UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-Q

(Mark One)

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

For the quarterly period ended September 30, 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: 001-39264

KEROS THERAPEUTICS, INC.

(Exact name of registrant as specified in its charter)

Delaware	**81-1173868**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification Number)
99 Hayden Avenue, Suite 120, Building E Lexington, Massachusetts	**02421**
(Address of principal executive offices)	(Zip Code)

Tel: (617) 314-6297

(Registrant's telephone number, including area code)

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

Title of each class	Trading Symbol	Name of each exchange on which registered
Common Stock, $0.0001 par value per share	**KROS**	**The Nasdaq Stock Market LLC**

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, a smaller reporting company, or an emerging growth company. See the definitions of “large accelerated filer,” “accelerated filer,” “smaller reporting company,” and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large Accelerated Filer	☐	Accelerated Filer	☐
Non-Accelerated Filer	☑	Smaller Reporting Company	☑
		Emerging Growth Company	☑

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

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

As of October 28, 2021, there were 23,398,657 outstanding shares of the registrant's common stock, par value $0.0001 per share.

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SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This Quarterly Report on Form 10-Q contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. All statements other than statements of historical facts contained in this Quarterly Report on Form 10-Q are forward-looking statements, including statements about:

- the timing of announcement of additional data for our Phase 2 clinical trial for our lead protein therapeutic product candidate, KER-050, in patients with myelodysplastic syndromes;
- the timing of initiation of and announcement of data for our Phase 2 clinical trial for KER-050 in patients with myelofibrosis-associated cytopenias;
- the timing of initiation of and announcement of data for our three Phase 2 clinical trials for our lead small molecule product candidate, KER-047;
- the timing of initiation of and announcement of data for our Phase 1 clinical trial for our third product candidate, KER-012;
- risks associated with the COVID-19 pandemic, which may adversely impact our business, preclinical studies and clinical trials;
- our ability to receive the required regulatory approvals and clearances to successfully market and sell our products in the United States and certain other countries;
- our ability to successfully advance our pipeline of additional product candidates;
- our ability to develop sales and marketing capabilities;
- the rate and degree of market acceptance of any products we are able to commercialize;
- the effects of increased competition as well as innovations by new and existing competitors in our market;
- our ability to obtain funding for our operations;
- our ability to establish and maintain collaborations;
- our ability to effectively manage our anticipated growth;
- our ability to maintain, protect and enhance our intellectual property rights and proprietary technologies;
- our ability to operate our business without infringing the intellectual property rights and proprietary technology of third parties;
- costs associated with defending intellectual property infringement, product liability and other claims;
- regulatory developments in the United States, Australia, New Zealand and other foreign countries;
- our ability to attract and retain qualified employees;
- our expectations regarding the period during which we qualify as an emerging growth company under the Jumpstart Our Business Startups Act of 2012;
- statements regarding future revenue, hiring plans, expenses, capital expenditures, capital requirements and stock performance; and
- the future trading prices of our common stock and the impact of securities analysts' reports on these prices.

In some cases, you can identify forward-looking statements by the words "anticipate," "believe," "continue," "could," "estimate," "expect," "intend," "may," "might," "objective," "ongoing," "plan," "predict," "project," "potential," "should," "will," or "would," or the negative of these terms, or other comparable terminology intended to identify statements about the future. These statements involve known and unknown risks, uncertainties and other factors that may cause our actual results, levels of activity, performance or achievements to be materially different from the information expressed or implied by these forward-looking statements.

In addition, statements that "we believe" and similar statements reflect our beliefs and opinions on the relevant subject. These statements are based upon information available to us as of the date of this report, and while we believe such information forms a reasonable basis for such statements, such information may be limited or incomplete, and our statements should not be read to indicate that we have conducted an exhaustive inquiry into, or review of, all potentially available relevant information. These statements are inherently uncertain and investors are cautioned not to unduly rely upon these statements.

You should read the section titled “Risk Factors” set forth in Part II, Item 1A of this Quarterly Report on Form 10-Q for a discussion of important factors that may cause our actual results to differ materially from those expressed or implied by our forward-looking statements. 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 risk factors and uncertainties. As a result of these factors, we cannot assure you that the forward-looking statements in this Quarterly Report on Form 10-Q will prove to be accurate. Except as required by applicable law, we do not plan to publicly update or revise any forward-looking statements contained herein, whether as a result of any new information, future events, changed circumstances or otherwise.

You should read this Quarterly Report on Form 10-Q, completely and with the understanding that our actual future results may be materially different from what we expect. We qualify all of our forward-looking statements by these cautionary statements.

SPECIAL NOTE REGARDING COMPANY REFERENCES

Throughout this Quarterly Report on Form 10-Q, “Keros,” the “Company,” “we,” “us” and “our” refer to Keros Therapeutics, Inc. and its subsidiaries.

SPECIAL NOTE REGARDING TRADEMARKS

All trademarks, trade names and service marks appearing in this Quarterly Report on Form 10-Q are the property of their respective owners.

SUMMARY OF SELECTED RISKS ASSOCIATED WITH OUR BUSINESS

Our business faces significant risks and uncertainties. If any of the following risks are realized, our business, financial condition and results of operations could be materially and adversely affected. You should carefully review and consider the full discussion of our risk factors in the section titled “Risk Factors” in Part II, Item 1A of this Quarterly Report on Form 10-Q. Some of the more significant risks include the following:

- We have a limited operating history, have incurred net losses in every year since our inception and anticipate that we will continue to incur net losses in the future.
- We will need substantial additional funding in order to complete the development and commence commercialization of our product candidates. Failure to obtain this necessary capital when needed may force us to delay, reduce or eliminate certain of our product development or research operations.
- We are heavily dependent on the success of our product candidates, which are in early clinical development. If we are unable to advance our current or future product candidates through clinical trials, obtain marketing approval and ultimately commercialize any product candidates we develop, or experience significant delays in doing so, our business will be materially harmed.
- All of our product candidates are in preclinical or early clinical development stages. Clinical trials are difficult to design and implement, and they involve a lengthy and expensive process with uncertain outcomes. We may experience delays in completing, or ultimately be unable to complete, the development and commercialization of KER-050, KER-047, KER-012 or any future product candidates.
- If we are unable to successfully commercialize any product candidate for which we receive regulatory approval, or experience significant delays in doing so, our business will be materially harmed.
- We face significant competition from other biotechnology and pharmaceutical companies, and our operating results will suffer if we fail to compete effectively.
- Our success depends in part on our ability to protect our intellectual property. It is difficult and costly to protect our proprietary rights and technology, and we may not be able to ensure their protection.
- We rely, and expect to continue to rely, on third parties, including independent clinical investigators, contracted laboratories and contract research organizations, to conduct our preclinical studies and clinical trials. If these third parties do not successfully carry out their contractual duties or meet expected deadlines, we may not be able to obtain regulatory approval for or commercialize our product candidates and our business could be substantially harmed.
- We rely on third parties to supply and manufacture our product candidates, and we expect to continue to rely on third parties to manufacture our products, if approved. The development of such product candidates and the commercialization of any products, if approved, could be stopped, delayed or made less profitable if any such third party fails to provide us with sufficient quantities of product candidates or products or fails to do so at acceptable quality levels or prices or fails to maintain or achieve satisfactory regulatory compliance.
- Our future collaborations will be important to our business. If we are unable to enter into new collaborations, or if these collaborations are not successful, our business could be adversely affected.
- The COVID-19 pandemic could adversely impact our business, including the timing or results of our preclinical studies and clinical trials.

PART I. FINANCIAL INFORMATION

Item 1. FINANCIAL STATEMENTS (unaudited)

KEROS THERAPEUTICS, INC.
Condensed Consolidated Balance Sheets
(In thousands, except share and per share data)
(Unaudited)

	SEPTEMBER 30, 2021	DECEMBER 31, 2020
ASSETS		
CURRENT ASSETS:		
Cash and cash equivalents	$ 221,349	$ 265,876
Prepaid expenses and other current assets	4,725	1,850
Total current assets	226,074	267,726
Operating lease right-of-use assets	1,265	878
Property and equipment, net	1,295	724
Restricted cash	1,328	115
TOTAL ASSETS	$ 229,962	$ 269,443
LIABILITIES AND STOCKHOLDERS' EQUITY		
CURRENT LIABILITIES:		
Accounts payable	$ 2,811	$ 2,149
Current portion of operating lease liabilities	843	423
Accrued expenses and other current liabilities	7,361	4,612
Total current liabilities	11,015	7,184
Operating lease liabilities, net of current portion	453	476
Other liabilities	16	62
Total liabilities	11,484	7,722
STOCKHOLDERS' EQUITY:		
Common stock, par value of $0.0001 per share; 200,000,000 shares authorized as of September 30, 2021 and December 31, 2020, respectively; 23,396,793 and 23,192,866 shares issued and outstanding as of September 30, 2021 and December 31, 2020, respectively	2	2
Additional paid-in capital	335,291	326,730
Accumulated deficit	(116,815)	(65,011)
Total stockholders' equity	218,478	261,721
TOTAL LIABILITIES AND STOCKHOLDERS' EQUITY	$ 229,962	$ 269,443

See notes to condensed consolidated financial statements.

KEROS THERAPEUTICS, INC.
Condensed Consolidated Statements of Operations
(In thousands, except share and per share data)
(Unaudited)

	THREE MONTHS ENDED SEPTEMBER 30,		NINE MONTHS ENDED SEPTEMBER 30,	
	2021	2020	2021	2020
REVENUE:				
License revenue	$ —	$ —	$ 100	$ —
Total revenue	—	—	100	—
OPERATING EXPENSES:				
Research and development	(14,832)	(8,395)	(36,310)	(24,186)
General and administrative	(5,365)	(3,553)	(15,297)	(9,180)
Total operating expenses	(20,197)	(11,948)	(51,607)	(33,366)
LOSS FROM OPERATIONS	(20,197)	(11,948)	(51,507)	(33,366)
OTHER INCOME (EXPENSE), NET				
Interest expense, net	(1)	(2)	(3)	(5)
Change in fair value of preferred stock tranche obligation	—	—	—	(1,490)
Other income (expense), net	(137)	(86)	(282)	4
Total other expense, net	(138)	(88)	(285)	(1,491)
Loss before income taxes	(20,335)	(12,036)	(51,792)	(34,857)
Income tax (provision) benefit	38	—	(12)	172
Net loss	$ (20,297)	$ (12,036)	$ (51,804)	$ (34,685)
Net loss attributable to common stockholders—basic and diluted (Note 10)	$ (20,297)	$ (12,036)	$ (51,804)	$ (35,697)
Net loss per share attributable to common stockholders—basic and diluted	$ (0.87)	$ (0.60)	$ (2.22)	$ (2.65)
Weighted-average common stock outstanding—basic and diluted	23,362,237	20,175,883	23,299,720	13,452,606

See notes to condensed consolidated financial statements.

KEROS THERAPEUTICS, INC.
Condensed Consolidated Statements of Convertible Preferred Stock and Stockholders' Equity (Deficit)
(In thousands, except share and per share data)
(Unaudited)

	CONVERTIBLE PREFERRED STOCK												
	$0.0001 PAR VALUE SERIES A		$0.0001 PAR VALUE SERIES A-1		$0.0001 PAR VALUE SERIES B-1		$0.0001 PAR VALUE SERIES C		COMMON STOCK $0.0001 PAR VALUE		ADDITIONAL PAID-IN CAPITAL	ACCUMULATED DEFICIT	TOTAL STOCKHOLDERS' EQUITY
	SHARES	AMOUNT	SHARES	AMOUNT	SHARES	AMOUNT	SHARES	AMOUNT	SHARES	AMOUNT			
As of December 31, 2020	—	$ —	—	$ —	—	$ —	—	$ —	23,192,866	$ 2	$ 326,730	$ (65,011)	$ 261,721
Exercise of common stock options	—	—	—	—	—	—	—	—	78,628	—	42	—	42
Stock-based compensation	—	—	—	—	—	—	—	—	—	—	2,494	—	2,494
Net loss	—	—	—	—	—	—	—	—	—	—	—	(15,885)	(15,885)
As of March 31, 2021	—	$ —	—	$ —	—	$ —	—	$ —	23,271,494	$ 2	$ 329,266	$ (80,896)	$ 248,372
Exercise of common stock options	—	—	—	—	—	—	—	—	57,277		57	—	57
Stock-based compensation	—	—	—	—	—	—	—	—	—	—	2,849	—	2,849
Net loss	—	—	—	—	—	—	—	—	—	—	—	(15,622)	(15,622)
As of June 30, 2021	—	$ —	—	$ —	—	$ —	—	$ —	23,328,771	$ 2	$ 332,172	$ (96,518)	$ 235,656
Exercise of common stock options	—	—	—	—	—	—	—	—	68,022	—	35	—	35
Stock-based compensation	—	—	—	—	—	—	—	—	—	—	3,084	—	3,084
Net loss	—	—	—	—	—	—	—	—	—	—	—	(20,297)	(20,297)
As of September 30, 2021	—	—	—	—	—	—	—	—	23,396,793	$ 2	$ 335,291	$ (116,815)	$ 218,478

	CONVERTIBLE PREFERRED STOCK												
	$0.0001 PAR VALUE SERIES A		$0.0001 PAR VALUE SERIES A-1		$0.0001 PAR VALUE SERIES B-1		$0.0001 PAR VALUE SERIES C		COMMON STOCK $0.0001 PAR VALUE		ADDITIONAL PAID-IN CAPITAL	ACCUMULATED DEFICIT	TOTAL STOCKHOLDERS' EQUITY (DEFICIT)
	SHARES	AMOUNT	SHARES	AMOUNT	SHARES	AMOUNT	SHARES	AMOUNT	SHARES	AMOUNT			
As of December 31, 2019	4,607,652	$ 9,891	368,612	$ 944	1,579,043	$ 9,106	—	$ —	2,429,705	$ 1	$ 203	$ (19,650)	$ (19,446)
Exercise of common stock options	—	—	—	—	—	—	—	—	44,686	—	13	—	13
Issuance of Series C convertible preferred stock, net of issuance costs of $219	—	—	—	—	—	—	4,169,822	55,781	—	—	—	—	—
Vesting of restricted stock	—	—	—	—	—	—	—	—	17,279	—	—	—	—
Stock-based compensation	—	—	—	—	—	—	—	—	—	—	12	—	12
Settlement of preferred stock tranche liability	—	—	—	—	—	—	—	—	—	—	6,446	—	6,446
Net loss	—	—	—	—	—	—	—	—	—	—	—	(11,892)	(11,892)
As of March 31, 2020	4,607,652	$ 9,891	368,612	$ 944	1,579,043	$ 9,106	4,169,822	$ 55,781	2,491,670	$ 1	$ 6,674	$ (31,542)	$ (24,867)
Offering expenses associated with direct offering	—	$ —	—	$ —	—	$ —	—	$ —	—	$ —	$ (8)	$ —	$ (8)
Conversion of convertible preferred stock upon initial public offering	(4,607,652)	$ (9,891)	(368,612)	$ (944)	(1,579,043)	$ (9,106)	(4,169.822)	$ (55,781)	10,725,129	$ 1	$ 75,721	$ —	$ 75,722
Initial public offering, net of underwriting discounts, commissions and offering costs of $9,390	— —	$ — —	—	$ —	—	$ —	—	$ —	6,900,000	$ —	$ 100,123	$ —	$ 100,123
Exercise of common stock options	—	$ —	—	$ —	—	$ —	—	$ —	24,003	$ —	$ 9	$ —	$ 9
Vesting of restricted stock	—	$ —	—	$ —	—	$ —	—	$ —	17,278	$ —	$ —	$ —	$ —
Stock-based compensation	—	$ —	—	$ —	—	$ —	—	$ —	—	$ —	$ 1,139	$ —	$ 1,139
Net loss	—	$ —	—	$ —	—	$ —	—	$ —	—	$ —	$ —	$ (10,757)	$ (10,757)
As of June 30, 2020	— —	$ —	—	$ —	—	$ —	—	$ —	20,158,080	$ 2	$ 183,658	$ (42,299)	$ 141,361
Exercise of common stock options	—	—	—	—	—	—	—	—	27,650	—	9	—	9
Stock-based compensation	—	—	—	—	—	—	—	—	—	—	1,424	—	1,424
Net loss	—	—	—	—	—	—	—	—	—	—	—	(12,036)	(12,036)
As of September 30, 2020	—	—	—	—	—	—	—	—	20,185,730	$ 2	$ 185,091	$ (54,335)	$ 130,758

See notes to condensed consolidated financial statements.

