construction thereof that: (i) are inconsistent with Landlord's obligations hereunder, (ii) increase the cost of constructing Landlord's Work, or (iii) will materially delay the construction of Landlord's Work, Landlord and Tenant shall reasonably and in good faith seek means by which to mitigate or eliminate any such adverse terms and conditions.

(c) **Completion of Landlord's Work.** On or before the Target Commencement Date (subject to Tenant Delays and Force Majeure delays), Landlord shall substantially complete or cause to be substantially completed Landlord's Work in a good and workmanlike manner, in accordance with the TI Permit subject, in each case, to Minor Variations and normal "punch list" items of a non-material nature that do not interfere with the use of the Premises ("Substantial Completion" or "Substantially Complete"). Upon Substantial Completion of Landlord's Work, Landlord shall require the TI Architect and the general contractor to execute and deliver, for the benefit of Tenant and Landlord, a Certificate of Substantial Completion in the form of the American Institute of Architects ("AIA") document G7G4, For purposes of this Work Letter. "Minor Variations" shall mean any modifications reasonably required: (i) to comply with all applicable Legal Requirements and/or to obtain or to comply with any required permit (including the TI Permit); (ii) to comply with any request by Tenant for modifications to Landlord's Work; (iii) to comport with good design, engineering, and construction practices that are not material; or (iv) to make reasonable adjustments for field deviations or conditions encountered during the construction of Landlord's Work.

(d) **Selection of Materials.** Where more than one type of material or structure is indicated on the TI Construction Drawings approved by Landlord and Tenant, the option will be selected at Landlord's sole and absolute subjective discretion. As to all building materials and equipment that Landlord is obligated to supply under this Work Letter, Landlord shall select the manufacturer thereof in its sole and absolute subjective discretion.

(e) **Delivery of the Premises.** When Landlord's Work is Substantially Complete, subject to the remaining terms and provisions of this Section 3(e), Tenant shall accept the Premises, Tenant's taking possession and acceptance of the Premises shall not constitute a waiver of: (i) any warranty with respect to workmanship (including installation of equipment) or material (exclusive of equipment provided directly by manufacturers), (ii) any non-compliance of Landlord's Work with applicable Legal Requirements, or (iii) any claim that Landlord's Work was not completed substantially in accordance with



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the TI Construction Drawings (subject to Minor Variations and such other changes as are permitted hereunder) (collectively, a "Construction Defect"). Tenant shall have one year after Substantial Completion within which to notify Landlord of any such Construction Defect discovered by Tenant, and Landlord shall use reasonable efforts to remedy or cause the responsible contractor to remedy any such Construction Defect within 30 days thereafter. Notwithstanding the foregoing, Landlord shall not be in default under the Lease if the applicable contractor, despite Landlord's reasonable efforts, fails to remedy such Construction Defect within such 30-day period, in which case Landlord shall have no further obligation with respect to such Construction Defect other than to cooperate, at no cost to Landlord, with Tenant should Tenant elect to pursue a claim against such contractor, provided that Tenant shall defend with counsel reasonably acceptable to Landlord, indemnify and hold Landlord harmless from and against any claims arising out of or in connection with any such claim.

Tenant shall be entitled to receive the benefit of all construction warranties and manufacturer's equipment warranties relating to equipment installed in the Premises. If requested by Tenant, Landlord shall attempt to obtain extended warranties from manufacturers and suppliers of such equipment, but the cost of any such extended warranties shall be borne solely by Tenant. Landlord shall promptly undertake and complete, or cause to be completed, all punch list items.

(f) **Commencement Date Delay.** Except as otherwise provided in the Lease, Delivery of the Premises shall occur when Landlord's Work has been Substantially Completed, except to the extent that completion of Landlord's Work shall have been actually delayed by any one or more of the following causes ("Tenant Delay"):

- (i) Tenant's Representative was not available to give or receive any Communication or to take any other action required to be taken by Tenant hereunder;
- (ii) Tenant's request for Change Requests (as defined in Section 4(a) below) whether or not any such Change Requests are actually performed;
- (iii) Construction of any Change Requests;
- (iv) Tenant's request for materials, finishes or installations requiring unusually long lead times;
- (v) Tenant's delay in reviewing, revising or approving plans and specifications beyond the periods set forth herein,
- (vi) Tenant's delay in providing information critical to the normal progression of the Project. Tenant shall provide such information as soon as reasonably possible, but in no event longer than one week after receipt of any request for such information from Landlord;
- (vii) Tenant's delay in making payments to Landlord for Excess TI Costs (as defined in Section 5(d) below); or
- (viii) Any other act or omission by Tenant or any Tenant Party (as defined in the Lease), or persons employed by any of such persons.

If Delivery is delayed for any of the foregoing reasons, then Landlord shall cause the TI Architect to certify the date on which the Tenant Improvements would have been Substantially Completed but for such Tenant Delay and such certified date shall be the date of Delivery.

4. **Changes.** Any changes requested by Tenant to the Tenant Improvements shall be requested and instituted in accordance with the provisions of this Section 4 and shall be subject to the written approval of Landlord and the TI Architect, such approval not to be unreasonably withheld, conditioned or delayed.

(a) **Tenant's Request For Changes.** If Tenant shall request changes to the Tenant Improvements ("Changes"), Tenant shall request such Changes by notifying Landlord in writing in substantially the same form as the AIA standard change order form (a "Change Request"), which Change Request shall detail the nature and extent of any such Change. Such Change Request must be signed by Tenant's Representative. Landlord shall, before proceeding with any Change,

use commercially reasonable efforts to respond to Tenant as soon as is reasonably possible with an estimate of: (i) the time it will take, and (ii) the architectural and engineering fees and costs that will be Incurred, to analyze such Change Request (which costs shall be paid by Tenant to the extent actually incurred, whether or not such change is implemented). Landlord shall thereafter submit to Tenant in writing, within 5 business days of receipt of the Change Request (or such longer period of time as is reasonably required depending on the extent of the Change Request), an analysis of the additional cost or savings involved, Including, without limitation, architectural and engineering costs and the period of time, if any, that the Change will extend the date on which Landlord's Work will be Substantially Complete. Any such delay in the completion of Landlord's Work caused by a Change, including any suspension of Landlord's Work while any such Change is being evaluated and/or designed, shall be Tenant Delay.

(b) **Implementation of Changes.** If Tenant: (i) approves in writing the cost or savings and the estimated extension in the time for completion of Landlord's Work, if any, and (ii) deposits with Landlord any Excess TI Costs required in connection with such Change, Landlord shall cause the approved Change to be instituted. Notwithstanding any approval or disapproval by Tenant of any estimate of the delay caused by such proposed Change, the TI Architect's determination of the amount of Tenant Delay in connection with such Change shall be final and binding on Landlord and Tenant.