KEROS THERAPEUTICS, INC.
Condensed Consolidated Statements of Cash Flows
(In thousands)
(Unaudited)

	NINE MONTHS ENDED SEPTEMBER 30, 2021	2020
CASH FLOWS FROM OPERATING ACTIVITIES:		
Net loss	$ (51,804)	$ (34,685)
Adjustments to reconcile net loss to net cash provided by operating activities:		
Depreciation expense	274	203
Loss on disposal of fixed asset	20	—
Stock-based compensation expense	8,427	2,575
Change in right to use asset	(709)	—
Non-cash lease expense	322	229
Changes in fair value of preferred stock tranche obligation	—	1,490
Changes in operating assets and liabilities:		
Research and development incentive receivable	—	922
Prepaid expenses and other current assets	(2,875)	(2,225)
Deferred IPO costs	—	604
Accounts payable	662	(372)
Operating lease liabilities	397	(277)
Accrued expenses and other current liabilities	2,749	2,675
Other liabilities	(46)	(42)
Net cash used in operating activities	(42,583)	(28,903)
CASH FLOWS FROM INVESTING ACTIVITIES:		
Purchase of property and equipment	(865)	(234)
Net cash used in investing activities	(865)	(234)
CASH FLOWS FROM FINANCING ACTIVITIES:		
Proceeds from issuance of Series C preferred stock	—	56,000
Payment of Series C preferred stock issuance costs	—	(227)
Proceeds from issuance of common stock, from the initial public offering, net of offering costs of $7,728	—	102,672
Payment of initial public offering costs	—	(2,549)
Proceeds from exercise of stock options	134	31
Net cash provided by financing activities	134	155,927
NET (DECREASE) INCREASE IN CASH, CASH EQUIVALENTS AND RESTRICTED CASH	(43,314)	126,790
Cash, cash equivalents and restricted cash at beginning of period	265,991	7,135
Cash, cash equivalents and restricted cash at end of period	$ 222,677	$ 133,925
SUPPLEMENTAL DISCLOSURE OF CASH FLOW INFORMATION:		
Right-of-use assets obtained in exchange for operating lease obligation	$ 709	$ 44
Property and equipment purchases still in accounts payable	$ 135	$ —
Settlement of preferred stock tranche obligation	$ —	$ 6,446
Conversion of preferred stock into common stock upon closing of initial public offering	$ —	$ 75,714

The following table provides a reconciliation of the ending cash, cash equivalents and restricted cash as of each of the periods shown above:

	NINE MONTHS ENDED SEPTEMBER 30, 2021	2020
Cash and cash equivalents	$ 221,349	$ 133,810
Restricted cash	1,328	115
Total cash, cash equivalents and restricted cash	$ 222,677	$ 133,925

See notes to condensed consolidated financial statements.

1. NATURE OF BUSINESS AND BASIS OF PRESENTATION

Keros Therapeutics, Inc. (“Keros” or the “Company”) was incorporated in 2015 as a Delaware corporation. Its principal offices are in Lexington, Massachusetts. The Company is a clinical-stage biopharmaceutical company focused on the discovery, development and commercialization of novel treatments for patients suffering from hematological and musculoskeletal disorders with high unmet medical need.

The accompanying unaudited interim condensed consolidated financial statements are prepared in conformity with accounting principles generally accepted in the United States of America (“U.S. GAAP”) and include the accounts of the Company and its wholly owned subsidiaries, Keros Therapeutics Australia Pty Ltd (“Keros Australia”) and Keros Security Corporation, a Massachusetts securities corporation. All significant intercompany transactions and accounts have been eliminated in consolidation.

Since its inception in 2015, the Company has devoted the majority of its resources on business planning, research and development of its product candidates, including by conducting clinical trials and preclinical studies, raising capital and recruiting management and technical staff to support these operations. To date, the Company has not generated any revenue from product sales as none of its product candidates have been approved for commercialization.

On April 13, 2020, the Company completed an initial public offering (“IPO”) in which the Company issued and sold 6,900,000 shares of its common stock, which includes 900,000 shares issued and sold pursuant to the full exercise of the underwriters’ option to purchase additional shares, at a public offering price of $16.00 per share, for aggregate gross proceeds of $110.4 million. The Company received approximately $100.1 million in net proceeds after deducting underwriting discounts and commissions and offering costs.

On November 17, 2020, the Company completed an underwritten public offering in which the Company issued and sold 2,990,000 shares of common stock at a public offering price of $50.00 per share, which included 390,000 shares of common stock issued pursuant to the exercise in full of the underwriters' option to purchase additional shares. The aggregate gross proceeds to the Company from the public offering were approximately $149.5 million. The Company received approximately $140.1 million in net proceeds after deducting underwriting discounts and commissions and offering costs.

In May 2021, the Company filed a registration statement on Form S-3, which was automatically effective upon filing. Pursuant to this registration statement, the Company may issue up to $150.0 million in common stock in sales deemed to be an “at the market offering,” as defined by the Securities Act, and, so long as the Company qualifies as a “well-known seasoned issuer” as defined in Rule 405 of the Securities Act, an unspecified amount of shares of our common stock, preferred stock, debt securities and warrants.

The Company’s condensed consolidated financial statements have been prepared on the basis of the Company continuing as a going concern for the next 12 months. Management believes that the Company’s existing cash and cash equivalents, will allow the Company to continue its operations for at least the next 12 months. In the absence of a significant source of recurring revenue, the continued viability of the Company is dependent on its ability to continue to raise additional capital to finance its operations. If the Company is unable to obtain additional funding, the Company may be forced to delay, reduce or eliminate some or all of its research and development programs, product portfolio expansion or commercialization efforts, which could adversely affect its business prospects, or the Company may be unable to continue operations.

The accompanying unaudited interim condensed consolidated financial statements as of September 30, 2021 and for the three and nine months ended September 30, 2021 and 2020 have been prepared by the Company in conformity with generally accepted accounting principles in the United States of America (“U.S. GAAP”) and, pursuant to the rules and regulations of Article 10 of Regulation S-X of the Securities Act published by the Securities and Exchange Commission (“SEC”) for interim financial statements. Certain information and footnote disclosures normally included in financial statements prepared in accordance with U.S. GAAP have been condensed or omitted pursuant to such rules and regulations. However, the Company believes the disclosures are adequate. These unaudited interim condensed consolidated financial statements should be read in conjunction with the Company’s audited financial statements and notes thereto for the year ended December 31, 2020 included in the Company’s Annual Report on Form 10-K for the year ended December 31, 2020, filed with the SEC on March 25, 2021 (the “Annual Report”).

The unaudited interim condensed consolidated financial statements have been prepared on the same basis as the audited financial statements. In the opinion of management, the accompanying unaudited interim condensed consolidated financial

statements contain all adjustments which are necessary for a fair presentation of the Company's condensed consolidated balance sheets as of September 30, 2021 and December 31, 2020, condensed consolidated statements of operations for the three and nine months ended September 30, 2021 and 2020 and condensed consolidated cash flows for the nine months ended September 30, 2021 and 2020. Such adjustments are of a normal and recurring nature. The results of operations for the three and nine months ended September 30, 2021 are not necessarily indicative of the results of operations that may be expected for the year ending December 31, 2021.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Significant Accounting Policies

The significant accounting policies and estimates used in preparation of the unaudited interim condensed consolidated financial statements are described in the Company's audited consolidated financial statements as of and for the year ended December 31, 2020, and the notes thereto, which are included in the Annual Report. Except as detailed below, there have been no material changes to the Company's significant accounting policies during the nine months ended September 30, 2021.

Risks and Uncertainties

With the global COVID-19 pandemic continuing throughout 2021, the Company has implemented business continuity plans designed to address and mitigate the impact of the COVID-19 pandemic on its employees and its business operations, including its preclinical studies and clinical trials, supply chains and third-party providers. Additionally, in response to the spread of COVID-19, the Company closed its principal executive office in March 2020, with its administrative employees continuing their work outside of the office, and limited the number of staff in any given research laboratory. The Company further requested that its employees work from home if they are able to perform their duties remotely and limited the number of on-site employees to allow for proper social distancing in its offices and laboratories. For those employees on-site, the Company has implemented stringent safety measures designed to comply with applicable federal, state and local guidelines instituted in response to the COVID-19 pandemic. In July 2021, the Company implemented a plan to reopen its principal executive office to allow employees to return on-site to the office, which is based on a phased approach that is principles-based and local in design, with a focus on continuity of preclinical studies and clinical trial activities, employee safety and optimal work environment.

The Company anticipates that the COVID-19 pandemic will have an impact on the development timelines for several of its preclinical and clinical programs. The extent to which the COVID-19 pandemic impacts the Company's business, its clinical development and regulatory efforts, its corporate development objectives and the value of and market for its common stock will depend on future developments which are highly uncertain and cannot be predicted with confidence at this time, such as the ultimate duration of the pandemic, particularly in light of variant strains of the COVID-19 virus, travel restrictions, quarantines, social distancing and business closure requirements in the United States, Australia, New Zealand and other countries and the effectiveness of actions taken globally to contain and treat the disease. The global economic slowdown, the overall disruption of global healthcare systems and the other risks and uncertainties associated with the pandemic could have a material adverse effect on the Company's business, financial condition, results of operations and growth prospects. As of the date of issuance of these financial statements, the Company is not aware of any specific event or circumstance that would require the Company to update its estimates, assumptions and judgments or revise the carrying value of its assets or liabilities. Actual results could differ from those estimates, and any such differences may be material to the Company's financial statements.

In addition, the Company is subject to other challenges and risks specific to its business and its ability to execute on its business plan and strategy, as well as risks and uncertainties common to companies in the biopharmaceutical industry with research and development operations, including, without limitation, risks and uncertainties associated with: obtaining regulatory approval of its product candidates; delays or problems in obtaining clinical supply, loss of single source suppliers or failure to comply with manufacturing regulations; product development and the inherent uncertainty of clinical success; the challenges of protecting and enhancing its intellectual property rights; the challenges of complying with applicable regulatory requirements; and identifying, acquiring or in-licensing additional products or product candidates. In addition, to the extent the ongoing COVID-19 pandemic adversely affects the Company's business and results of operations, it may also have the effect of heightening many of the other risks and uncertainties discussed above.

Recently Adopted Accounting Pronouncements

On January 1, 2021, the Company adopted Financial Accounting Standards Board Accounting Standards Update No. 2019-12, *Income Taxes-Simplifying the Accounting for Income Taxes* ("ASU No. 2019-12"). ASU No. 2019-12 eliminates certain exceptions related to the approach for intraperiod tax allocation, the methodology for calculating income taxes in an interim period and the recognition of deferred tax liabilities for outside basis differences. ASU No. 2019-12 also simplifies aspects of the accounting for franchise taxes, enacted changes in tax laws or rates and clarifies the accounting for transactions that result in a step-up in the tax basis of goodwill. The adoption of this standard did not have an impact on the Company's condensed consolidated financial statements and related disclosures.

3. FAIR VALUE MEASUREMENTS

The following table presents information about the Company's financial assets and liabilities measured at fair value on a recurring basis and indicates the level of the fair value hierarchy utilized to determine such fair values (in thousands):

DESCRIPTION	SEPTEMBER 30, 2021	QUOTED PRICES ACTIVE MARKETS FOR IDENTICAL ASSETS (LEVEL 1)	SIGNIFICANT OTHER OBSERVABLE INPUTS (LEVEL 2)	SIGNIFICANT OTHER OBSERVABLE INPUTS (LEVEL 3)
Assets				
Money market funds	$ 221,390	$ 221,390	$ —	$ —
Total financial assets	$ 221,390	$ 221,390	$ —	$ —

DESCRIPTION	DECEMBER 31, 2020	QUOTED PRICES ACTIVE MARKETS FOR IDENTICAL ASSETS (LEVEL 1)	SIGNIFICANT OTHER OBSERVABLE INPUTS (LEVEL 2)	SIGNIFICANT OTHER OBSERVABLE INPUTS (LEVEL 3)
Assets				
Money market funds	$ 262,043	$ 262,043	$ —	$ —
Total financial assets	$ 262,043	$ 262,043	$ —	$ —

There have been no transfers between fair value levels during the nine months ended September 30, 2021. The carrying values of other current assets, accounts payable and accrued expenses approximate their fair values due to the short-term nature of these assets and liabilities.

4. PREPAID EXPENSES AND OTHER CURRENT ASSETS

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

	SEPTEMBER 30, 2021	DECEMBER 31, 2020
Prepaid service contracts	$ 2,231	$ 501
Income tax credit receivable	24	172
Prepaid sales tax	92	188
Prepaid rent	66	—
R&D payroll tax credit	145	44
Prepaid insurance	1,854	785
Other	313	160
Total prepaid expenses and other current assets	$ 4,725	$ 1,850

5. ACCRUED EXPENSES AND OTHER CURRENT LIABILITIES

Accrued expenses and other current liabilities consisted of the following (in thousands):

	SEPTEMBER 30, 2021	DECEMBER 31, 2020
Accrued external R&D costs	$ 1,604	$ 169
Accrued external manufacturing costs	3,050	2,265
Accrued compensation and benefits	1,765	1,510
Accrued tax	83	185
Accrued professional fees	657	265
Other	202	218
Total accrued expenses and other current liabilities	$ 7,361	$ 4,612

Accrued compensation and benefits consisted primarily of accrued payroll and accrued vacation.

6. COMMON STOCK

As of September 30, 2021, the Company’s amended and restated certificate of incorporation authorized the Company to issue 200,000,000 shares of common stock at a par value of $0.0001 per share.

In conjunction with the closing of the Company's initial public offering ("IPO") in April 2020, the Company issued and sold 6,900,000 shares of its common stock, including 900,000 shares pursuant to the full exercise of the underwriters' option to purchase additional shares, at a public offering price of $16.00 per share, for aggregate net proceeds of $100.1 million after deducting underwriting discounts and commissions and offering costs. In connection with the IPO, all outstanding shares of Preferred Stock converted into 10,725,129 shares of common stock.

In conjunction with the Company's November 2020 public offering closing, the Company issued and sold 2,990,000 shares of its common stock, which included 390,000 shares pursuant to the full exercise of the underwriters' option to purchase additional shares, at a public offering price of $50.00 per share, for aggregate net proceeds of $140.1 million after deducting underwriting discounts and commissions and offering costs.

In May 2021, the Company filed a registration statement on Form S-3, which was automatically effective upon filing. Pursuant to this registration statement, the Company may issue up to $150.0 million in common stock in sales deemed to be an “at the market offering,” as defined by the Securities Act, and, so long as the Company qualifies as a “well-known seasoned issuer” as defined in Rule 405 of the Securities Act, an unspecified amount of shares of our common stock, preferred stock, debt securities and warrants. See Note 8, *Stockholders’ Equity*, for further detail.

As of September 30, 2021 and December 31, 2020, the Company had an aggregate of the following options to purchase shares of common stock:

	SEPTEMBER 30, 2021	DECEMBER 31, 2020
Options to purchase common stock	2,724,800	2,499,603

7. STOCK-BASED COMPENSATION

2017 Stock Incentive Plan

The Board adopted the 2017 Stock Incentive Plan (the "2017 Plan") in February 2017, and the stockholders approved the 2017 Plan in March 2017. The 2017 Plan was most recently amended in March 2020.

As of September 30, 2021, there was an aggregate of 777,476 shares of common stock issuable upon the exercise of outstanding options under the 2017 Plan. Any options or awards outstanding under the 2017 Plan remain outstanding and effective.

2020 Equity Incentive Plan

In April 2020, the 2020 Equity Incentive Plan (the "2020 Plan") became effective, and, as a result, no further awards will be made under the 2017 Plan. The 2020 Plan provides for the grant of stock options qualifying as incentive stock options

("ISOs"), to employees and for the grant of nonstatutory stock options ("NSOs"), restricted stock awards, restricted stock unit awards, stock appreciation rights, performance stock awards and other forms of stock compensation to employees, consultants and directors. The 2020 Plan also provides for the grant of performance cash awards to employees, consultants and directors. Any previously granted awards under the 2017 Plan will remain outstanding in accordance with their respective terms.

Under the 2020 Plan, there is an annual increase on January 1 of each year from January 1, 2021 continuing through January 1, 2030, by 4.0% of the total number of shares of common stock outstanding on December 31 of the preceding calendar year, or a lesser number of shares as may be determined by the Board. On January 1, 2021, the Company increased the number of shares available for future grant under the 2020 Plan by 927,714 shares. As of September 30, 2021, there was an aggregate of 1,947,324 shares of common stock issuable upon the exercise of outstanding options under the 2020 Plan. Additionally, there were an aggregate of 1,038,029 shares reserved for future issuance under the 2020 Plan, including shares forfeited from the 2017 Plan.

Stock Options

A summary of option activity during the nine months ended September 30, 2021 is as follows (in thousands except share and per share data):

	NUMBER OF OPTIONS	WEIGHTED-AVERAGE EXERCISE PRICE	WEIGHTED-AVERAGE REMAINING CONTRACTUAL TERM (IN YEARS)	AGGREGATE INTRINSIC VALUE
Outstanding as of December 31, 2020	2,499,603	$ 11.77	8.62	$ 147,103
Granted	605,108	61.41		
Exercised	(203,927)	0.66		$ 10,288
Expired	(175,984)	28.67		
Outstanding as of September 30, 2021	2,724,800	$ 22.53	8.21	$ 59,493
Options exercisable as of December 31, 2020	723,130	$ 0.57	7.38	$ 50,599
Options exercisable as of September 30, 2021	1,152,714	$ 9.13	7.44	$ 35,472

The weighted-average grant date fair value price per share of options granted during the nine months ended September 30, 2021 and 2020 was $42.92 and $14.78, respectively. As of September 30, 2021, there was $32.9 million of unrecognized stock-based compensation expense related to unvested stock options. The unrecognized stock-based compensation expense is estimated to be recognized over a period of 2.68 years.

The total fair value of options vested during the nine months ended September 30, 2021 was $8.1 million.

Stock-Based Compensation Expense

Total stock-based compensation expense recorded for employees, directors and non-employees during the three and nine months ended September 30, 2021 and 2020 was as follows (in thousands):

	THREE MONTHS ENDED SEPTEMBER 30,		NINE MONTHS ENDED SEPTEMBER 30,	
	2021	2020	2021	2020
Research and development	$ 1,018	$ 465	$ 3,032	$ 786
General and administrative	2,066	959	5,395	1,789
Total stock-based compensation expense	$ 3,084	$ 1,424	$ 8,427	$ 2,575

8. STOCKHOLDERS' EQUITY

Sales Agreement

On May 3, 2021, the Company entered into a Sales Agreement (the “ATM Sales Agreement”) with SVB Leerink LLC (“SVB Leerink”), as agent, pursuant to which the Company may offer and sell, from time to time, shares of its common stock having an aggregate offering price of up to $150.0 million (the “ATM Shares”) from time to time through SVB Leerink (the “ATM Offering”).

Under the ATM Sales Agreement, SVB Leerink may sell the ATM Shares by methods deemed to be an “at the market offering” as defined in Rule 415(a)(4) promulgated under the Securities Exchange Act of 1934, as amended. The Company may sell the ATM Shares in amounts and at times to be determined by the Company from time to time subject to the terms and conditions of the ATM Sales Agreement, but it has no obligation to sell any of the ATM Shares in the ATM Offering.

ATM Shares sold under the ATM Sales Agreement will be issued pursuant to a prospectus supplement filed on May 3, 2021, and related prospectus filed with the Securities and Exchange Commission, or the SEC, pursuant to our automatically effective shelf registration statement on Form S-3 (Registration No. 333-255724), filed with the SEC on May 3, 2021.

The Company or SVB Leerink may suspend or terminate the offering of ATM Shares upon notice to the other party and subject to other conditions. The Company has agreed to pay SVB Leerink commissions for its services in acting as agent in the sale of the ATM Shares in the amount of up to 3.0% of gross proceeds from the sale of the ATM Shares pursuant to the ATM Sales Agreement. The Company has also agreed to provide SVB Leerink with customary indemnification and contribution rights.

The Company did not issue any shares under the ATM Sales Agreement during the quarter ended September 30, 2021.

9. INCOME TAXES

On March 27, 2020, the Coronavirus Aid, Relief, and Economic Security Act (“CARES Act”) was signed into law in the United States. The CARES Act provides numerous tax provisions and other stimulus measures, including temporary changes regarding the prior and future utilization of net operating losses and technical corrections from prior tax legislation for tax depreciation of certain qualified improvement property. The Company evaluated the provisions of the CARES Act and as a result, received approximately $0.2 million in February 2021 related to the carryback of our 2019 net operating loss to claim a refund for prior federal tax liabilities.

10. LOSS PER SHARE

Basic and diluted loss per share is computed by dividing net loss attributable to common stockholders by the weighted-average common shares outstanding (in thousands, except share and per share data):

	THREE MONTHS ENDED SEPTEMBER 30,		NINE MONTHS ENDED SEPTEMBER 30,	
	2021	2020	2021	2020
Numerator:				
Net loss	$ (20,297)	$ (12,036)	$ (51,804)	$ (34,685)
Less: Accruals of dividends of preferred stock	—	0	—	(1,012)
Net loss attributable to common stockholders - basic and diluted	$ (20,297)	$ (12,036)	$ (51,804)	$ (35,697)
Denominator:				
Weighted-average common stock outstanding - basic and diluted	23,362,237	20,175,883	23,299,720	13,452,606
Net loss per share attributable to common stockholders - basic and diluted	$ (0.87)	$ (0.60)	$ (2.22)	$ (2.65)

The Company’s potentially dilutive securities, which includes stock options, have been excluded from the computation of diluted net loss per share as the effect would be to reduce the net loss per share. Therefore, the weighted-average number of common shares outstanding used to calculate both basic and diluted net loss per share attributable to common stockholders is the same. The Company excluded the following from the computation of diluted net loss per share attributable to common stockholders at September 30, 2021 and 2020 because including them would have had an anti-dilutive effect:

	SEPTEMBER 30, 2021	SEPTEMBER 30, 2020
Options to purchase common stock	2,724,800	2,484,152

11. REVENUE FROM CONTRACTS WITH CUSTOMERS

Neurona Therapeutics, Inc. License Agreement

On June 22, 2021, the Company entered into a license agreement (the "Neurona Agreement") with Neurona Therapeutics, Inc. (“Neurona”). Under the Neurona Agreement, the Company granted Neurona a non-exclusive license to use LDN-193189, an early-stage research compound, which the Company licenses from a third party, solely as a reagent in connection with the manufacturing of diagnostic and/or therapeutic products to make, have made, use, import, offer for sale and sell products and services arising therefrom, and to make, have made, acquire, transfer, import and export the compound for such use. The license excludes Neurona from any rights to use, sell or distribute the compound for any therapeutic or diagnostic purpose. Unless terminated by either party for breach of contract or insolvency, the Neurona Agreement, which commenced on the execution date, will continue in perpetuity until the last patent expires. Under the Neurona Agreement, the Company was paid a one-time, upfront license payment of $0.1 million from Neurona as of September 30, 2021.

In accordance with the Company's ASC 606 assessment, Neurona is considered to be a customer. The Company identified a single performance obligation, the non-exclusive license, that was satisfied on the date of the execution of the Neurona Agreement when control of the license was transferred. The Company determined that the upfront license fee of $0.1 million constitutes the entire transaction price and does not require further allocation as there was only one performance obligation. The Company determined that the $0.1 million represented the point at which the licensee was able to use and benefit from the license and recognized revenue from upfront license fees when the license was transferred to Neurona upon execution of the Neurona Agreement. The Company recognized the upfront fee as revenue on its consolidated statement of operations for the nine months ended September 30, 2021.

12. COMMITMENTS AND CONTINGENCIES

Leases

Operating Leases

In March 2017, the Company entered into a lease agreement (the “Lexington Lease”) for its current headquarters located in Lexington, Massachusetts. In July and August 2019, the Company entered into a first and second amendment to its Lexington Lease, respectively, to expand the rental space to 10,417 square feet. In August 2021, the Company entered into a third amendment to its Lexington Lease (the "Third Amendment") to extend the lease term through March 31, 2023 and to further expand the rental space to 15,622 square feet. The lease modification from the Third Amendment resulted in a non-cash increase to the Company's operating lease liabilities and right-of-use assets of $0.7 million in the quarter ended September 30, 2021. As required under the terms of the Lexington Lease, as amended to date, as collateral for the Lexington Lease, as amended to date, the Company has restricted cash of $0.1 million in the form of a certificate of deposit as of September 30, 2021 and 2020. The Lexington Lease, as amended to date, provides for scheduled annual rent increases throughout the lease term and does not include termination or purchase options.

From time to time, leases may include options to renew the lease after the expiration of the initial lease term. A renewal period is included in the lease term only when it is reasonably certain that the Company will exercise such renewal options based on economic factors present. As of September 30, 2021, no renewal options existed that the Company believed were reasonably certain of being exercised.

The following table contains a summary of the lease costs recognized (in thousands):

	THREE MONTHS ENDED SEPTEMBER 30,		NINE MONTHS ENDED SEPTEMBER 30,	
	2021	2020	2021	2020
Lease cost				
Operating lease cost	$ 120	$ 116	$ 360	$ 349
Variable payments	—	—	—	—
Total lease cost	$ 120	$ 116	$ 360	$ 349

The following table summarizes other information related to the Company's operating leases (in thousands):

	NINE MONTHS ENDED SEPTEMBER 30,	
	2021	2020
Other information		
Operating lease payments	$ 360	$ 349
Remaining lease term	1.5 years	2.2 years
Discount rate	7.27 %	8.02 %

Remaining maturities of the Company's operating leases, excluding short-term leases, included in operating lease liabilities in the Company's condensed consolidated balance sheets as of September 30, 2021 are as follows (in thousands):

2021	$ 226
2022	913
2023	233
Total lease payments	1,372
Less: imputed interest	(76)
Total operating lease liabilities	$ 1,296
Included in the consolidated balance sheet:	
Current portion of lease liabilities	$ 843
Lease liabilities	453
Total operating lease liabilities	$ 1,296

On September 7, 2021, the Company entered into an indenture of lease (the "1050 Waltham Lease") with Revolution Labs Owner, LLC (the "Landlord"), pursuant to which the Company will lease approximately 35,662 square feet of office and laboratory space located at 1050 Waltham Street, Lexington, Massachusetts for its new principal executive office. The 1050 Waltham Lease has not yet commenced as of September 30, 2021 and is therefore not included in the maturity table above.

The term of the 1050 Waltham Lease is currently expected to commence in the fourth quarter of 2022, on the date that the Landlord delivers the premises to the Company, which shall be after the substantial completion of agreed upon improvements to be performed by the Landlord (such date, the "Commencement Date"). This work is not expected to begin until the second quarter of 2022. The Company's obligation for the payment of base rent for the premises begins four months after the Commencement Date (the "Rent Commencement Date") and will initially be fixed at $0.2 million per month, which will increase by approximately 3% per annum. The Company will be obligated to reimburse the Landlord for certain variable costs, including its proportional share (approximately 20% of the rentable area of the building) of taxes and operating expenses, as specified in the 1050 Waltham Lease. The 1050 Waltham Lease has a term of eight years and four months, measured from

the Commencement Date. The Company has the option to extend the term of the 1050 Waltham Lease for a period of an additional five years.

In connection with its entry into the 1050 Waltham Lease and as a security deposit, the Company has provided the Landlord a letter of credit in the amount of approximately $1.2 million.

The Landlord has the right to terminate the 1050 Waltham Lease upon customary events of default. The Company has the right to terminate the 1050 Waltham Lease if (i) the Landlord work on the premises has not commenced on or prior to July 1, 2022 or (ii) the premises are not ready for occupancy within a specified time period after October 21, 2022.

ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

You should read the following discussion and analysis of our financial condition and results of operations together with (1) our condensed consolidated financial statements and the related notes and other financial information included elsewhere in this Quarterly Report on Form 10-Q and (2) the audited consolidated financial statements and the related notes and management's discussion and analysis of financial condition and results of operations for the fiscal year ended December 31, 2020 included in our Annual Report on Form 10-K for the year ended December 31, 2020, and filed with the Securities and Exchange Commission, or SEC, on May 25, 2021, which we refer to as the Annual Report.

Some of the information contained in this discussion and analysis or set forth elsewhere in this Quarterly Report on Form 10-Q, including information with respect to our plans and strategy for our business, includes forward-looking statements that involve risks and uncertainties. As a result of many factors, including those factors set forth in the "Risk Factors" section of this Quarterly Report on Form 10-Q, our actual results could differ materially from the results described in or implied by the forward-looking statements contained in the following discussion and analysis. You should carefully read the section titled "Risk Factors" set forth in Part II, Item 1A of this Quarterly Report on Form 10-Q to gain an understanding of the important factors that could cause actual results to differ materially from our forward-looking statements. Please also see the section entitled "Special Note Regarding Forward-Looking Statements." You should, therefore, not rely on these forward-looking statements as representing our views as of any date subsequent to the date of this Quarterly Report on Form 10-Q.

Overview

We are a clinical-stage biopharmaceutical company focused on the discovery, development and commercialization of novel treatments for patients suffering from hematological and musculoskeletal disorders with high unmet medical need. We are a leader in understanding the role of the transforming growth factor-beta, or TGF-ß, family of proteins, which are master regulators of red blood cell and platelet production as well as of the growth, repair and maintenance of muscle and bone. We have leveraged this understanding and developed a discovery approach to generate large and small molecules to address diseases of these tissues. Targeting TGF-ß signaling pathways has been clinically proven to elicit robust changes in blood cells, muscle and bone, which we believe provides a precedent and strong rationale for our strategy.

Our lead protein therapeutic product candidate, KER-050, is an engineered ligand trap comprised of a modified ligand-binding domain of the TGF-ß superfamily receptor known as activin receptor type IIA that is fused to the portion of the human antibody known as the Fc domain. KER-050 is being developed for the treatment of low blood cell counts, or cytopenias, including anemia and thrombocytopenia, in patients with myelodysplastic syndromes, or MDS, and in patients with myelofibrosis. In June 2021, we announced preliminary results from Cohorts 1 and 2 of our Phase 2 clinical trial evaluating KER-050 for the treatment of anemia and thrombocytopenia in patients with very low-, low-, or intermediate-risk MDS. We expect to report additional Part 1 data and initiate Part 2 of the trial by the end of 2021. Additionally, we plan to commence an open-label Phase 2 clinical trial evaluating KER-050 for the treatment of patients with myelofibrosis-associated cytopenias in the fourth quarter of 2021 and expect to report initial data from this trial in 2022.

Our lead small molecule product candidate, KER-047, is designed to selectively and potently inhibit activin receptor-like kinase-2, or ALK2, a TGF-ß superfamily receptor. KER-047 is being developed for the treatment of anemia resulting from iron imbalance as a direct consequence of elevated ALK2 signaling, including our initial target, iron-refractory iron deficiency anemia, or IRIDA. We are also developing KER-047 for the treatment of fibrodysplasia ossificans progressiva, or FOP, a rare musculoskeletal disorder. In December 2020, we reported topline data from our Phase 1 clinical trial of KER-047 in healthy volunteers. We expect to commence two open-label Phase 2 clinical trials in the first quarter of 2022, one in patients with iron deficiency anemia, or IDA, and one in patients with IRIDA, and expect to report initial data from both trials in 2022. Following the completion of our expected Phase 2 clinical trials of KER-047 in patients with IDA and IRIDA, we plan to commence a Phase 2 clinical trial in patients with FOP.