5. Costs.

(a) **Budget For Tenant Improvements.** Landlord shall be responsible for the payment of design, permits and construction costs in connection with the construction of the Tenant Improvements, Including, without limitation, the cost of preparing the TI Construction Drawings and the Space Plan and Landlord's out-of-pocket expenses, up to \$273,960.00 in the aggregate (collectively, "**TI Costs**"), Notwithstanding anything to the contrary contained herein, in no event shall Landlord be required to pay for any furniture, personal property or other non-Building system materials or equipment, including, but not limited to, Tenant's voice or data cabling, non-ducted biological safety cabinets and other scientific equipment not incorporated into the Tenant Improvements.

(b) **Excess TI Costs.** Tenant acknowledges and agrees that Landlord shall have no responsibility for any costs arising from or related to Tenant's changes to the Space Plan or the TI Construction Drawings, Tenant Delays, the cost of Changes and Change Requests and/or any other costs incurred with respect to the Tenant Improvements in excess of \$273,960.00 in the aggregate (collectively, "**Excess TI Costs**"). Tenant shall reimburse Landlord for 100% of Excess TI Costs within 30 days after Landlord's delivery to Tenant of an invoice therefor containing reasonable detail of the TI Costs incurred by Landlord. If Tenant fails to deposit any Excess TI Costs with Landlord, Landlord shall have all of the rights and remedies set forth in the Lease for nonpayment of Rent (including, but not limited to, the right to interest at the Default Rate and the right to assess a late charge). For purposes of any litigation instituted with regard to such amounts, those amounts will be deemed Rent under the Lease.

6. Tenant Access.

(a) **Tenant's Access Rights.** Landlord hereby agrees to permit Tenant access, at Tenant's sole risk and expense, to the Building (i) 14 days prior to the Commencement Date to perform any work ("**Tenant's Work**") required by Tenant other than Landlord's Work, provided that such Tenant's Work is coordinated with the TI Architect and the general contractor, and complies with the Lease and all other reasonable restrictions and conditions Landlord may impose, and (ii) prior to the completion of Landlord's Work, to inspect and observe work in process; all such access shall be during normal business hours or at such other times as are reasonably designated by Landlord. Notwithstanding the foregoing, Tenant shall have no right to enter onto the Premises or the Project unless and until Tenant shall deliver to Landlord evidence reasonably satisfactory to Landlord demonstrating that any Insurance reasonably required by Landlord in connection with such pre-commencement access (including, but not limited to, any insurance that Landlord may require pursuant to the Lease) is in full force and effect. Any entry by Tenant shall comply with all established safety practices of Landlord's contractor and Landlord until completion of Landlord's Work and acceptance thereof by Tenant.

(b) **No Interference.** Neither Tenant nor any Tenant Party (as defined in the Lease) shall interfere with the performance of Landlord's Work, nor with any inspections or issuance of final approvals by applicable Governmental Authorities, and upon any such interference. Landlord shall have the right to exclude Tenant and any Tenant Party from the Premises and the Project until Substantial Completion of Landlord's Work.



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(c) **No Acceptance of Premises.** The fact that Tenant may, with Landlord's consent, enter into the Project prior to the date Landlord's Work is Substantially Complete for the purpose of performing Tenant's Work shall not be deemed an acceptance by Tenant of possession of the Premises, but in such event Tenant shall defend with counsel reasonably acceptable by Landlord, indemnify and hold Landlord harmless from and against any loss of or damage to Tenant's property, completed work, fixtures, equipment, materials or merchandise, and from liability for death of, or injury to, any person, caused by the act or omission of Tenant or any Tenant Party.

7. **Miscellaneous.**

(a) **Consents.** Whenever consent or approval of either party is required under this Work Letter, that party shall not unreasonably withhold, condition or delay such consent or approval, unless expressly set forth herein to the contrary.

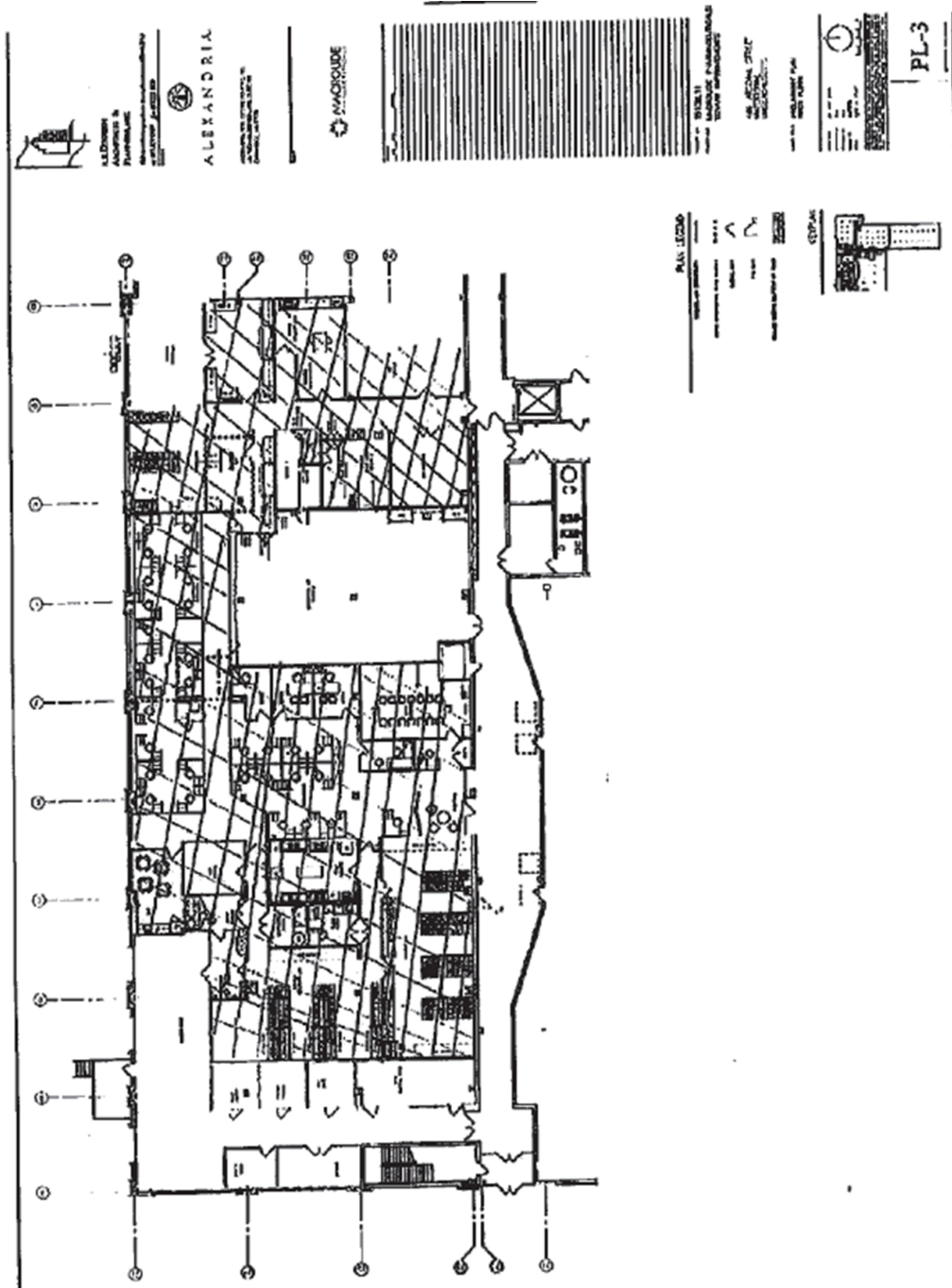
(b) **Modification.** No modification, waiver or amendment of this Work Letter or of any of its conditions or provisions shall be binding upon Landlord or Tenant unless in writing signed by Landlord and Tenant.



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Annex 1

Space Plan



Annex 2

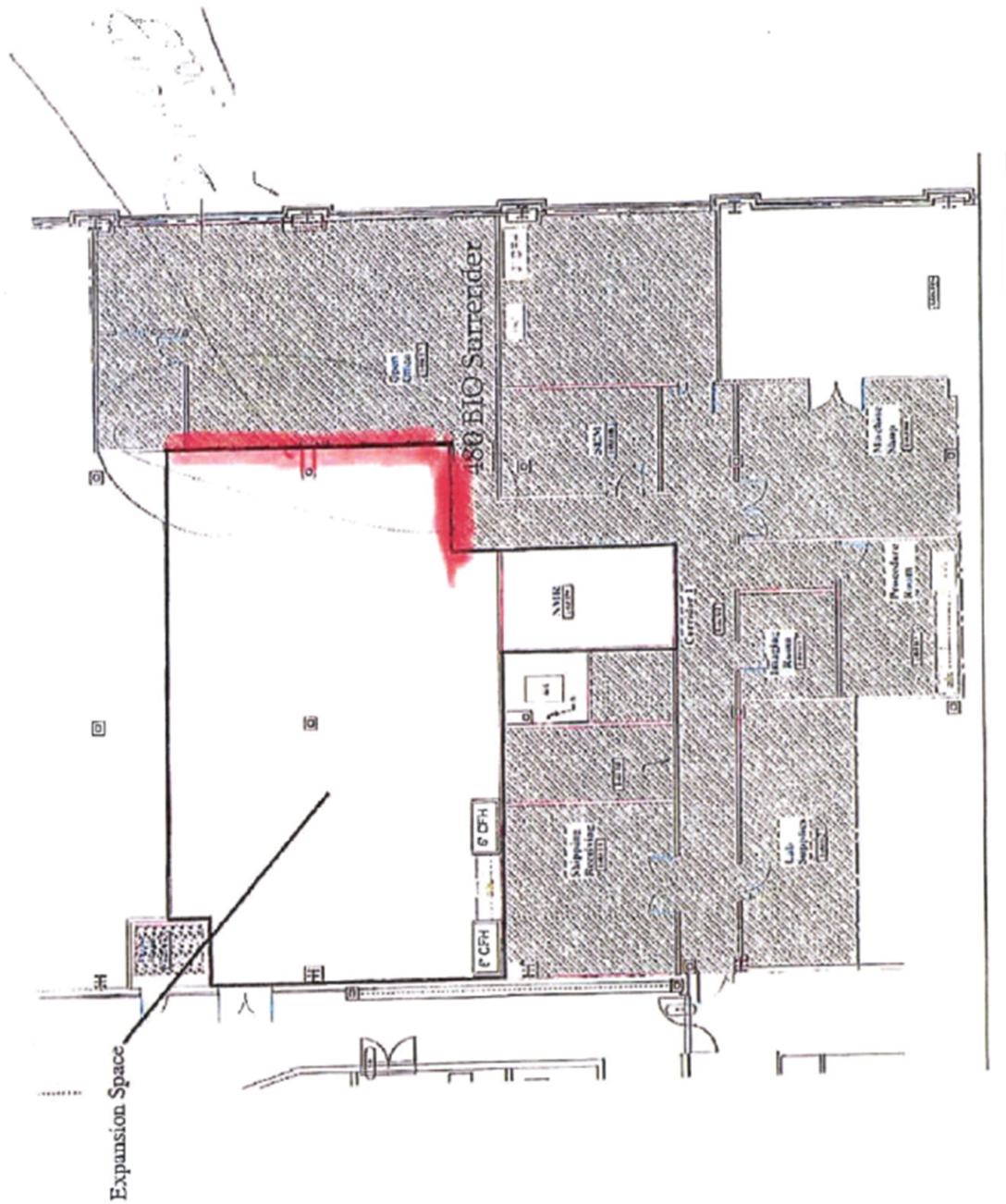
Demising Wall

EXHIBIT D TO LEASE**ACKNOWLEDGMENT OF COMMENCEMENT DATE**

This **ACKNOWLEDGMENT OF COMMENCEMENT DATE** is made this _____ day of _____, _____, between **ARE-480 ARSENAL STREET, LLC**, a Delaware limited liability company ("Landlord"), and **MACROLIDE PHARMACEUTICALS, INC.**, a Delaware corporation ("Tenant"), and is attached to and made a part of the Lease dated _____, _____ (the "Lease"), by and between Landlord and Tenant. Any initially capitalized terms used but not defined herein shall have the meanings given them in the Lease.

Landlord and Tenant hereby acknowledge and agree, for all purposes of the Lease, that the Commencement Date of the Base Term of the Lease is _____, _____, the Rent Commencement Date is _____, _____, and the termination date of the Base Term of the Lease shall be midnight on _____, _____. In case of a conflict between the terms of the Lease and the terms of this Acknowledgment of Commencement Date, this Acknowledgment of Commencement Date shall control for all purposes.

IN WITNESS WHEREOF, Landlord and Tenant have executed this ACKNOWLEDGMENT OF COMMENCEMENT DATE to be effective on the date first above written.

TENANT:

MACROLIDE PHARMACEUTICALS, INC.,
a Delaware corporation

By: _____

Its: _____

LANDLORD:

ARE-480 ARSENAL STREET, LLC,
a Delaware limited liability company

By: ALEXANDRIA REAL ESTATE EQUITIES, L.P.,
a Delaware limited partnership,
managing member