Our third product candidate, KER-012, is designed to bind to and inhibit the signaling of TGF-ß ligands, including activin A and activin B, to potentially increase bone mass. KER-012 is being developed for the treatment of disorders associated with bone loss, such as osteoporosis and osteogenesis imperfecta, and for the treatment of pulmonary arterial hypertension, or PAH. In September 2021, we commenced a Phase 1 clinical trial of KER-012 in healthy volunteers and expect to report initial data from Part 1 of this trial in the first half of 2022 and additional data from Part 2 of this trial in the second half of 2022.

Since our inception in 2015, we have devoted the majority of our efforts into business planning, research and development of our product candidates, including by conducting clinical trials and preclinical studies, raising capital and recruiting management and technical staff to support these operations. To date, we have not generated any revenue from product sales as none of our product candidates have been approved for commercialization. We have historically financed our operations primarily through the sale of convertible preferred stock and cash received from licensing agreements.

Initial Public Offering

On April 13, 2020, we completed an initial public offering, or IPO, of our common stock, in which we issued and sold 6,900,000 shares of common stock, which includes 900,000 shares issued and sold pursuant to the full exercise of the underwriters' option to purchase additional shares, at a public offering price of $16.00 per share. The aggregate net proceeds to us from the IPO were approximately $100.1 million after deducting underwriting discounts and commissions and offering expenses. The shares began trading on the Nasdaq Global Market on April 8, 2020. Upon completion of the IPO, all of our outstanding shares of convertible preferred stock converted into 10,725,129 shares of our common stock.

November 2020 Public Offering of Common Stock

On November 17, 2020, we completed a public offering in which we issued and sold 2,990,000 shares of common stock at a public offering price of $50.00 per share, which included 390,000 shares of common stock issued pursuant to the exercise in full of the underwriters' option to purchase additional shares. The aggregate net proceeds to us from the public offering were approximately $140.1 million, after deducting underwriting discounts and commissions and offering expenses.

We have incurred recurring operating losses since inception in 2015. Our ability to generate product revenue sufficient to achieve profitability will depend on the successful development and commercialization of one or more of our product candidates. Our net loss was $20.3 million and $51.8 million for the three and nine months ended September 30, 2021, respectively. As of September 30, 2021, we had an accumulated deficit of $116.8 million. We expect to continue to generate operating losses and negative operating cash flows for the foreseeable future in connection with our ongoing activities. As of September 30, 2021, we had cash and cash equivalents of $221.3 million.

Clinical Update

KER-050 Update

We will be presenting an abstract announcing additional data from our ongoing open-label, two-part, multiple ascending dose trial to assess the safety, tolerability, pharmacokinetics and pharmacodynamics of KER-050 in patients with MDS at the 63rd American Society of Hematology, or ASH, Annual Meeting and Exposition, to be held in person and virtually from December 11 through 14, 2021. Patients in Cohort 1, 2, 3 and 4 received 0.75 mg/kg, 1.5 mg/kg, 2.5 mg/kg and 3.75 mg/kg doses of KER-050, respectively, once every four weeks for 12 weeks.

As of July 10, 2021, which was the data cut-off date, 17 patients in Cohorts 1, 2 and 3 had received at least one dose of KER-050, ten of whom, in Cohorts 1 and 2, had completed eight weeks of treatment, which we refer to as the evaluable patients. The ten evaluable patients were comprised of three non-transfused, or NT, two low transfusion burden, or LTB, and five high transfusion burden, or HTB, patients. Of the seven LTB and HTB patients, three did not have ring sideroblasts, or non-RS, and four have ring sideroblasts, or RS positive.

As of the data cut-off date, 60% (n=6/10) of the evaluable patients met at least one of the following endpoints:

- Increase in hemoglobin ≥ 1.5 g/dL for eight weeks, or
- 50% reduction in transfusion requirements over eight weeks, or
- Transfusion independence for at least eight weeks.

Additional data from the evaluable patients in Cohorts 1 and 2 of the trial, as of the data cut-off date, include:

- 71% (n=5/7) of the transfused evaluable patients (LTB: n=1/2 and HTB: n=4/5; non-RS: n=2/3 and RS positive: n=3/4) had at least a 50% reduction in transfusion requirements over eight weeks, which we refer to as the transfused evaluable responders.
    - 57% (n=4/7) of the transfused evaluable patients achieved transfusion independence for at least eight weeks.
    - Observed a maximum increase in platelets from baseline of 130 $x10^9$/L (mean), with a range of 32 to 235 $x10^9$/L, in the five transfused evaluable responders.
        - Baseline platelet count of 234 $x10^9$/L (mean), with a range of 104 to 401 $x10^9$/L.
        - No patients required dose reduction due to thrombocytosis.
- 33% (n=1/3) of the NT evaluable patients had a hemoglobin increase of ≥ 1.5g/dL sustained for at least eight weeks.

As of the data cut-off date, the following pharmacodynamic changes were observed in the five transfused evaluable responders:

- Observed maximum increase from baseline in reticulocytes in transfused responders was 24.6 $x10^9$/L (mean), with a range of 10.5 to 41.6 $x10^9$/L from Day 1 to 29; increases in reticulocytes were observed after each dose.
- Observed maximum reduction in serum ferritin in transfused responders was 40.4% (mean), with a range of 10% to 66%.
- Observed maximum increase in soluble transferrin receptor in transfused responders was 52.8% (mean), with a range of 29.8% to 116.4%.

The observed increases in reticulocytes and soluble transferrin receptor and observed decreases in serum ferritin suggest that administration of KER-050 is potentially associated with increased erythropoiesis.

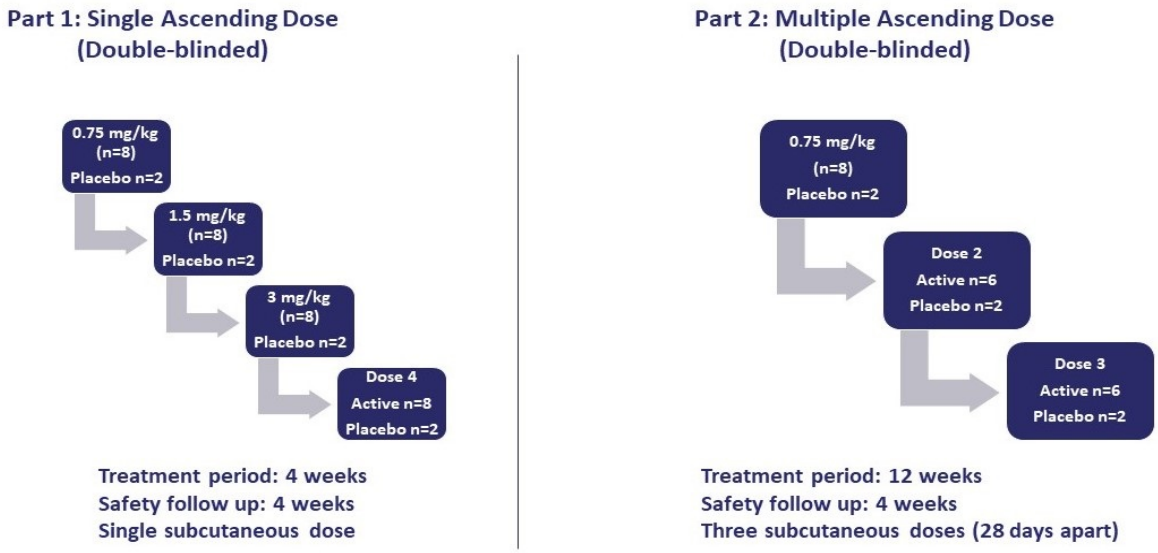
As of the data cut-off date, KER-050 was well tolerated in Cohorts 1, 2 and 3 of this trial. No drug-related serious adverse events, or SAEs, dose-limiting toxicities or dose modifications were reported. Additionally, no patients developed high-risk MDS or acute myeloid leukemia. There were four treatment-emergent SAEs reported in three patients, all of which were deemed unrelated to study drug, including anemia, febrile illness, pneumonia and death. Two patients withdrew from the trial prior to completing eight weeks of treatment with KER-050, one due to death deemed unrelated to study drug and one patient withdrew consent. There was one observed treatment-related adverse event of maculopapular rash that was moderate in severity. The rash was reported after the patient's first dose and resolved without recurrence following subsequent doses.

We expect to present additional clinical data by the end of 2021.

KER-012 Update

We are conducting a randomized, double-blind, placebo-controlled, two-part Phase 1 clinical trial to evaluate single and multiple ascending doses of KER-012 in healthy volunteers. The primary objectives of this trial are to assess safety, tolerability and pharmacokinetics of KER-012. The trial design is summarized in the figure below.

Phase 1 Clinical Trial Design



We expect to report initial data from Part 1 of this trial in the first half of 2022 and additional data from Part 2 of this trial in the second half of 2022.

COVID-19 Business Update

With the global COVID-19 pandemic continuing throughout 2021, we have implemented business continuity plans designed to address and mitigate the impact of the COVID-19 pandemic on our employees, and our business operations, including our preclinical studies and clinical trials, supply chains and third-party providers. We are closely monitoring the COVID-19 situation as we evolve our business continuity plans and response strategy. On March 23, 2020, the governor of Massachusetts ordered the closure of all non-essential businesses effective March 24, 2020 through April 7, 2020, which was subsequently extended through May 18, 2020. On May 29, 2021, the Commonwealth of Massachusetts permitted all industries to fully re-open and on June 15, 2021, the governor of Massachusetts signed an executive order that terminated the Commonwealth's State of Emergency. Because of the nature of our operations, we were considered to be an essential business so our operations were only partially affected by these orders. The outbreak and government measures taken in response have also had a significant impact, both direct and indirect, on third-party businesses and commerce, as worker shortages have occurred; supply chains have been disrupted; facilities and production have been suspended; and demand for certain goods and services, such as medical services and supplies, has spiked, while demand for other goods and services, such as travel, has fallen. In response to the spread of COVID-19, we closed our principal executive office in March 2020, with our administrative employees continuing their work outside of our office, and limited the number of staff in any given research laboratory. In July 2021, we implemented a plan to reopen our office to allow employees to return to the office, which is based on a phased approach that is principles-based and local in design, with a focus on continuity of preclinical studies and clinical trial activities, employee safety and optimal work environment. While we are experiencing limited financial impacts at this time, given the global economic slowdown, the overall disruption of global healthcare systems and the other risks and uncertainties associated with the pandemic, particularly in light of variant strains of the COVID-19 virus, our business, financial condition, results of operations and growth prospects could be materially adversely affected.

Preclinical and Clinical Development

With respect to preclinical and clinical development, we have taken measures to implement remote and virtual approaches, including remote participant monitoring where possible, to maintain participant safety and trial continuity and to preserve study integrity. For several of our clinical development programs, we are experiencing, and expect to continue to experience, a disruption or delay in our ability to initiate trial sites and enroll and assess participants. As the COVID-19 pandemic continues, we have experienced and expect to continue to experience an impact on our ability to enroll participants in our clinical trials. We have experienced and expect to continue to experience an impact on the ability to supply study drug, report trial results or

interact with clinicians, investigators, regulators, ethics committees or other important agencies due to limitations in regulatory authority employee resources or otherwise. In addition, we rely on contract research organizations, or CROs, or other third parties to assist us with clinical trials, and we cannot guarantee that they will continue to perform their contractual duties in a timely and satisfactory manner as a result of the COVID-19 pandemic. If the COVID-19 pandemic continues and persists for an extended period of time, we could experience significant disruptions to our preclinical and clinical development timelines, which would adversely affect our business, financial condition, results of operations and growth prospects.

Supply Chain

As for our third-party manufacturers, distributors and other partners, we are working closely with them to manage our supply chain activities and mitigate potential disruptions to our clinical supply as a result of the COVID-19 pandemic. We expect to have adequate supply for the development of our product candidates. However, if the COVID-19 pandemic persists for an extended period of time and begins to impact essential distribution systems such as FedEx and postal delivery, we could experience disruptions to our supply chain and operations, and associated delays in the manufacturing and supply of our product candidates, which would adversely impact our ability to carry out our clinical trials.

Financial Impact

The COVID-19 pandemic continues to rapidly evolve and has already resulted in a significant disruption of global financial markets. If the disruption persists and deepens, we could experience an inability to access additional capital, which could in the future negatively affect our operations. While we expect the COVID-19 pandemic to adversely affect our business operations, our clinical development and regulatory efforts, our corporate development objectives and the value of and market for our common stock will depend on future developments that are highly uncertain and cannot be predicted with confidence at this time, as a result of uncertainty regarding ultimate duration of the pandemic, particularly in light of variant strains of the COVID-19 virus, travel restrictions, quarantines, social distancing and business closure requirements in the United States, Australia and New Zealand and the effectiveness of actions taken globally to contain and treat the disease.

Licensing Agreements

2016 Exclusive Patent License Agreement with The General Hospital Corporation

In April 2016, we entered into an exclusive patent license agreement with The General Hospital Corporation, or MGH, and such agreement was subsequently amended in May 2017 and February 2018. Under the license agreement with MGH, or the MGH Agreement, we obtained an exclusive, worldwide license, with the right to sublicense, under certain patents and technical information of MGH, to make, have made, use, have used, sell, have sold, lease, have leased, import, have imported or otherwise transfer licensed products and processes for use in the treatment, diagnosis, palliation and prevention of diseases and disorders in humans and animals. We are required to use commercially reasonable efforts to develop and commercialize licensed products and processes, and must achieve certain required diligence milestones.

Under the terms of the MGH Agreement, we made an initial license payment of $0.1 million in 2016 and reimbursed MGH approximately $0.3 million of prior patent prosecution expenses related to the licensed patents in 2017. We also issued MGH an aggregate of 358,674 shares of our common stock. Additionally, we are required to pay a nominal annual maintenance fee prior to the first commercial sale of our first product or process, a mid-five digit annual maintenance fee after the first commercial sale of our first product or process that is creditable against royalties, certain clinical and regulatory milestone payments for the first three products or indications to achieve such milestones, which milestone payments are $8.6 million in the aggregate, and certain commercial milestone payments for the first three products or indications to achieve such milestones, which milestone payments are $18.0 million in the aggregate. We are also obligated to pay tiered royalties on net sales of licensed products ranging in the low-single digits to mid-single digits. The royalty rates are subject to up to a maximum 50% reduction for lack of a valid claim, in the event that it is necessary for us to obtain a license to any third-party intellectual property related to the licensed products, and generic competition. The obligation to pay royalties under the MGH Agreement expires on a licensed product-by-licensed product and country-by-country basis upon the later of expiry of the last valid claim of the licensed patents that cover such licensed product in such country and ten years from the first commercial sale of such product in such country. We are also obligated to pay a percentage of non-royalty-related payments received by us from sublicensees ranging in the sub-teen double digits and a change of control fee equal to a low-single digit percentage of the payments received as part of any completed transaction up to a low-seven digit amount.

Neurona Therapeutics Inc., License Agreement

On June 22, 2021, we entered into a license agreement, or the Neurona Agreement, with Neurona Therapeutics, Inc., or Neurona. Under the Neurona Agreement, we granted Neurona a non-exclusive license to use LDN-193189, an early-stage

research compound, which we license from a third party, solely as a reagent in connection with the manufacturing of diagnostic and/or therapeutic products to make, have made, use, import, offer for sale and sell products and services arising therefrom, and to make, have made, acquire, transfer, import and export the compound for such use. The license excludes Neurona from any rights to use, sell or distribute the compound for any therapeutic or diagnostic purpose. Unless terminated by either party for breach of contract or insolvency, the Neurona Agreement will continue in perpetuity until the last patent expires. Under the Neurona Agreement, we received a one-time, upfront license fee of $0.1 million from Neurona in July 2021.

Components of Our Results of Operations

Revenue

To date, we have not generated any revenue, and do not expect to generate any revenue in the foreseeable future, from product sales. We have generated revenue solely from research collaborations or licensing of intellectual property. We may in the future generate revenue from other strategic collaborations.