By: ARE-QRS CORP.,
a Maryland corporation,
general partner

By: _____

Name: _____

Title: _____



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EXHIBIT E TO LEASE

Rules and Regulations

1. The sidewalk, entries, and driveways of the Project shall not be obstructed by Tenant, or any Tenant Party, or used by them for any purpose other than ingress and egress to and from the Premises.
2. Tenant shall not place any objects, including antennas, outdoor furniture, etc., in the parking areas, landscaped areas or other areas outside of its Premises, or on the roof of the Project.
3. Except for animals assisting the disabled, no animals shall be allowed in the offices, halls, or corridors in the Project.
4. Tenant shall not disturb the occupants of the Project or adjoining buildings by the use of any radio or musical instrument or by the making of loud or improper noises.
5. If Tenant desires telegraphic, telephonic or other electric connections in the Premises, Landlord or its agent will direct the electrician as to where and how the wires may be introduced; and, without such direction, no boring or cutting of wires will be permitted. Any such installation or connection shall be made at Tenant's expense.
6. Tenant shall not install or operate any steam or gas engine or boiler, or other mechanical apparatus in the Premises, except as specifically approved in the Lease. The use of oil, gas or inflammable liquids for heating, lighting or any other purpose is expressly prohibited. Explosives or other articles deemed extra hazardous shall not be brought into the Project.
7. Parking any type of recreational vehicles is specifically prohibited on or about the Project. Except for the overnight parking of operative vehicles, no vehicle of any type shall be stored in the parking areas at any time. In the event that a vehicle is disabled, it shall be removed within 48 hours. There shall be no "For Sale" or other advertising signs on or about any parked vehicle. All vehicles shall be parked in the designated parking areas in conformity with all signs and other markings. All parking will be open parking, and no reserved parking, numbering or lettering of individual spaces will be permitted except as specified by Landlord.
8. Tenant shall maintain the Premises free from rodents, insects and other pests.
9. Landlord reserves the right to exclude or expel from the Project any person who, in the judgment of Landlord, is intoxicated or under the influence of liquor or drugs or who shall in any manner do any act in violation of the Rules and Regulations of the Project.
10. Tenant shall not cause any unnecessary labor by reason of Tenant's carelessness or indifference in the preservation of good order and cleanliness. Landlord shall not be responsible to Tenant for **any** loss of property on the Premises, however occurring, or for any damage done to the effects of Tenant by the janitors or any other employee or person.
11. Tenant shall give Landlord prompt notice of any defects in the water, lawn sprinkler, sewage, gas pipes, electrical lights and fixtures, heating apparatus, or any other service equipment affecting the Premises.
12. Tenant shall not permit storage outside the Premises, including without limitation, outside storage of trucks and other vehicles, or dumping of waste or refuse or permit any harmful materials to be placed in any drainage system or sanitary system in or about the Premises.
13. All moveable trash receptacles provided by the trash disposal firm for the Premises must be kept in the trash enclosure areas, if any, provided for that purpose.
14. No auction, public or private, will be permitted on the Premises or the Project.



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15. No awnings shall be placed over the windows in the Premises except with the prior written consent of Landlord.

16. The Premises shall not be used for lodging, sleeping or cooking or for any immoral or illegal purposes or for any purpose other than that specified in the Lease. No gaming devices shall be operated in the Premises.

17. Tenant shall ascertain from Landlord the maximum amount of electrical current which can safely be used in the Premises, taking into account the **capacity** of the electrical wiring in the Project and the Premises and the needs of other tenants, and shall not use more than such safe capacity. Landlord's consent to the installation of electric equipment shall not relieve Tenant from the obligation not to use more electricity than such safe capacity.

18. Tenant assumes full responsibility for protecting the Premises from theft, robbery and pilferage.

19. Tenant shall not install or operate on the Premises any machinery or mechanical devices of a nature not directly related to Tenant's ordinary use of the Premises and shall keep all such machinery free of vibration, noise and air waves which may be transmitted beyond the Premises.




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EXHIBIT F TO LEASE

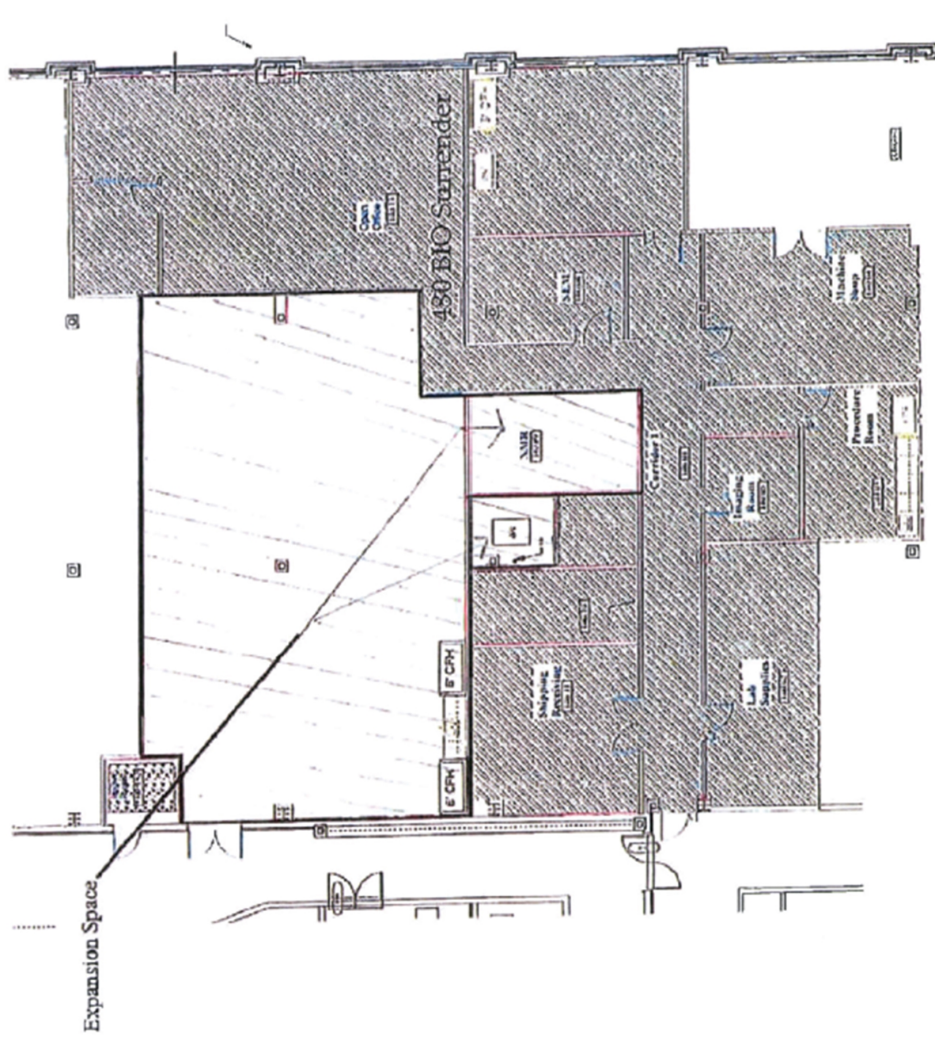
TENANT'S PERSONAL PROPERTY

None.

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[Page 43 of 44]

EXHIBIT G TO LEASE

EXPANSION SPACE

FIRST AMENDMENT TO LEASE

THIS FIRST AMENDMENT TO LEASE (this “**First Amendment**”) is made as of June 30, 2020, by and between **ARE-480 ARSENAL STREET, LLC**, a Delaware limited liability company (“**Landlord**”), and **ZIKANI THERAPEUTICS, INC.**, a Delaware corporation (“**Tenant**”), formerly known as Macrolide Pharmaceuticals, Inc.