Operating Expenses

Research and Development Expenses

Research and development expenses consist primarily of costs incurred for our research activities, including our discovery efforts and the preclinical and clinical development of our current and potential future product candidates, and include:

- salaries, benefits and other related costs, including stock-based compensation expense, for personnel engaged in research and development functions;
- expenses incurred under agreements with third parties, including CROs that conduct research, preclinical and clinical activities on our behalf, as well as contract manufacturing organizations, or CMOs, that manufacture drug product for use in our preclinical studies and clinical trials;
- license fees incurred in connection with license agreements;
- research and development supplies and services expenses;
- facility-related expenses, which include direct depreciation costs and allocated expenses for rent and maintenance of facilities and other operating costs;
- cost of outside consultants, including their fees and related travel expenses, engaged in research and development functions;
- expenses related to regulatory affairs; and
- fees related to our scientific advisory board.

We expense research and development costs as incurred. Costs for external development activities are recognized based on an evaluation of the progress to completion of specific tasks using information provided to us by our vendors. Payments for these activities are based on the terms of the individual agreements, which may differ from the pattern of costs incurred, and are reflected in our condensed consolidated financial statements as prepaid or accrued research and development expenses. Nonrefundable advance payments for goods or services to be received in the future for use in research and development activities are recorded as prepaid expenses and expensed as the related goods are delivered or the services are performed.

Research and development activities are central to our business model. We expect that our research and development expenses will continue to increase for the foreseeable future as we continue ongoing and initiate new clinical trials for our product candidates and continue to discover and develop additional product candidates. If any of our product candidates enter into later stages of clinical development, they will generally have higher development costs than those in earlier stages of clinical development, primarily due to the increased size and duration of later-stage clinical trials. There are numerous factors associated with the successful commercialization of any product candidates we may develop in the future, including future trial design and various regulatory requirements, many of which cannot be determined with accuracy at this time based on our stage of development. Additionally, future commercial and regulatory factors beyond our control will impact our clinical development program and plans.

General and Administrative Expenses

General and administrative expenses consist primarily of salaries and other related costs, including stock-based compensation for personnel in our executive, finance, corporate and business development and administrative functions.

General and administrative expenses also include professional fees for legal, patent, accounting, information technology, auditing, tax and consulting services, and travel expenses and facility-related expenses, which include direct depreciation costs and allocated expenses for rent and maintenance of facilities and other operating costs.

We expect that our general and administrative expenses will increase in the future as we increase our headcount to support our continued research and development and potential commercialization of our product candidates. We also expect to incur increased expenses associated with being a public company, including costs of accounting, audit, legal, regulatory and tax compliance services, director and officer insurance costs, and investor and public relations costs.

Other Income (Expense), Net

Interest Expense, Net

Interest expense, net primarily consists of interest earned on money market accounts and interest expense related to leasehold improvement debt amortization. Our interest expense has not been significant to date.

Change in Fair Value of Preferred Stock Tranche Obligation

The change in fair value of our preferred stock tranche obligation fluctuates based on remeasurement at each reporting period. Our preferred stock tranche obligation stems from our obligation to issue additional shares to investors upon the closing of additional tranches of preferred stock. Upon the waiver of the Series B-2 preferred stock milestone by our board of directors in March 2020, this liability was fully settled. Until settlement, fluctuations in the fair value of our preferred stock tranche obligation were based on the remeasurement at each reporting period.

Other Income (Expense), Net

Other income (expense), net primarily consists of unrealized gains on foreign currency and dividend income earned on money market fund accounts.

Results of Operations

Comparison for the three months ended September 30, 2021 and 2020

The following table summarizes our results of operations for the three months ended September 30, 2021 and 2020 (in thousands):

	THREE MONTHS ENDED SEPTEMBER 30,	
	2021	2020
REVENUE:		
License revenue	$ —	$ —
Total revenue	—	—
OPERATING EXPENSES:		
Research and development	(14,832)	(8,395)
General and administrative	(5,365)	(3,553)
Total operating expenses	(20,197)	(11,948)
LOSS FROM OPERATIONS	(20,197)	(11,948)
OTHER EXPENSE, NET		
Interest expense, net	(1)	(2)
Other expense, net	(137)	(86)
Total other expense, net	(138)	(88)
Loss before income taxes	(20,335)	(12,036)
Income tax (provision) benefit	38	—
Net loss	$ (20,297)	$ (12,036)

Revenue

We did not recognize any revenue for the three months ended September 30, 2021 and 2020.

Research and Development Expenses

The following table summarizes our research and development expenses for the three months ended September 30, 2021 and 2020 (in thousands):

	THREE MONTHS ENDED SEPTEMBER 30,		INCREASE / (DECREASE)
	2021	2020	
KER-050	$ 4,483	$ 1,896	$ 2,587
KER-047	806	2,236	(1,430)
KER-012	3,571	1,061	2,510
Preclinical and development fees	1,447	660	787
Personnel expenses (including share-based compensation)	3,593	1,695	1,898
Professional fees	661	680	(19)
Facilities and supplies	177	99	78
Other expenses	94	68	26
	$ 14,832	$ 8,395	$ 6,437

Research and development expenses were $14.8 million for the three months ended September 30, 2021, compared to $8.4 million for the three months ended September 30, 2020. The increase of $6.4 million was primarily due to (i) a net increase of $2.6 million of KER-050-related expenses, primarily driven by a $2.2 million increase in preclinical and clinical program activities due to the progression of our Phase 2 clinical trial of KER-050 and a $0.3 million increase in manufacturing activities to support the clinical advancement of the program; (ii) a net decrease of $1.4 million of KER-047-related expenses driven by a $1.1 million decrease in clinical expenses due to the completion of our expanded Phase 1 clinical trial and a $0.3 million decrease in manufacturing expenses; (iii) a net increase of $2.5 million of KER-012 related expenses due to a $1.1 million increase in preclinical and clinical program activities due to the commencement of our Phase 1 clinical trial and an increase of $1.4 million in related manufacturing activities; (iv) a $1.9 million increase related to personnel expenses, including additional share-based compensation costs, driven by increased headcount to support the advancement of our pipeline; and (v) a $0.8 million increase in preclinical and development activities. We expect research and development expenses to fluctuate from quarter to quarter depending on the timing of clinical trial activities, clinical manufacturing and other development activities.

General and Administrative Expenses

General and administrative expenses were $5.4 million for the three months ended September 30, 2021, compared to $3.6 million for the three months ended September 30, 2020. The increase of approximately $1.8 million was primarily due to (i) a $1.5 million increase in personnel expenses, which includes additional share-based compensation costs, to support our organizational growth and achievement of our corporate goals; and (ii) an increase of $0.2 million in professional fees primarily due to an increase in legal and recruitment services.

Total Other Expense, Net

Total other expense, net was $0.1 million for each of the three months ended September 30, 2021 and September 30, 2020. The $0.1 million for each period was primarily related to unrealized foreign exchange loss.

Comparison for the nine months ended September 30, 2021 and 2020

The following table summarizes our results of operations for the nine months ended September 30, 2021 and 2020 (in thousands):

	NINE MONTHS ENDED SEPTEMBER 30, 2021	2020
REVENUE:		
License revenue	$ 100	$ —
Total revenue	100	—
OPERATING EXPENSES:		
Research and development	(36,310)	(24,186)
General and administrative	(15,297)	(9,180)
Total operating expenses	(51,607)	(33,366)
LOSS FROM OPERATIONS	(51,507)	(33,366)
OTHER INCOME (EXPENSE), NET		
Interest expense, net	(3)	(5)
Change in fair value of preferred stock tranche obligation	—	(1,490)
Other income (expense), net	(282)	4
Total other expense, net	(285)	(1,491)
Loss before income taxes	(51,792)	(34,857)
Income tax (provision) benefit	(12)	172
Net loss	$ (51,804)	$ (34,685)

Revenue

Our revenue for the nine months ended September 30, 2021 consisted of a one-time license fee under the Neurona Agreement. All revenue under the Neurona Agreement was earned as of September 30, 2021. We did not recognize any revenue for the nine months ended September 30, 2020.

Research and Development Expenses

The following table summarizes our research and development expenses for the nine months ended September 30, 2021 and 2020 (in thousands):

	NINE MONTHS ENDED SEPTEMBER 30, 2021	2020	INCREASE/(DECREASE)
KER-050	$ 8,575	$ 10,216	$ (1,641)
KER-047	2,474	5,295	(2,821)
KER-012	9,957	1,126	8,831
Preclinical and development fees	3,371	1,511	1,860
Personnel expenses (including share-based compensation)	9,251	4,222	5,029
Professional fees	1,967	1,309	658
Facilities and supplies	473	290	183
Other expenses	242	217	25
Total	$ 36,310	$ 24,186	$ 12,124

Research and development expenses were $36.3 million for the nine months ended September 30, 2021, compared to $24.2 million for the nine months ended September 30, 2020. The increase of $12.1 million was primarily due to (i) a net decrease of $1.6 million of KER-050-related expenses primarily driven by a $5.0 million decrease in manufacturing activities to support the clinical advancement of the program, partially offset by a $3.3 million increase in clinical and preclinical program activities due

to the progression of our Phase 2 clinical trial of KER-050; (ii) a net decrease of $2.8 million of KER-047-related expenses driven by a $1.7 million decrease in clinical expenses due to the completion of our expanded Phase 1 clinical trial and a $1.1 million decrease in manufacturing and preclinical expenses; (iii) a net increase of $8.8 million of KER-012 related expense driven by a $7.9 million increase in manufacturing and preclinical activities and $0.9 million increase in our clinical program activities due to the commencement of our Phase 1 clinical trial; (iv) a $1.9 million increase in preclinical and development fees related to general platform development; (v) a $5.0 million increase related to personnel expenses, including additional share-based compensation costs, driven by increased headcount to support the advancement of our pipeline; and (vi) a $0.7 million increase in professional fees to support our organizational growth and the continued advancements of our pipeline. We expect research and development expenses to fluctuate from quarter to quarter depending on the timing of clinical trial activities, clinical manufacturing and other development activities.

General and Administrative Expenses

General and administrative expenses were $15.3 million for the nine months ended September 30, 2021, compared to $9.2 million for the nine months ended September 30, 2020. The increase of approximately $6.1 million was primarily due to (i) a $4.5 million increase in personnel expenses, which includes additional share-based compensation costs, to support our organizational growth and achievement of our corporate goals; (ii) a $0.9 million increase in director and officer insurance premiums recognized; (iii) a $0.4 million in office and facilities expense due to the growth of the organization; and (iv) a $0.4 million increase in fees associated with the filing of our registration statement on Form S-3.

Total Other Expense, Net

Total other expense, net was $0.3 million for the nine months ended September 30, 2021, compared to $1.5 million for the nine months ended September 30, 2020. The change of $1.2 million was primarily related to $1.5 million in expense related to the change in fair value of the preferred stock tranche obligation in 2020, which did not recur in 2021, which was partially offset by a $0.3 million increase in state and local taxes.

Liquidity and Capital Resources

Since our inception, we have incurred significant operating losses. Our net losses were $51.8 million and $34.7 million for the nine months ended September 30, 2021 and 2020, respectively. As of September 30, 2021 and December 31, 2020, we had an accumulated deficit of $116.8 million and $65.0 million, respectively. To date, we have devoted the majority of our efforts into business planning, research and development of our product candidates, including by conducting clinical trials and preclinical studies, raising capital and recruiting management and technical staff to support these operations. Our primary uses of cash are to fund operating expenses, which are primarily research and development expenditures. We expect our expenses to increase substantially in connection with our ongoing activities, particularly as we advance the preclinical studies and clinical trials of our product candidates in development and we will incur additional costs associated with operating as a public reporting company. In addition, if we obtain marketing approval for any of our product candidates, we expect to incur significant commercialization expenses related to establishing sales, marketing, distribution and other commercial infrastructure to commercialize such products.

We do not have any products approved for sale. We do not expect to generate any revenue from product sales unless and until we successfully complete development and obtain regulatory approval for one or more of our product candidates, which we expect will take a number of years. Since our inception, we have funded our operations primarily through equity financings and through research collaborations. In April 2020, we completed our IPO whereby we sold an aggregate of 6,900,000 shares of our common stock for aggregate net proceeds of approximately $100.1 million after deducting underwriting discounts and commissions and offering expenses. In November 2020, we completed a public offering of our common stock, whereby we sold an aggregate of 2,990,000 shares of our common stock for aggregate net proceeds of approximately $140.1 million after deducting underwriting discounts and commissions and offering expenses.

On May 3, 2021, we filed a shelf registration statement on Form S-3, or Shelf, with the Securities and Exchange Commission, or SEC, which was automatically effective upon filing. The Shelf permits us to offer, from time to time, an unspecified amount of common stock, preferred stock, debt securities and warrants. We simultaneously entered into a sales agreement with SVB Leerink LLC, as agent, to provide for the issuance and sale by us of up to $150.0 million of our common stock from time to time in “at the market” offerings under the Shelf, which we refer to as the ATM Program. As of September 30, 2021, no sales have been made pursuant to the ATM Program.

As of September 30, 2021, we had cash and cash equivalents of $221.3 million. We believe that our existing cash and cash equivalents will be sufficient to fund our projected liquidity requirements for at least the next 12 months. We have based this estimate on assumptions that may prove to be wrong, and we could use our capital resources sooner than we currently

expect. Due to the numerous risks and uncertainties associated with the development of our product candidates and programs, and because the extent to which we may enter into collaborations with third parties for development of our product candidates is unknown, we are unable to estimate the timing and amounts of increased capital outlays and operating expenses associated with completing the research and development of our product candidates. Our future funding requirements, both near and long-term, will depend on many factors, including:

- the progress, timing and completion of preclinical studies and clinical trials for our current or any future product candidates, as well as the associated costs, including any unforeseen costs we may incur as a result of preclinical study or clinical trial delays due to the COVID-19 pandemic or other causes;
- the timing and amount of milestone and royalty payments we are required to make or are eligible to receive under our license agreement with The General Hospital Corporation;
- the number of potential new product candidates we identify and decide to develop;
- the need for additional or expanded preclinical studies and clinical trials beyond those that we plan to conduct with respect to our current and future product candidates;
- the costs involved in growing our organization to the size needed to allow for the research, development and potential commercialization of our current or any future product candidates;
- the costs involved in filing patent applications, maintaining and enforcing patents or defending against infringement or other claims raised by third parties;
- the maintenance of our existing license and collaboration agreements and the entry into new license and collaboration agreements;
- the time and costs involved in obtaining regulatory approval for our product candidates and any delays we may encounter as a result of evolving regulatory requirements or adverse results with respect to any of our product candidates;
- the effect of competing technological and market developments;
- the costs of operating as a public company;
- the cost of manufacturing KER-050, KER-047, KER-012 and future product candidates for clinical trials in preparation for marketing approval and in preparation for commercialization;
- the cost of establishing sales, marketing and distribution capabilities for any product candidates for which we may receive regulatory approval in regions where we choose to commercialize our products on our own;
- the amount of revenues, if any, we may derive either directly or in the form of royalty payments from future sales of our product candidates, if approved; and
- market acceptance of any approved product candidates.

In addition, the COVID-19 pandemic continues to rapidly evolve and has already resulted in a significant disruption of global financial markets. If the disruption persists and deepens, we could experience an inability to access additional capital when and if needed. If we are unable to obtain funding, we could be forced to delay, reduce or eliminate some or all of our research and development programs and clinical development efforts, which would adversely affect our business prospects, or we may be unable to continue operations. We do not have any committed external source of funds or other support for our development efforts and we cannot be certain that additional funding will be available on acceptable terms, or at all. Until we can generate sufficient product or royalty revenue to finance our cash requirements, which we may never do, we expect to finance our future cash needs through a combination of public or private equity offerings, debt financings, collaborations, strategic alliances, licensing arrangements and other marketing or distribution arrangements. Adequate additional funding may not be available to us on acceptable terms, or at all. Any failure to raise capital as and when needed could have a negative impact on our financial condition and on our ability to pursue our business plans and strategies.