RECITALS

A. Landlord and Tenant are now parties to that certain Lease Agreement dated as of July 28, 2015, as amended by that certain Side Letter dated as of July 28, 2015, and as further amended by that certain Side Letter of dated as of March 25, 2016 (as amended, the “**Lease**”). Pursuant to the Lease, Tenant leases certain premises containing approximately 12,991 rentable square feet (the “**Original Premises**”) in that certain building located at 480 Arsenal Street, Watertown, Massachusetts (the “**Building**”). The Premises are more particularly described in the Lease. Capitalized terms used herein without definition shall have the meanings defined for such terms in the Lease.

B. The Base Term of the Lease is scheduled to expire on November 30, 2020.

C. Landlord and Tenant desire to amend the Lease to, among other things, (a) decrease the size of the Original Premises to approximately 9,385 rentable square feet, as more particularly described on **Exhibit A** attached hereto (the “**Remaining Premises**”), and (b) extend the term of the Lease with respect to the Remaining Premises only through February 28, 2024 (the “**First Amendment Expiration Date**”).

NOW, THEREFORE, in consideration of the foregoing Recitals, which are incorporated herein by this reference, the mutual promises and conditions contained herein, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Landlord and Tenant hereby agree as follows:

1. **Extension of Term.** Notwithstanding anything to the contrary contained in the Lease, the Term of the Lease with respect to the Remaining Premises only is hereby extended through the First Amendment Expiration Date. Tenant’s continued occupancy of the Remaining Premises shall be on an “as-is” basis and, except as otherwise expressly set forth in Section 5 below, Landlord shall have no obligation to provide any tenant improvement allowance or make any alterations to the Remaining Premises.

The Term of the Lease with respect to that certain portion of the Original Premises containing approximately 3,606 rentable square feet identified on **Exhibit A** attached hereto as the “**Reduction Premises**,” shall expire on November 30, 2020, as provided in the Lease. Tenant shall voluntarily surrender the Reduction Premises on November 30, 2020, in accordance with all surrender requirements contained in the Lease.

2. **Premises.**

- a. Commencing on December 1, 2020, the defined terms “**Premises**” and “**Rentable Area of Premises**” on page 1 of the Lease are hereby deleted in their entirety and replaced with the following:

“**Premises:** That portion of the Building containing approximately 9,385 rentable square feet, as determined by Landlord, as shown on **Exhibit A**”

“**Rentable Area of Premises:** 9,385 sq. ft.” Commencing on December 1, 2020, **Exhibit A** to the Lease shall be amended to delete the Reduction Premises.

- b. Prior to December 1, 2020, Landlord shall, at Landlord’s cost, construct a demising wall and related improvements required to fully demise the Remaining Premises from the Reduction Premises (collectively, the “**Demising Work**”). Tenant acknowledges that Landlord may require access to portions of the Premises in order to perform the Demising Work. Landlord and its contractors and agents shall have the right, upon at least twenty four (24) hours’ prior notice to enter the Premises to perform the Demising Work and Tenant shall cooperate with Landlord in connection with the same. Landlord shall use reasonable efforts to minimize interference with Tenant’s operations in the Premises in connection with Landlord’s performance of the Demising Work. Tenant acknowledges that Landlord’s performance of the Demising Work may adversely affect Tenant’s use and occupancy of the Premises. Tenant waives all claims for rent abatement in connection with the Demising Work.

c. For the period of thirty (30) consecutive days after Landlord's completion of the Demising Work, Landlord shall, at its sole cost and expense (which shall not constitute an Operating Expense), be responsible for any repairs that are required to be made to the Building Systems demised as part of the Demising Work, unless Tenant or any Tenant Party was responsible for the cause of such repair, in which case Tenant shall pay the cost. Notwithstanding anything to the contrary contained herein, the foregoing shall not limit any obligation of Landlord under Section 13 of the Lease.

3. **Base Rent.**

a. Tenant shall continue to pay Base Rent as provided under the Lease with respect to the entire Premises through November 30, 2020. Commencing on December 1, 2020, Tenant shall pay Base Rent in the amount of \$70.00 per rentable square foot per year with respect to the Remaining Premises. Base Rent shall increase on December 1, 2021, and on each subsequent December 1st through the First Amendment Expiration Date (each, a "**First Amendment Adjustment Date**") by multiplying the Base Rent payable immediately before such First Amendment Adjustment Date by 3% and adding the resulting amount to the Base Rent payable immediately before such First Amendment Adjustment Date.

b. So long as Tenant is not then in default under the Lease (beyond applicable notice and cure periods), Base Rent shall be abated for the period commencing on December 1, 2020, through February 28, 2021 (the "**Abatement Period**"). Tenant shall begin paying full Base Rent with respect to the Remaining Premises on March 1, 2021.

4. **Operating Expenses.**

a. Commencing on December 1, 2020, the defined term "**Tenant's Share of Operating Expenses**" on page 1 of the Lease is hereby deleted in its entirety and replaced with the following:

"Tenant's Share of Operating Expenses: 6.67%"

b. Commencing on December 1, 2020, the portion of the second paragraph of Section 5 of the Lease commencing with "The term "Operating Expenses" and ending with "excluding only:" is hereby deleted in its entirety and replaced with the following:

"The term "**Operating Expenses**" means all costs and expenses of any kind or description whatsoever incurred or accrued each calendar year by Landlord with respect to the Project including, without duplication, (u) Taxes (as defined in Section 9), (w) the cost of any amenities available at any time and from time to time at the Project including, without limitation, any common amenities which Landlord may construct in the Reduction Premises, (w) the Project Amenities Share of the AOTC Amenities Operating Expenses (as such terms are defined in Section 4(b) below), (x) transportation costs (including Shuttle Service Costs (as defined in Section 8 below)), (y) capital repairs, replacements and improvements amortized over the lesser of 10 years or the useful life of such capital items (except for capital repairs, replacements and improvements to the roof, which shall be amortized over 15 years), adjusted to reflect Building operations 24 hours per day, 7 days per week and 365 days per year (provided that those Operating Expenses incurred or accrued by Landlord with respect to any capital repairs, replacements or improvements which are for the intended purpose of promoting sustainability (for example, without limitation, by reducing energy usage at the Project) (a "**Capital Sustainability Expenditure**") may be amortized over a shorter period, at Landlord's discretion, to the extent the cost of a Capital Sustainability Expenditure is offset by a reduction in Operating Expenses), and (z) the costs of Landlord's third party property manager or, if there is no third party property manager, administration rent in the amount of 3.0% of Base Rent (provided that during the Abatement Period, Tenant shall nonetheless be required to pay administration rent that Tenant would have been required to pay in the absence of the Abatement Period), excluding only:" For the avoidance of doubt, the itemized exclusions to the term "Operating Expenses" in such Section 5 shall remain in full force and effect.

c. As used herein, "**AOTC Amenities Operating Expenses**" shall mean all costs and expenses of any kind or description whatsoever incurred or accrued each calendar year with respect to the AOTC Amenities (including, without limitation, subsidies which AOTC Landlord or its affiliates may provide in connection with the AOTC Amenities). The "**Project Amenities Share**" shall mean the Project's share of the AOTC Amenities Operating Expenses, which shall be allocated as reasonably determined by the AOTC Landlord between and among the AOTC Project, the Project and any other projects owned or operated by ARE Parties (as defined in Section 7 below) leased in whole or in part to Users (as defined in Section 7 below) granted the right under their respective leases (or other applicable occupancy agreement(s)) to all or portion of the AOTC Amenities. In no event shall Tenant's Project Amenities Share include any costs or expenses for any portion of the AOTC Amenities which Tenant does not have a right to use.

5. **Improvements Allowance.** Landlord shall make available to Tenant a tenant improvement allowance of up to \$10.00 per rentable square foot of the Remaining Premises (the "**Improvement Allowance**") for the design and construction of fixed and permanent improvements desired by and performed by Tenant and reasonably acceptable to Landlord to the Premises (the "**Premises Improvements**"), which Premises Improvements shall be constructed pursuant to a scope of work reasonably acceptable to Landlord

and Tenant. The Improvement Allowance shall be available only for the design and construction of the Premises Improvements. The Improvement Allowance may not be used to purchase any furniture, personal property or other non-Building System materials or equipment. Tenant acknowledges that upon the expiration or earlier termination of the Term of the Lease, the Premises Improvements shall become the property of Landlord and may not be removed by Tenant. Except for the Improvement Allowance, Tenant shall be solely responsible for all of the costs of the Premises Improvements. The Premises Improvements shall be treated as Alterations and shall be undertaken pursuant to Section 12 of the Lease. The contractor for the Premises Improvements shall be selected and engaged by Tenant, subject to Landlord's approval, which approval shall not be unreasonably withheld, conditioned or delayed. Prior to the commencement of the Premises Improvements, Tenant shall deliver to Landlord a copy of any contract with Tenant's contractors, and certificates of insurance from any contractor performing any part of the Premises Improvements evidencing industry standard commercial general liability, automotive liability, "builder's risk", and workers' compensation insurance. Tenant shall cause the general contractor to provide a certificate of insurance naming Landlord, Alexandria Real Estate Equities, Inc., and Landlord's lender (if any) as additional insureds for the general contractor's liability coverages required above.

During the course of design and construction of the Premises Improvements, Landlord shall reimburse Tenant for the cost of the Premises Improvements once a month against a draw request in Landlord's standard form, containing evidence of payment of the applicable costs and such certifications, lien waivers (including a conditional lien release for each progress payment and unconditional lien releases for the prior month's progress payments), inspection reports and other matters as Landlord customarily and reasonably obtains, to the extent of Landlord's approval thereof for payment, no later than 30 days following receipt of such draw request. Upon completion of the Premises Improvements (and prior to any final disbursement of the Improvement Allowance) Tenant shall deliver to Landlord the following items: (i) sworn statements setting forth the names of all contractors and subcontractors who did work on the Premises Improvements and final lien waivers from all such contractors and subcontractors; and (ii) "as built" plans, if available, for Premises Improvements. Notwithstanding the foregoing, if the cost of the Premises Improvements exceeds the Improvement Allowance, Tenant shall be required to pay such excess in full prior to Landlord having any obligation to fund any remaining portion of the Improvement Allowance. The Improvement Allowance shall only be available for use by Tenant for the construction of the Premises Improvements from the date of this First Amendment through November 30, 2021 (the "**Outside Allowance Date**"). Any portion of the Improvement Allowance which has not been properly requested by Tenant from Landlord on or before the Outside Allowance Date shall be forfeited and shall not be available for use by Tenant.

6. **Parking.** Commencing on December 1, 2020, the number of parking spaces, which Tenant is entitled to use subject to the terms of Section 10 of the Lease, shall be reduced to [25] parking spaces.

If a transportation demand management plan ("**TDMP**") setting forth requirements relating to parking and transportation demand management is implemented with respect to the Project at any time during the Term, Tenant shall comply with such TDMP.

7. **Submarket Amenities.**

a. **Generally.** Subject to the provisions of this Section 7, ARE-MA Region No. 75, LLC, a Delaware limited liability company ("**AOTC Landlord**"), an affiliate of Landlord, may construct certain common amenities at the property owned by AOTC Landlord commonly known as Arsenal on the Charles (the "**AOTC Project**"), which may including shared conferencing facilities ("**Shared Conference Facilities**"), a fitness center and/or a restaurant (collectively, the "**AOTC Amenities**") for non-exclusive use by tenants of (i) the AOTC Project, (ii) tenants of the Project, (iii) other affiliates of Landlord, AOTC Landlord and Alexandria Real Estate Equities, Inc. ("**ARE**"), and (iv) any other parties permitted by AOTC Landlord (collectively, "**Users**"). Landlord, AOTC Landlord, ARE, and all affiliates of Landlord, AOTC Landlord and ARE may be referred to collectively herein as the "**ARE Parties**." Notwithstanding anything to the contrary contained herein, Tenant acknowledges and agrees that AOTC Landlord shall have the right, at the sole discretion of AOTC Landlord, to construct any AOTC Amenities desired by AOTC Landlord at the AOTC Project but not make all or a portion of such AOTC Amenities available for use by some or all currently contemplated Users. AOTC Landlord shall have the sole right to determine all matters related to the AOTC Amenities including, without limitation, relating to the type, design and construction thereof. Tenant acknowledges and agrees that Landlord has not made any representations or warranties regarding the development of any of the AOTC Amenities and that Tenant is not entering into this First Amendment relying on the construction and completion of the AOTC Amenities or with an expectation that the AOTC Amenities will ever be constructed and/or made available to Tenant.

b. **License.** Commencing on the date that all or a portion of the AOTC Amenities are made available for use by Users (the "**Amenities Commencement Date**"), and so long as the AOTC Project and the Project continue to be owned by affiliates of ARE, Tenant shall have the non-exclusive right to the use of the available AOTC Amenities in common with other Users pursuant to the terms of this Section 7. To the extent that the AOTC Amenities include a fitness center, fitness center passes shall be issued to Tenant for all full time employees of Tenant employed at the Premises.

c. **Shared Conference Facilities.** Use by Tenant of the Shared Conference Facilities shall be in common with other users with scheduling procedures reasonably determined by AOTC Landlord or AOTC Landlord's then designated event operator

("Conferencing Operator"). Tenant's use of the Shared Conference Facilities shall be subject to the payment by Tenant of a fee equal to the quoted rates for the usage of the Shared Conference Facilities in effect at the time of Tenant's scheduling.