Cash Flows

The following table summarizes our cash flows for the nine months ended September 30, 2021 and 2020 (in thousands):

	NINE MONTHS ENDED SEPTEMBER 30,	
	2021	**2020**
Net cash used in operating activities	$ (42,583)	$ (28,903)
Net cash used in investing activities	(865)	(234)
Net cash provided by financing activities	134	155,927
Net (decrease) increase in cash, cash equivalents and restricted cash	$ (43,314)	$ 126,790

Operating Activities

Net cash used in operating activities was $42.6 million for the nine months ended September 30, 2021, which was driven by a net loss of $51.8 million, and a $0.9 million increase in net cash used by operating assets and liabilities, including an increase in payables and accrued expenses of $3.4 million and an increase in $0.4 million in operating lease liabilities, partially offset by an increase in prepaid expenses of $2.9 million to support the advancement of our programs. Cash used in operating activities was partially offset by non-cash charges, including $8.4 million of stock-based compensation expense.

During the nine months ended September 30, 2020, cash used in operating activities was $28.9 million, which was driven by a net loss of $34.7 million, offset by non-cash charges including $1.5 million related to the change in the fair value of our preferred stock tranche liability prior to settlement and $2.6 million of stock-stock based compensation expense. Cash used in operating activities was also partially offset by a $1.3 million change in operating assets and liabilities, including (i) an increase in accounts payable and accrued expenses of $2.3 million; (ii) a decrease of $0.6 million in deferred IPO costs; and (iii) receipt of $0.9 million research and development incentive receivable, which were partially offset by (a) a $2.2 million decrease in prepaid expenses and other assets due to the timing of expense recognition for our research and development costs; and (b) a $0.3 million decrease in our operating lease liability.

Investing Activities

Net cash used in investing activities was $0.9 million for the nine months ended September 30, 2021 and $0.2 million for the nine months ended September 30, 2020. The cash used in investing activities in both periods was due to purchases of property and equipment.

Financing Activities

Net cash provided by financing activities of less than $0.1 million for the nine months ended September 30, 2021 was related to exercises of options to purchase common stock.

Net cash provided by financing activities for the nine months ended September 30, 2020 was $155.9 million. The increase was primarily related to the net proceeds $100.1 million from our IPO, net of underwriters' discounts and commissions and offering expenses payable by us, as well as $55.8 million driven by net proceeds from our issuance of Series C preferred stock during the nine months ended September 30, 2020.

Contractual Obligations and Commitments

The following table summarizes our contractual obligations at September 30, 2021 and the effects such obligations are expected to have on our liquidity and cash flow in future periods (in thousands):

	PAYMENTS DUE BY PERIOD				
	TOTAL	LESS THAN 1 YEAR	1 TO 3 YEARS	4 TO 5 YEARS	MORE THAN 5 YEARS
Operating lease commitments	$ 1,372	$ 909	$ 463	$ —	$ —
Loan for leasehold improvements	81	65	16	—	—
Total	$ 1,453	$ 974	$ 479	$ —	$ —

In March 2017, we entered into a lease agreement for our current headquarters located in Lexington, Massachusetts. In July and August 2019, we executed the first and second amendments to our lease, respectively, to expand the rental space to 10,417 square feet. In August 2021, we entered into a third amendment to our lease to extend the lease term through March 31, 2023 and to expand the rental space to 15,622 square feet. The table above includes future minimum lease payments under the non-cancelable lease arrangement.

A portion of the contractual obligations and commitments is related to the loan we received from the landlord of $0.2 million for leasehold improvements. This will be repaid in full by December 2022, but principal payments became due in monthly installments beginning 18 months after the commencement of the lease, which was March 2017.

We have entered into a new lease for rental space in Lexington, Massachusetts, which will serve as our new principal executive office and includes laboratory space, which has not yet commenced. We expect to pay $21.6 million over the lease term of eight years and four months, which we expect to begin in the fourth quarter of 2022.

Critical Accounting Policies and Significant Judgments and Estimates

Our unaudited interim condensed consolidated financial statements are prepared in accordance with generally accepted accounting principles in the United States. The preparation of our unaudited interim condensed consolidated financial statements and related disclosures requires us to make estimates and judgments that affect the reported amounts of assets, liabilities, costs and expenses, and the disclosure of contingent assets and liabilities in our condensed financial statements. We base our estimates on historical experience, known trends and events and various other factors that we believe are reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. We evaluate our estimates and assumptions on an ongoing basis. However, even though we believe we have used reasonable estimates and assumptions in preparing our interim condensed consolidated financial statements, the future effects of the COVID-19 pandemic on our results of operations, cash flows, and financial position are unclear. Our actual results may differ from these estimates under different assumptions or conditions.

There have been no significant changes to our critical accounting policies from those described in “Management’s Discussion and Analysis of Financial Condition and Results of Operations,” included in our Annual Report.

Off-Balance Sheet Arrangements

We did not have during the periods presented, and we do not currently have, any off-balance sheet arrangements, as defined by applicable SEC rules and regulations, such as relationships with unconsolidated entities or financial partnerships, including entities sometimes referred to as structured finance or special purpose entities that were established for the purpose of facilitating off-balance sheet arrangements or other contractually narrow or limited purposes.

Recently Issued Accounting Pronouncements

Refer to Note 2 in the accompanying notes to our unaudited interim condensed consolidated financial statements appearing elsewhere in this Quarterly Report on Form 10-Q for a discussion of recent accounting pronouncements.

Emerging Growth Company Status

We are an emerging growth company, as defined in the Jumpstart Our Business Startups Act of 2012, or the JOBS Act. Under the JOBS Act, emerging growth companies can delay adopting new or revised accounting standards issued subsequent to the enactment of the JOBS Act until such time as those standards apply to private companies. We elected to use this extended transition period for complying with new or revised accounting standards that have different effective dates for public and private companies until the earlier of the date that we (i) are no longer an emerging growth company or (ii) affirmatively and irrevocably opt out of the extended transition period provided in the JOBS Act. We expect to use the extended transition period for any other new or revised accounting standards during the period in which we remain an emerging growth company and, as a result, we will not adopt new or revised accounting standards on the relevant dates on which adoption of such standards is required for other public companies.

We may take advantage of these exemptions until December 31, 2025, or such earlier time that we are no longer an emerging growth company. We would cease to be an emerging growth company on the date that is the earliest of (1) the last day of the fiscal year in which we have total annual gross revenues of $1.07 billion or more; (2) December 31, 2025; (3) the date on which we have issued more than $1.0 billion in nonconvertible debt during the previous three years; or (4) the date on which we are deemed to be a large accelerated filer under the rules of the Securities and Exchange Commission. We may choose to take advantage of some but not all of these exemptions.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

We are exposed to market risks in the ordinary course of our business. Market risk represents the risk of loss that may impact our financial position due to adverse changes in financial market prices and rates. Our market risk exposure is primarily the result of interest rate sensitivities.

Interest Rate Sensitivity

As of September 30, 2021 and December 31, 2020, we had cash and cash equivalents of $221.3 million and $265.9 million, respectively. Our exposure to interest rate sensitivity is impacted by changes in the underlying U.S. bank interest rates. Our surplus cash has been invested in money market fund accounts as well as interest-bearing savings accounts from time to time. We have not entered into investments for trading or speculative purposes. Due to the conservative nature of our

investment portfolio, which is predicated on capital preservation of investments with short-term maturities, we do not believe an immediate one percentage point change in interest rates would have a material effect on the fair market value of our portfolio, and therefore we do not expect our operating results or cash flows to be significantly affected by changes in market interest rates.

As of September 30, 2021 and December 31, 2020, we had no debt outstanding that is subject to interest rate variability, as our only debt is related to our lease incentive allowance. Therefore, we are not subject to interest rate risk related to debt.

ITEM 4. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

We maintain “disclosure controls and procedures,” as defined in Rule 13a-15(e) and Rule 15d-15(e) under the Exchange Act that are designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the SEC’s rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is accumulated and communicated to our management, including our principal executive and principal financial officers, as appropriate to allow timely decisions regarding required disclosure.

Our management, with the participation of our Chief Executive Officer and our Chief Financial Officer, evaluated the effectiveness of our disclosure controls and procedures as of September 30, 2021. Based on the evaluation of our disclosure controls and procedures as of September 30, 2021, our Chief Executive Officer and Chief Financial Officer concluded that, as of such date, our disclosure controls and procedures were effective at the reasonable assurance level.

Changes in Internal Control Over Financial Reporting

There was no change in our internal control over financial reporting identified in connection with the evaluation required by Rule 13a-15(d) and 15d-15(d) of the Exchange Act that occurred during the period covered by this Quarterly Report on Form 10-Q that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

As a result of the COVID-19 pandemic, certain employees began working remotely in March 2020. Notwithstanding these changes to the working environment, we have not identified any material changes in our internal control over financial reporting. We will continue to monitor and assess the COVID-19 situation to determine any potential impact on the design and operating effectiveness of our internal controls over financial reporting.

Inherent Limitations on Effectiveness of Controls

Our disclosure controls and procedures and internal control over financial reporting are designed to provide reasonable assurance of achieving the desired control objectives. Our management recognizes that any control system, no matter how well designed and operated, is based upon certain judgments and assumptions and cannot provide absolute assurance that its objectives will be met. Similarly, an evaluation of controls cannot provide absolute assurance that misstatements due to error or fraud will not occur or that all control issues and instances of fraud, if any, have been detected.

PART II – OTHER INFORMATION

ITEM 1. LEGAL PROCEEDINGS

From time to time, we may become subject to arbitration, litigation or claims arising in the ordinary course of business. We are not currently a party to any material arbitration or legal proceedings. The results of any future claims or proceedings cannot be predicted with certainty, and regardless of the outcome, litigation can have an adverse impact on us because of defense and litigation costs, diversion of management resources, and other factors.

ITEM 1A. RISK FACTORS

Our business is subject to numerous risks. You should consider carefully the risks and uncertainties described below, in addition to other information contained in this Quarterly Report on Form 10-Q as well as our other public filings with the Securities and Exchange Commission, or the SEC. Any of the following risks could have a material adverse effect on our business, financial condition, results of operations and growth prospects and cause the trading price of our common stock to decline.

Risks Related to Our Financial Position and Need for Additional Capital

We have a limited operating history, have incurred net losses in every year since our inception and anticipate that we will continue to incur net losses in the future.

We are a clinical-stage biopharmaceutical company with a limited operating history. Since our inception in 2015, we have invested most of our resources in developing our product candidates, building our intellectual property portfolio, developing our supply chain, conducting business planning, raising capital and providing general and administrative support for these operations. Consequently, we have no meaningful operations upon which to evaluate our business and predictions about our future success or viability may not be as accurate as they could be if we had a longer operating history or a history of successfully developing and commercializing drug products. Investment in biopharmaceutical product development is highly speculative because it entails substantial upfront capital expenditures and significant risk that any potential product candidate will fail to demonstrate adequate effect or an acceptable safety profile, gain regulatory approval and become commercially viable. We have not yet demonstrated the ability to progress any product candidate through late-stage clinical trials, we have no products approved for commercial sale and we have not generated any revenue from product sales to date. We continue to incur significant research and development and other expenses related to our ongoing operations. As a result, we are not profitable and have incurred losses in each period since our inception. For the three and nine months ended September 30, 2021, we reported a net loss of $20.3 million and $51.8 million, respectively. As of September 30, 2021, we had an accumulated deficit of $116.8 million. We expect to continue to incur significant losses for the foreseeable future, and we expect these losses to increase as we continue our research and development of, and seek regulatory approvals for, our lead protein therapeutic product candidate, KER-050, our lead small molecule product candidate, KER-047, our third product candidate, KER-012, and any future product candidates we may develop.

We anticipate that our expenses will increase substantially if, and as, we:

- complete our Phase 2 clinical trial of KER-050 evaluating the treatment of cytopenias, including anemia and thrombocytopenia, in patients with myelodysplastic syndrome, or MDS;
- commence an open-label Phase 2 clinical trial of KER-050 evaluating the treatment of cytopenias, including anemia and thrombocytopenia, in patients with myelofibrosis in the fourth quarter of 2021;
- commence two open-label Phase 2 clinical trials of KER-047 in the first quarter of 2022, one in patients with iron-deficiency anemia, or IDA, and one in patients with iron-refractory iron deficiency anemia, or IRIDA;
- initiate a Phase 2 clinical trial of KER-047 in patients with fibrodysplasia ossificans progressiva, or FOP;
- progress our Phase 1 clinical trial of KER-012 in healthy volunteers;
- continue the research and development of our other clinical- and preclinical-stage product candidates and discovery-stage programs;
- increase the amount of research and development activities to identify and develop product candidates using our proprietary discovery approach;
- make milestone, royalty or other payments under in-license or collaboration agreements;
- maintain, expand and protect our intellectual property portfolio;
- expand our operational, financial and management systems and increase personnel, including personnel to support our clinical development, manufacturing and commercialization efforts and our operations as a public company;
- establish a sales, marketing, medical affairs and distribution infrastructure to commercialize any products for which we may obtain marketing approval and intend to commercialize on our own or jointly with third parties;
- invest in or in-license other technologies; and
- experience any delays or encounter any issues with any of the above, including but not limited to failed studies, complex results, manufacturing challenges, safety issues or other regulatory challenges.

To become and remain profitable, we, our collaborators and any potential future collaborators must develop and eventually commercialize products with significant market potential. This will require us to be successful in a range of challenging activities, including completing preclinical studies and clinical trials, obtaining marketing approval for product candidates, manufacturing, marketing and selling products for which we may obtain marketing approval and satisfying any post-marketing requirements. We may never succeed in any or all of these activities and, even if we do, we may never generate revenue that is significant or large enough to achieve profitability. If we do achieve profitability, we may not be able to sustain or increase profitability on a quarterly or annual basis. Our failure to become and remain profitable would decrease the value of our company and could impair our ability to raise capital, maintain our research and development efforts, expand our business or continue our operations. A decline in the value of our company also could cause you to lose all or part of your investment.

Even if we succeed in commercializing one or more of our product candidates, we will continue to incur substantial research and development and other expenditures to develop and market additional product candidates. We may encounter unforeseen expenses, difficulties, complications, delays and other unknown factors that may adversely affect our business. The size of our future net losses will depend, in part, on the rate of future growth of our expenses and our ability to generate revenue. Our prior losses and expected future losses have had and will continue to have an adverse effect on our stockholders' equity and working capital.

We will need substantial additional funding in order to complete the development and commence commercialization of our product candidates. Failure to obtain this necessary capital when needed may force us to delay, reduce or eliminate certain of our product development or research operations.

To date, we have funded our operations primarily through private placements of our equity securities, upfront and expense reimbursement payments received from our collaborators, from our initial public offering, or IPO, in April 2020 and from our public offering of common stock in November 2020. We expect our expenses to increase in connection with our ongoing activities, particularly as we complete our Phase 2 clinical trial of KER-050 in patients with MDS, initiate our Phase 2 clinical trial of KER-050 in patients with myelofibrosis, initiate three Phase 2 clinical trials of KER-047, one in patients with IDA, one in patients with IRIDA and one in patients with FOP, advance KER-012 into clinical development and initiate later-stage clinical development, and continue to research, develop and initiate clinical trials of any other future product candidates. In addition, if we obtain regulatory approval for any of our product candidates, we expect to incur significant commercialization expenses related to product manufacturing, marketing, sales and distribution. Furthermore, we expect to incur additional costs associated with operating as a public company. Accordingly, we will need to obtain substantial additional funding in connection with our continuing operations. If we are unable to raise capital when needed or on attractive terms, we could be forced to delay, reduce or eliminate our product development programs or any future commercialization efforts.