d. Rules and Regulations. Tenant shall be solely responsible for paying the cost of any and all ancillary services (e.g., audio visual equipment) provided to Tenant, and the cost of any and all goods and services provided to Tenant by any food services operators and/or any third party vendors at the AOTC Project. Tenant shall use the AOTC Amenities (including, without limitation, the Shared Conference Facilities) in compliance with all applicable Legal Requirements and any rules and regulations imposed by AOTC Landlord or Landlord from time to time and in a manner that will not interfere with the rights of other Users, which rules and regulations shall be enacted and enforced in a non-discriminatory manner and may include, (i) the required use by Users of one or more food and beverage operators designated by AOTC Landlord, (ii) usage of and compliance with reservations systems governing the use of Shared Conference Facilities and other facilities, (iii) the payment of additional costs in connection with the after-hours usage of shared conference rooms and other facilities, and (iv) access card entry requirements. The use of the AOTC Amenities other than the Shared Conference Facilities by employees of Tenant shall be in accordance with the terms and conditions of the standard licenses, indemnification and waiver agreements required by AOTC Landlord or the operator of the AOTC Amenities to be executed by all persons wishing to use such AOTC Amenities. Neither the AOTC Landlord nor Landlord (nor, if applicable, any other affiliate of Landlord) shall have any liability or obligation for the breach of any rules or regulations by other Users with respect to the AOTC Amenities. Tenant shall not make any alterations, additions, or improvements of any kind to the Shared Conference Facilities, the AOTC Amenities or the AOTC Project.

Tenant acknowledges and agrees that the AOTC Landlord shall have the right at any time and from time to time to reconfigure, relocate, modify or remove any of the AOTC Amenities at the AOTC Project and/or to revise, expand or discontinue any of the services (if any) provided in connection with the AOTC Amenities.

e. Waiver of Liability and Indemnification. Tenant warrants that it will use reasonable care to prevent damage to property and injury to persons while on the AOTC Project. Tenant waives any claims it or any Tenant Parties may have against any ARE Parties relating to, arising out of or in connection with the AOTC Amenities and any entry by Tenant and/or any Tenant Parties onto the AOTC Project, and Tenant releases and exculpates all ARE Parties from any liability relating to, arising out of or in connection with the AOTC Amenities and any entry by Tenant and/or any Tenant Parties onto the AOTC Project. Tenant hereby agrees to indemnify, defend, and hold harmless the ARE Parties from any claim of damage to property or injury to persons relating to, arising out of or in connection with (i) the use of the AOTC Amenities by Tenant or any Tenant Parties, and (ii) any entry by Tenant and/or any Tenant Parties onto the AOTC Project, except to the extent caused by the negligence or willful misconduct of ARE Parties. The provisions of this Section 7(f) shall survive the expiration or earlier termination of the Lease.

f. Insurance. As of the Amenities Commencement Date, Tenant shall cause AOTC Landlord to be named as an additional insured under the commercial general liability policy of insurance that Tenant is required to maintain pursuant to Section 17 of the Lease.

8. Shuttle Services. Landlord and affiliates of Landlord plan to provide shuttle service between the Project and Harvard Square MBTA Red Line Station (the "Shuttle Service") which would run for 4 hours in the morning and 4 hours in the afternoon; provided, however, that neither Landlord nor any affiliate of Landlord shall be obligated to provide the Shuttle Service (or, once the Shuttle Service has commenced, to continue providing the Shuttle Service for any specific period of time) or to cause the Shuttle Service to follow any specific route, make any specific stops, or adhere to any specific schedule or hours of operation. If Landlord and affiliates of Landlord actually commence operation of the Shuttle Service, (i) Landlord shall give Tenant written notice of the date such operation will commence ("Shuttle Services Commencement Date") and the planned route, stops, schedule, and hours of operation, (ii) Landlord shall permit Tenant's employees actually employed at the Project to use the Shuttle Service, and (iii) regardless of whether Tenant's employees use the Shuttle Services, commencing on the Shuttle Services Commencement Date, through the earlier of the expiration of the Term or the date that Landlord permanently ceases to provide Shuttle Service, Operating Expenses shall include the cost of provision the Shuttle Service (the "Shuttle Service Costs"). Tenant acknowledges and agrees that Landlord has not made any representations or warranties regarding the commencement or continued availability of the Shuttle Service and that Tenant is not entering into this Lease with an expectation that the Shuttle Service shall commence or continue to be available to Tenant throughout the Term.

Neither Landlord nor any of Landlord's officers, directors, employees, managers, agents or contractors (collectively, the "Landlord Parties") shall have any liability to Tenant or any of Tenant's employees for any matters in connection with the Shuttle Services and Landlord (and the Landlord Parties) shall not be liable for any damages arising from any act, omission or neglect of the Shuttle Service operator. Tenant hereby waives all Claims against Landlord (and the Landlord Parties) for losses or damages resulting from any accident or occurrence arising in connection with the Shuttle Services. This limitation of liability shall survive the expiration or earlier termination of this Lease.

9. Right to Expand. As of the date of this First Amendment, Section 39 of the Lease is hereby deleted in its entirety and is null and void and of no further force or effect.

10. **Right to Extend Term.** As of the date of this First Amendment, Section 40 of the Lease is hereby deleted in its entirety and is null and void and of no further force or effect.
11. **Brokers.** Landlord and Tenant each represents and warrants that it has not dealt with any broker, agent or other person (collectively, “**Broker**”) in connection with the transaction reflected in this Second Amendment and that no Broker brought about this transaction, other than Cushman & Wakefield and Landmark Real Estate Advisors. Landlord and Tenant each hereby agree to indemnify and hold the other harmless from and against any claims by any Broker, other than Cushman & Wakefield and Landmark Real Estate Advisors, claiming a commission or other form of compensation by virtue of having dealt with Tenant or Landlord, as applicable, with regard to this leasing transaction.
12. **OFAC.** Tenant and all beneficial owners of Tenant are currently (a) in compliance with and shall at all times during the Term of the Lease remain in compliance with the regulations of the Office of Foreign Assets Control (“**OFAC**”) of the U.S. Department of Treasury and any statute, executive order, or regulation relating thereto (collectively, the “**OFAC Rules**”), (b) not listed on, and shall not during the term of the Lease be listed on, the Specially Designated Nationals and Blocked Persons List, Foreign Sanctions Evaders List or the Sectoral Sanctions Identifications List, which are all maintained by OFAC and/or on any other similar list maintained by OFAC or other governmental authority pursuant to any authorizing statute, executive order, or regulation, and (c) not a person or entity with whom a U.S. person is prohibited from conducting business under the OFAC Rules.
13. **Miscellaneous.**
- a. This First Amendment is the entire agreement between the parties with respect to the subject matter hereof and supersedes all prior and contemporaneous oral and written agreements and discussions. This First Amendment may be amended only by an agreement in writing, signed by the parties hereto.
- b. This First Amendment is binding upon and shall inure to the benefit of the parties hereto, their respective agents, employees, representatives, officers, directors, divisions, subsidiaries, affiliates, assigns, heirs, successors in interest and shareholders.
- c. This First Amendment may be executed in 2 or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. Counterparts may be delivered via facsimile, electronic mail (including pdf or any electronic signature process complying with the U.S. federal E-SIGN Act of 2000) or other transmission method and any counterpart so delivered shall be deemed to have been duly and validly delivered and be valid and effective for all purposes. Electronic signatures shall be deemed original signatures for purposes of this First Amendment and all matters related thereto, with such electronic signatures having the same legal effect as original signatures.
- d. Except as amended and/or modified by this First Amendment, the Lease is hereby ratified and confirmed and all other terms of the Lease shall remain in full force and effect, unaltered and unchanged by this First Amendment. In the event of any conflict between the provisions of this First Amendment and the provisions of the Lease, the provisions of this First Amendment shall prevail. Whether or not specifically amended by this First Amendment, all of the terms and provisions of the Lease are hereby amended to the extent necessary to give effect to the purpose and intent of this First Amendment.

[Signatures are on the next page]

IN WITNESS WHEREOF, the parties hereto have executed this First Amendment as of the day and year first above written.

TENANT:

ZIKANI THERAPEUTICS, INC.,
a Delaware corporation

By: 
Its: President & CEO, Sumit Aggarwal

LANDLORD:

ARE-480 ARSENAL STREET, LLC,
a Delaware limited liability company

By: **ALEXANDRIA REAL ESTATE EQUITIES, L.P.,**
a Delaware limited partnership, managing member

By: **ARE-QRS CORP.,**
a Maryland corporation,
general partner

By: 
Its: VP Real Estate Legal Affairs

CONFIDENTIAL

Exhibit A

Remaining Premises and Reduction Premises

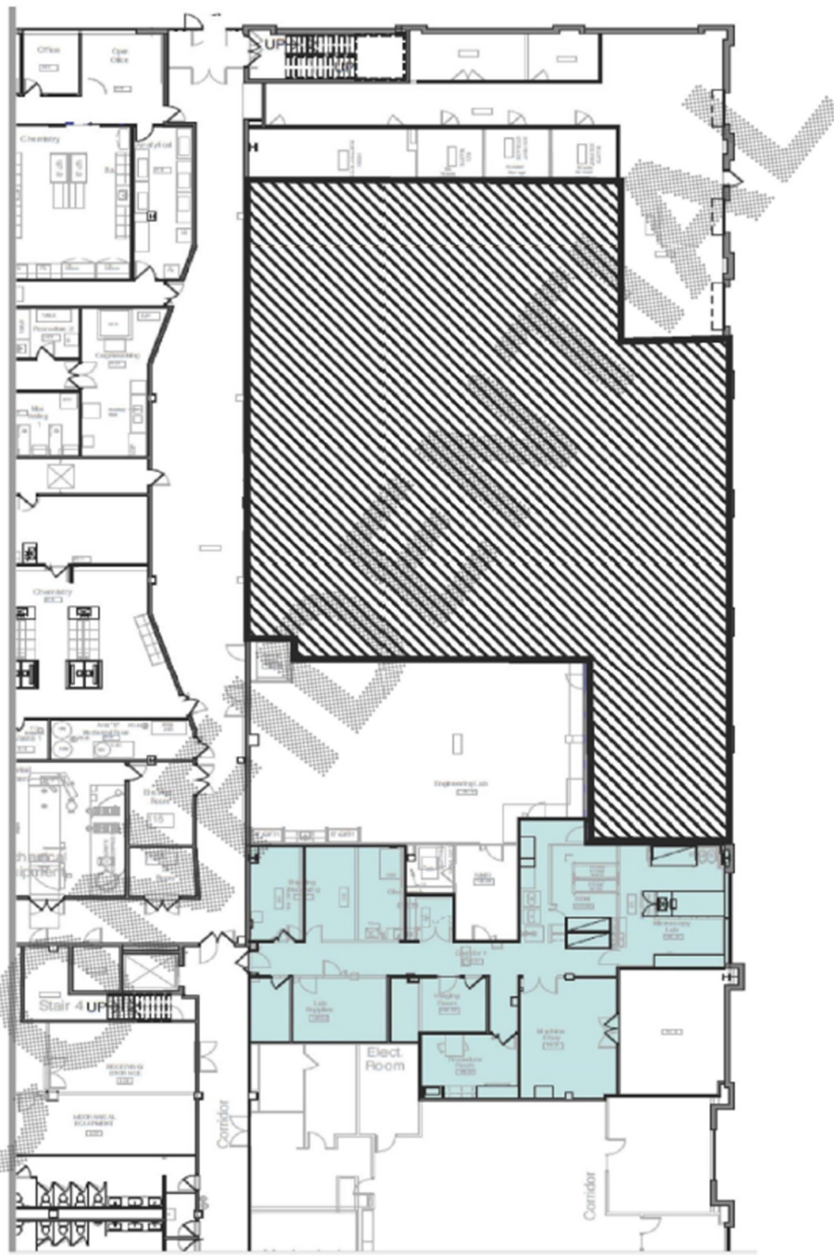


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Premises
9,385 RSF

Zikani
480 Arsenal Way



CERTIFICATION

I, Sumit Aggarwal, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q 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.

Date: May 7, 2021

/s/ Sumit Aggarwal

Sumit Aggarwal
Chief Executive Officer
(Principal Executive Officer)

CERTIFICATION

I, Daniel E. Geffken, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q 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.

Date: May 7, 2021

/s/ Daniel E Geffken

Daniel E Geffken

Interim Chief Financial Officer

(Principal Financial Officer)

CERTIFICATION⁽¹⁾

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), as adopted by §906 of the Sarbanes-Oxley Act of 2002, I, Sumit Aggarwal, Chief Executive Officer of Eloxx Pharmaceuticals, Inc. (the “Company”), hereby certify that, to the best of my knowledge:

1. The Company’s Quarterly Report on Form 10-Q for the quarterly period ended March 31, 2021 (the “Quarterly 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 Quarterly 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 7th day of May, 2021.

/s/ Sumit Aggarwal

Sumit Aggarwal

Chief Executive Officer

(Principal Executive Officer)

- ⁽¹⁾ This certification accompanies the Quarterly Report to which it relates, is not deemed filed with the Securities and Exchange Commission for purposes of Section 18 of the Exchange Act 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 Quarterly Report), irrespective of any general incorporation language contained in such filing.

CERTIFICATION⁽¹⁾

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), as adopted by §906 of the Sarbanes-Oxley Act of 2002, I, Daniel E. Geffken Interim Chief Financial Officer of Eloxx Pharmaceuticals, Inc. (the “Company”), hereby certify that, to the best of my knowledge:

1. The Company’s Quarterly Report on Form 10-Q for the quarterly period ended March 31, 2021 (the “Quarterly 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 Quarterly 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 7th day of May, 2021.

/s/ Daniel E. Geffken

Daniel E. Geffken

Interim Chief Financial Officer

(Principal Financial Officer)

- ⁽¹⁾ This certification accompanies the Quarterly Report to which it relates, is not deemed filed with the Securities and Exchange Commission for purposes of Section 18 of the Exchange Act 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 Quarterly Report), irrespective of any general incorporation language contained in such filing.