At September 30, 2021, we had $221.3 million in cash and cash equivalents. We expect that our existing cash and cash equivalents as of September 30, 2021 will enable us to fund our operating expenses and capital expenditure requirements into the fourth quarter of 2023. We have based this estimate on assumptions that may prove to be wrong, and we could use our capital resources sooner than we currently expect. Our future capital requirements for KER-050, KER-047, KER-012 or our other preclinical programs will depend on many factors, including:

- the progress, timing and completion of preclinical studies and clinical trials for our current or any future product candidates, as well as the associated costs, including any unforeseen costs we may incur as a result of preclinical study or clinical trial delays due to the COVID-19 pandemic or other causes;
- the timing and amount of milestone and royalty payments we are required to make or are eligible to receive under our license agreement with The General Hospital Corporation;
- the number of potential new product candidates we identify and decide to develop;
- the need for additional or expanded preclinical studies and clinical trials beyond those that we plan to conduct with respect to our current and future product candidates;
- the costs involved in growing our organization to the size needed to allow for the research, development and potential commercialization of our current or any future product candidates;
- the costs involved in filing patent applications, maintaining and enforcing patents or defending against infringement or other claims raised by third parties;
- the maintenance of our existing license and collaboration agreements and the entry into new license and collaboration agreements;
- the time and costs involved in obtaining regulatory approval for our product candidates and any delays we may encounter as a result of evolving regulatory requirements or adverse results with respect to any of our product candidates;
- the effect of competing technological and market developments;
- the cost of manufacturing KER-050, KER-047, KER-012 and future product candidates for clinical trials in preparation for marketing approval and in preparation for commercialization;
- the cost of establishing sales, marketing and distribution capabilities for any product candidates for which we may receive regulatory approval in regions where we choose to commercialize our products on our own;
- the amount of revenues, if any, we may derive either directly or in the form of royalty payments from future sales of our product candidates, if approved; and
- market acceptance of any approved product candidates

We do not have any committed external source of funds or other support for our development efforts and we cannot be certain that additional funding will be available on acceptable terms, or at all. Until we can generate sufficient product or royalty revenue to finance our cash requirements, which we may never do, we expect to finance our future cash needs through a combination of public or private equity offerings, debt financings, collaborations, strategic alliances, licensing arrangements and other marketing or distribution arrangements.

Our ability to raise additional funds will depend on financial, economic and market conditions and other factors, over which we may have no or limited control. For example, the COVID-19 pandemic continues to rapidly evolve and has already resulted in a significant disruption of the global financial markets. If the disruption persists and deepens, we could experience an inability to access additional capital when and if needed. If we are unable to obtain additional funding, we could be forced to delay, reduce or eliminate some or all of our research and development programs and clinical development efforts, which would adversely affect our business prospects, or we may be unable to continue operations.

Raising additional capital may cause dilution to holders of our common stock, 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 revenues, we expect to finance our operations with our existing cash and cash equivalents and revenue from our collaborations. In order to further advance development of our product candidates, discover additional product candidates and pursue our other business objectives, we will need to seek additional funds.

We cannot guarantee that future financing will be available in sufficient amounts or on commercially reasonable terms, if at all. Moreover, the terms of any financing may adversely affect the holdings or the rights of holders of our common stock and the issuance of additional securities, whether equity or debt, by us, or the possibility of such issuance, may cause the market price of our common stock to decline. The sale of additional common stock or securities convertible or exchangeable into common stock would dilute all of our existing stockholders and the terms of these securities may include liquidation or other preferences that adversely affect your rights as a holder of our common stock. The incurrence of indebtedness could result in increased fixed payment obligations and we may be required to agree to certain restrictive covenants, such as limitations on our ability to incur additional debt or declare dividends, limitations on our ability to acquire, sell or license intellectual property rights and other operating restrictions that could adversely impact our ability to conduct our business If we raise additional capital through marketing and distribution arrangements or other collaborations, strategic alliances or licensing arrangements with third parties, we may have to relinquish certain valuable rights to our product candidates, technologies, future revenue streams or research programs or grant licenses on terms that may not be favorable to us. We also could be required to seek collaborators for KER-050, KER-047, KER-012 or any future product candidate at an earlier stage than otherwise would be desirable or relinquish our rights to product candidates or technologies that we otherwise would seek to develop or commercialize ourselves. Further, any additional fundraising efforts may divert our management from its day-to-day activities, which may adversely affect our ability to develop and commercialize our product candidates.

If we are unable to raise additional capital in sufficient amounts or on terms acceptable to us, we may have to significantly delay, scale back or discontinue the development or commercialization of one or more of our product candidates or one or more of our other research and development initiatives. Any of the above events could significantly harm our business, prospects, financial condition and results of operations and cause the price of our common stock to decline.

Risks Related to the Discovery, Development and Regulatory Approval of our Product Candidates

We are heavily dependent on the success of our product candidates, which are in early clinical development. If we are unable to advance our current or future product candidates through clinical trials, obtain marketing approval and ultimately commercialize any product candidates we develop, or experience significant delays in doing so, our business will be materially harmed.

Before obtaining marketing approval from regulatory authorities for the sale of our product candidates, we must conduct extensive clinical trials to demonstrate the safety and efficacy of the product candidates in humans. We are early in our product candidate development efforts, as KER-050, KER-047 and KER-012 are still in early-stage clinical trials. Because KER-050 and KER-047 are our lead product candidates, if either KER-050 or KER-047 encounters safety or efficacy problems, development delays or regulatory issues or other problems, our development plans and business would be significantly harmed.

Our ability to generate product revenues, which we do not expect will occur for several years, if ever, will depend heavily on the successful development and eventual commercialization of KER-050, KER-047, KER-012 and any future product candidates we develop, which may never occur. KER-050, KER-047, KER-012 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 jurisdictions for specific indications for use, demonstrating effectiveness to pricing and reimbursement authorities, obtaining sufficient manufacturing supply for both clinical development and commercial production, building of a commercial organization and substantial investment and significant marketing efforts before we generate any revenues from product sales. The success of our current and future product candidates will depend on several factors, including the following:

- successful and timely completion of clinical trials and preclinical studies for which the U.S. Food and Drug Administration, or the FDA, or any comparable foreign regulatory authority agree with the design, endpoints or implementation;
- sufficiency of our financial and other resources to complete the necessary preclinical studies and clinical trials;
- receiving regulatory approvals or authorizations for conducting our planned clinical trials or future clinical trials;
- initiation and successful patient enrollment in, and completion of, additional clinical trials on a timely basis;
- our ability to demonstrate to the satisfaction of the FDA or any comparable foreign regulatory authority that the applicable product candidate is safe and effective as a treatment for our targeted indications or, in the case of an applicable product candidates which is regulated as a biological product, that the applicable product is safe, pure, and potent for our targeted indications;
- our ability to demonstrate to the satisfaction of the FDA or any comparable foreign regulatory authority that the applicable product candidate's risk-benefit ratio for its proposed indication is acceptable;
- timely receipt of marketing approvals for our product candidates from applicable regulatory authorities;
- the extent of any required post-marketing approval commitments to applicable regulatory authorities;
- establishing and scaling up, either alone or with third-party manufacturers, manufacturing capabilities of clinical supply for our clinical trials and commercial manufacturing, if any of our product candidates are approved;
- obtaining and maintaining patent and trade secret protection or regulatory exclusivity for our product candidates, both in the United States and internationally;
- successfully scaling a sales and marketing organization and launching commercial sales of our product candidates, if approved;
- acceptance of our product candidates' benefits and uses, if approved, by patients, the medical community and third-party payors;
- maintaining a continued acceptable safety profile of our product candidates following approval;
- effectively competing with companies developing and commercializing other therapies in the indications which our product candidates target;
- obtaining and maintaining healthcare coverage and adequate reimbursement from third-party payors; and
- enforcing and defending intellectual property rights and claims.

If we are not successful with respect to one or more of these factors in a timely manner or at all, we could experience significant delays or an inability to successfully commercialize KER-050, KER-047, KER-012 or any future product candidates we develop, which would materially harm our business. If we do not receive marketing approvals for our current and future product candidates, we may not be able to continue our operations.

All of our product candidates are in preclinical or early clinical development stages. Clinical trials are difficult to design and implement, and they involve a lengthy and expensive process with uncertain outcomes. We may experience delays in completing, or ultimately be unable to complete, the development and commercialization of KER-050, KER-047, KER-012 or any future product candidates.

Clinical testing is expensive and can take many years to complete, and its outcome is inherently uncertain. Failure can occur at any time during the clinical trial process and our future clinical trial results may not be successful. We cannot guarantee that any of our ongoing and planned clinical trials will be conducted as planned or completed on schedule, if at all. Moreover, even if these trials are initiated or conducted on a timely basis, issues may arise that could result in the suspension or termination of such clinical trials.

To date, we have not completed any clinical trials required for the approval of any of our product candidates. Although we have completed our Phase 1 clinical trial of KER-050 and our expanded Phase 1 clinical trial of KER-047, each in healthy volunteers, we may experience delays in our ongoing clinical trials or preclinical studies and we do not know whether planned

clinical trials will begin on time, need to be redesigned, enroll patients on time, have sufficient drug supply for our product candidates on a timely basis or be completed on schedule, if at all. A failure of one or more clinical trials can occur at any stage of testing, and our ongoing and future clinical trials may not be successful. We also may experience numerous unforeseen events during our clinical trials that could delay or prevent our ability to receive marketing approval or commercialize KER-050, KER-047, KER-012 or any future product candidates, including:

- delays in or failure to obtain regulatory authorizations to commence a trial;
- delays in reaching a consensus with regulatory agencies as to the design or implementation of our clinical trials;
- delays in or failure to reach agreement on acceptable terms with prospective contract research organizations, or CROs, and clinical trial sites, the terms of which can be subject to extensive negotiation and may vary significantly among different CROs and trial sites;
- delays in or failure to obtain institutional review board, or IRB, or ethics committee approval at each site;
- delays in or failure to recruit a sufficient number of suitable patients to participate in a trial;
- failure to have patients complete a trial or return for post-treatment follow-up, including disruptions in our ability to treat patients or conduct post-treatment follow-up due to the COVID-19 pandemic;
- clinical sites deviating from trial protocol, missing data or dropping out of a trial;
- delays in adding new clinical trial sites;
- failure to manufacture sufficient quantities of our product candidates for use in clinical trials in a timely manner;
- occurrence of adverse events associated with the product candidate that are viewed to outweigh its potential benefits, or safety or tolerability concerns that could cause us or our collaborators, as applicable, to suspend or terminate a trial if we or our collaborators find that the participants are being exposed to unacceptable health risks;
- failure to perform clinical trials in accordance with the FDA's or any other regulatory authority's good clinical practices, or GCP, requirements, or regulatory guidelines in other countries;
- changes in regulatory requirements, policies and guidelines;
- failure of our third-party research contractors to comply with regulatory requirements or meet their contractual obligations to us in a timely manner, or at all;
- delays in establishing the appropriate dosage levels and frequency of dosing in clinical trials;
- the quality or stability of our product candidates falling below acceptable standards;
- delays due to the COVID-19 pandemic; and
- business interruptions resulting from geo-political actions, including war and terrorism, another outbreak of a contagious disease, or natural disasters including earthquakes, typhoons, floods and fires.

In addition, disruptions caused by the COVID-19 pandemic have resulted in difficulties and delays in initiating, enrolling, conducting or completing our planned and ongoing preclinical studies and clinical trials, as applicable,
and may increase the likelihood that we encounter additional difficulties and delays in the future. We could also encounter delays if a clinical trial is suspended or terminated by us, the IRBs of the institutions in which such trials are being conducted, or the FDA or comparable foreign regulatory authorities, or recommended for suspension or termination by the Safety Review Committee for such trial. A suspension or termination may be imposed 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 comparable foreign 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 or treatment, failure to establish or achieve clinically meaningful trial endpoints, changes in governmental regulations or administrative actions or lack of adequate funding to continue the clinical trial. Many of 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. Further, the FDA or comparable foreign regulatory authorities may disagree with our clinical trial design and our interpretation of data from clinical trials, or may change the requirements for approval even after they have reviewed and commented on the design for our clinical trials.

Our product development costs will increase if we experience delays in clinical testing or marketing approvals. We do not know whether any of our clinical trials will begin as planned, will need to be restructured or will be completed on schedule, or at all. Significant clinical trial delays also could shorten any periods during which we may have the exclusive right to commercialize our product candidates and may allow our competitors to bring products to market before we do, potentially impairing our ability to successfully commercialize our product candidates and harming our business and results of operations. Any delays in our clinical development programs may harm our business, financial condition and results of operations significantly.

Our clinical trials may fail to demonstrate substantial evidence of the safety and efficacy or safety, purity and potency of our product candidates or any future product candidates, which would prevent or delay or limit the scope of regulatory approval and commercialization.

To obtain the requisite regulatory approvals to market and sell any of our product candidates, including KER-050, KER-047, KER-012 and any other future product candidates, we must demonstrate through extensive preclinical studies and clinical trials that our investigational drug products, such as KER-047, are safe and effective for use in each targeted indication, and in the case of our product candidates regulated as biological products, such as KER-050 and KER-012, that the product candidate is safe, pure and potent for use in its targeted indication. Clinical testing is expensive and can take many years to complete, and its outcome is inherently uncertain. Failure can occur at any time during the clinical development process. Most product candidates that begin clinical trials are never approved by regulatory authorities for commercialization. We may be unable to establish clinical endpoints that applicable regulatory authorities would consider clinically meaningful, and a clinical trial can fail at any stage of testing. Further, the process of obtaining regulatory approval is expensive, often takes many years following the commencement of clinical trials and can vary substantially based upon the type, complexity and novelty of the product candidates involved, as well as the target indications, patient population and regulatory agency. Prior to obtaining approval to commercialize KER-050, KER-047, KER-012 and any future product candidates in the United States or abroad, we, our collaborators or our potential future collaborators must demonstrate with substantial evidence from adequate and well-controlled clinical trials, and to the satisfaction of the FDA or comparable foreign regulatory authorities, that such product candidates are safe and effective for their intended uses.

Clinical trials that we conduct may not demonstrate the efficacy and safety necessary to obtain regulatory approval to market our product candidates. In some instances, there can be significant variability in safety or efficacy results between different clinical trials of the same product candidate due to numerous factors, including changes in trial procedures set forth in protocols, differences in the size and type of the patient populations, changes in and adherence to the clinical trial protocols and the rate of dropout among clinical trial participants. If the results of our ongoing or future clinical trials are inconclusive with respect to the efficacy of our product candidates, if we do not meet the clinical endpoints with statistical and clinically meaningful significance, or if there are safety concerns associated with our product candidates, we may be delayed in obtaining marketing approval, if at all. Additionally, any safety concerns observed in any one of our clinical trials in our targeted indications could limit the prospects for regulatory approval of our product candidates in those and other indications.

Even if the trials are successfully completed, clinical data are often susceptible to varying interpretations and analyses, and we cannot guarantee that the FDA or comparable foreign regulatory authorities will interpret the results as we do, and more trials could be required before we submit our product candidates for approval. We cannot guarantee that the FDA or comparable foreign regulatory authorities will view our product candidates as having efficacy even if positive results are observed in clinical trials. Moreover, results acceptable to support approval in one jurisdiction may be deemed inadequate by another regulatory authority to support regulatory approval in that other jurisdiction. To the extent that the results of the trials are not satisfactory to the FDA or comparable foreign regulatory authorities for support of a marketing application, approval of KER-050, KER-047, KER-012 and any future product candidates may be significantly delayed, or we may be required to expend significant additional resources, which may not be available to us, to conduct additional trials in support of potential approval of our product candidates. Even if regulatory approval is secured for a product candidate, the terms of such approval may limit the scope and use of the specific product candidate, which may also limit its commercial potential.

The results of preclinical studies and early-stage clinical trials of our product candidates may not be predictive of the results of later-stage clinical trials. Initial success in our ongoing clinical trials may not be indicative of results obtained when these trials are completed or in later-stage trials.

The results of nonclinical and preclinical studies and clinical trials may not be predictive of the results of later-stage clinical trials. Product candidates in later stages of clinical trials may fail to show the desired safety and efficacy traits despite having progressed through preclinical studies and initial clinical trials. Furthermore, there can be no assurance that any of our clinical trials will ultimately be successful or support further clinical development of any of our product candidates. There is a high failure rate for product candidates proceeding through clinical trials. Many companies in the biotechnology and pharmaceutical industries have suffered significant setbacks in late-stage clinical trials after achieving positive results in early-stage development and we cannot be certain that we will not face similar setbacks. These setbacks have been caused by, among other things, preclinical findings made while clinical trials were underway, or safety or efficacy observations made in preclinical studies and clinical trials, including previously unreported adverse events. Moreover, preclinical and clinical data are often susceptible to varying interpretations and analyses and many companies that believed their product candidates performed

satisfactorily in preclinical studies and clinical trials nonetheless failed to obtain FDA approval. Any such setbacks in our clinical development could have a material adverse effect on our business, financial condition and results of operations.

Additionally, some of the clinical trials we conduct may include open-label trials conducted at a limited number of clinical sites on a limited number of patients. For example, our ongoing Phase 2 clinical trial for KER-050 in patients with MDS is an open-label trial. An "open-label" clinical trial is one where both the patient and investigator know whether the patient is receiving the investigational product candidate or either an existing approved product or placebo. Most typically, open-label clinical trials test only the investigational product candidate and sometimes may do so at different dose levels. For example, in our ongoing Phase 2 clinical trial for KER-050 in patients with MDS, the dose levels for Cohorts 1, 2, 3 and 4 are 0.75 mg/kg, 1.5 mg/kg, 2.5 mg/kg and 3.75 mg/kg, respectively.

Open-label clinical trials are also subject to various limitations that may exaggerate any therapeutic effect as patients in open-label clinical trials are aware when they are receiving treatment. Open-label clinical trials may be subject to a "patient bias" where patients perceive their symptoms to have improved merely due to their awareness of receiving an experimental treatment. Moreover, patients selected for early-stage clinical trials often include the most severe sufferers and their symptoms may have been bound to improve notwithstanding the new treatment. In addition, open-label clinical trials may be subject to an "investigator bias" where those assessing and reviewing the physiological outcomes of the clinical trials are aware of which patients have received treatment and may interpret the information of the treated group more favorably given this knowledge. Given that open-label Phase 2 clinical trials are both ongoing and planned for KER-050 and planned for KER-047, the results from these clinical trials may not be predictive of future clinical trial results with these or other product candidates for which we include an open-label clinical trial when studied in a controlled environment with a placebo or active control.

Our product candidates may be associated with serious adverse, undesirable or unacceptable side effects or other properties or safety risks, which may delay or halt their clinical development, or prevent marketing approval. If such side effects are identified during the development of our product candidates or following approval we may suspend or abandon our development of such product candidates, the commercial profile of any approved label may be limited, or we may be subject to other significant negative consequences following marketing approval.

Undesirable side effects that may be caused by our product candidates could cause us or regulatory authorities to interrupt, delay or halt clinical trials and could result in a more restrictive label or the delay or denial of regulatory approval by the FDA or comparable foreign regulatory authorities. While our lead product candidates, KER-050 and KER-047, have generally been well tolerated in our preclinical studies and clinical trials to date, the results from future preclinical studies and clinical trials, including of KER-012 and our other product candidates, may identify safety concerns or other undesirable properties of our product candidates.

The results of our ongoing and planned Phase 2 clinical trials of KER-050, our planned Phase 2 clinical trials of KER-047, our ongoing Phase 1 clinical trial of KER-012 and future clinical trials of these and other product candidates may show that our product candidates cause undesirable or unacceptable side effects or even death. In such an event, our trials could be suspended or terminated and the FDA or comparable foreign regulatory authorities could order us to cease further development of 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. Any of these occurrences may harm our business, financial condition and results of operations significantly.

Moreover, if our product candidates are associated with undesirable side effects in preclinical studies or clinical trials or have characteristics that are unexpected, we may elect to abandon their development or limit their development to more narrow uses or subpopulations in which the undesirable side effects or other characteristics are less prevalent, less severe or more acceptable from a risk-benefit perspective, which may limit the commercial expectations for the product candidate, if approved. Additionally, adverse developments in clinical trials of pharmaceutical and biopharmaceutical products conducted by others may cause the FDA or other regulatory oversight bodies to suspend or terminate our clinical trials or to change the requirements for approval of any of our product candidates.

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

- regulatory authorities may withdraw approvals of such product and require us to take our approved product off the market;
- regulatory authorities may require the addition of labeling statements, specific warnings, a contraindication or field alerts to physicians and pharmacies;
- regulatory authorities may require a medication guide outlining the risks of such side effects for distribution to patients, or that we implement a risk evaluation and mitigation strategy, or REMS, plan to ensure that the benefits of the product outweigh its risks;
- we may be required to conduct additional clinical trials, which may lead to additional interactions with regulatory authorities;
- we may be required to change the way the product is administered, conduct additional clinical trials or change the labeling of the product;
- we may be subject to limitations on how we may promote the product;
- sales of the product may decrease significantly;
- we may be subject to litigation or product liability claims; and
- our reputation may suffer.

Any of these events could prevent us, our collaborators or our potential future partners from achieving or maintaining market acceptance of the affected product or could substantially increase commercialization costs and expenses, which in turn could delay or prevent us from generating significant revenue from the sale of our product candidates, if approved.

We may find it difficult to enroll patients in our clinical trials, which could delay or prevent us from proceeding with, or otherwise adversely affect, clinical trials of our product candidates.

Identifying and qualifying patients to participate in clinical trials of our product candidates is critical to our success. The timely completion of our clinical trials in accordance with their protocols depends, among other things, on our ability to recruit a sufficient number of eligible patients to participate and remain in the trial until its conclusion. Patients may be unwilling to participate in our clinical trials because of negative publicity from adverse events related to novel therapeutic approaches, competitive clinical trials for similar patient populations, the existence of current treatments or for other reasons, including the ongoing COVID-19 pandemic. Any delays related to patient enrollment or difficulties related to patient retention could result in increased costs, delays in advancing our product candidates, delays in testing the effectiveness of our product candidates or termination of the clinical trials altogether. We may not be able to identify, recruit and enroll a sufficient number of patients, or those with the required or desired characteristics, to complete our clinical trials in a timely manner. Patient enrollment and trial completion is affected by many factors, including the:

- size and nature of the patient population and process for identifying patients;
- proximity and availability of clinical trial sites for prospective patients;
- ability of patients to travel to clinical trial sites;
- eligibility and exclusion criteria for the trial;
- design of the clinical trial;
- safety profile, to date, of the product candidate under study;
- perceived risks and benefits of the product candidate under study;
- perceived risks and benefits of our approach;
- approval of competing product candidates currently under investigation for the treatment of similar diseases or conditions, or competing clinical trials for similar product candidates or targeting patient populations meeting our patient eligibility criteria;
- severity of the disease under investigation;
- degree of progression of the patient's disease at the time of enrollment and throughout the clinical trial;
- ability to obtain and maintain patient consent;
- risk that enrolled patients will drop out before completion of the trial;
- patient referral practices of physicians; and
- ability to adequately monitor patients during and after treatment.

Enrollment risks are heightened with respect to indications that are rare or orphan diseases, which may limit the pool of patients that may be enrolled in our planned clinical trials. For example, we are developing KER-047 for the treatment of FOP, which is a rare genetic disease, affecting an estimated 3,500 people worldwide. As a result, we may encounter difficulties enrolling participants in our clinical trials evaluating KER-047 for the treatment of FOP due, in part, to the small size of this patient population. In addition, our clinical trials will compete with other clinical trials for product candidates that are in the

same therapeutic areas as our product candidates, and this competition will reduce the number and types of patients available to us, because 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. Since the number of qualified clinical investigators is limited, we expect to conduct some of our clinical trials at the same clinical trial sites that some of our competitors use, which will reduce the number of patients who are available for our clinical trials in such clinical trial site.

Delays related to patient enrollment and difficulties related to patient retention may result in increased costs or may affect the timing or outcome of our future clinical trials, which could prevent completion of these trials and adversely affect our ability to advance the development of our product candidates.

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 publish interim, topline or preliminary data from our clinical trials. Preliminary and interim data from our clinical trials may change as more participant data become available. For example, in June 2021, we announced preliminary results from Cohorts 1 and 2 of our Phase 2 clinical trial evaluating KER-050 for the treatment of anemia and thrombocytopenia in patients with very low-, low-, or intermediate-risk MDS, which only included a small subset of the patients expected to be enrolled in the trial. Preliminary or interim data from our clinical trials are not necessarily predictive of final results. Preliminary and interim data are subject to the risk that one or more of the clinical outcomes may materially change as enrollment continues, more trial data become available and we issue our final clinical trial report. Interim, topline and preliminary data also remain subject to audit and verification procedures that may result in the final data being materially different from the preliminary data we previously published. As a result, preliminary, topline and interim data should be viewed with caution until the final data are available. Material adverse changes in the final data compared to the interim data could significantly harm our business prospects.

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, if any, and our company in general. In addition, the information we choose to publicly disclose regarding a particular preclinical study or clinical trial is based on what is typically extensive information, and you or others may not agree with what we determine is the material or otherwise appropriate information to include in our disclosure, and any information we determine not to disclose may ultimately be deemed significant with respect to future decisions, conclusions, views, activities or otherwise regarding a particular product, if any, product candidate or our business. If the preliminary and interim 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 harm our business, operating results, prospects or financial condition.

Preclinical development is uncertain. Our preclinical programs may experience delays or may never advance to clinical trials, which would adversely affect our ability to obtain regulatory approvals or commercialize these programs on a timely basis or at all, which would have an adverse effect on our business.

Before we can commence clinical trials for any product candidate, we must complete extensive preclinical studies that support any future Investigational New Drug, or IND, applications in the United States, or similar applications in other jurisdictions. We have not submitted any IND to the FDA and all of our clinical trials have, to date, been conducted in Australia and New Zealand. Conducting preclinical testing is a lengthy, time-consuming and expensive process and delays associated with product candidates for which we are directly conducting preclinical testing and studies may cause us to incur additional operating expenses. While we are conducting a Phase 2 clinical trial for KER-050 in patients with MDS and a Phase 1 clinical trial for KER-012 in healthy volunteers, and plan to initially conduct a Phase 2 clinical trial for KER-050 in patients with myelofibrosis and two Phase 2 clinical trials for KER-047, one in patients with IDA and one in patients with IRIDA, outside of the United States, we cannot be certain of the timely completion or outcome of our preclinical testing and studies for our other product candidates and cannot predict if the FDA will accept our proposed clinical programs or if the outcome of our preclinical testing and foreign clinical trials will ultimately support the further development of our other product candidates. As a result, we cannot be sure that we will be able to submit INDs or similar applications for our preclinical programs on the timelines we expect, if at all, and we cannot be sure that submission of INDs or similar applications will result in the FDA or comparable foreign regulatory authorities allowing clinical trials to begin.

Our research and development activities could be affected or delayed as a result of possible restrictions on animal testing.

Certain laws and regulations require us to test our product candidates on animals before initiating clinical trials involving humans. Animal testing activities have been the subject of controversy and adverse publicity. Animal rights groups and other organizations and individuals have attempted to stop animal testing activities by pressing for legislation and regulation in these areas and by disrupting these activities through protests and other means. To the extent the activities of these groups are successful, our research and development activities may be interrupted, delayed or become more expensive.

The regulatory approval processes of the FDA and comparable foreign 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 foreign 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, laws or 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. We have not obtained regulatory approval for any product candidate and it is possible that none of our existing product candidates or any product candidates we may seek to develop in the future will ever obtain regulatory approval.

Our product candidates could fail to receive regulatory approval for many reasons, including the following:

- the FDA or comparable foreign regulatory authorities may disagree with the design or implementation of our clinical trials;
- we may be unable to demonstrate to the satisfaction of the FDA or comparable foreign regulatory authorities that a product candidate is safe and effective as a treatment for our targeted indications, or, in the case of a product candidate regulated as a biological product, that the product candidate is safe, pure and potent for its proposed indication;
- the population studied may not be sufficiently broad or representative to assure safety or efficacy in the population for which we seek approval;
- the results of clinical trials may not meet the level of statistical significance required by the FDA or comparable foreign regulatory authorities for approval;
- we may be unable to demonstrate that a product candidate's clinical and other benefits outweigh its safety risks;
- the FDA or comparable foreign regulatory authorities may disagree with our interpretation of data from preclinical studies or clinical trials;
- the FDA or comparable foreign regulatory authorities may require additional preclinical studies or clinical trials beyond those that we currently anticipate;
- the data collected from clinical trials of our product candidates may not be sufficient to support the submission of a New Drug Application, or NDA, or a Biologics License Application, or BLA, as applicable, to the FDA or other submission or to obtain regulatory approval in the United States or elsewhere;
- the FDA or comparable foreign regulatory authorities may find deficiencies with or 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 any comparable foreign regulatory authorities or the laws they enforce may significantly change in a manner rendering our clinical data insufficient for approval.

This lengthy approval process as well as the unpredictability of future clinical trial results may result in our failing to obtain regulatory approval to market any of our product candidates, which would significantly harm our business, financial condition and results of operations. The FDA and comparable foreign regulatory authorities have substantial discretion in the approval process, and determining when or whether regulatory approval will be obtained for any of our product candidates. Even if we believe the data collected from clinical trials of our product candidates are promising, such data may not be sufficient to support approval by the FDA or comparable foreign regulatory authorities. Separately, in response to the COVID-19 pandemic, the FDA had postponed most inspections of foreign and domestic manufacturing facilities and products, and as of July 2021, has restarted inspections on a risk-based basis. Regulatory authorities outside the United States may continue to adopt similar restrictions or other policy measures in response to the COVID-19 pandemic. If global health concerns continue to prevent the FDA or other regulatory authorities from conducting their regular inspections, reviews or other regulatory

activities, it could significantly impact the ability of the FDA to timely review and process our regulatory submissions, which could have a material adverse effect on our business.

In addition, even if we were to obtain approval, regulatory authorities may approve any of our product candidates for fewer or more limited indications than we request, may not approve the price we intend to charge for our products, if any, may grant approval contingent on the performance of costly post-marketing clinical trials, 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.

The FDA and any comparable foreign regulatory authorities may not accept data from trials conducted in locations outside of their jurisdiction.

We are presently conducting clinical development solely in Australia and New Zealand and may choose to conduct additional international clinical trials in the future. We have not submitted any IND to the FDA. The acceptance of trial data by the FDA or any comparable foreign regulatory authority from clinical trials conducted outside of their respective jurisdictions may be subject to certain conditions or may not be accepted at all. In cases where data from foreign clinical trials are intended to serve as the basis for marketing approval in the United States, the FDA will generally not approve the application on the basis of foreign data alone unless (i) the data are applicable to the United States population and United States medical practice, (ii) the trials are performed by clinical investigators of recognized competence and pursuant to compliance with current GCP requirements and (iii) the FDA is able to validate the data through an on-site inspection or other appropriate mean. Additionally, the FDA's clinical trial requirements, including the adequacy of the patient population studied and statistical powering, must be met. In addition, such foreign trials are subject to the applicable local laws of the foreign jurisdictions where the trials are conducted. There can be no assurance that the FDA or any applicable foreign regulatory authority will accept data from trials conducted outside of its applicable jurisdiction. If the FDA or any applicable foreign regulatory authority does not accept such data, it would result in the need for additional trials, which would be costly and time-consuming and delay aspects of our business plan, and which may result in our product candidates not receiving approval for commercialization in the applicable jurisdiction.

Even if we receive regulatory approval of a product candidate, we will be subject to ongoing regulatory obligations and continued regulatory review, which may result in significant additional expense and we may be subject to penalties if we fail to comply with regulatory requirements or experience unanticipated problems with such product candidate.

If any of our product candidates are approved, they will be subject to ongoing regulatory requirements for manufacturing, labeling, packaging, storage, advertising, promotion, sampling, record-keeping, conduct of post-marketing studies and submission of safety, efficacy and other post-market information, including both federal and state requirements in the United States and requirements of comparable foreign regulatory authorities. In addition, we will be subject to continued compliance with current Good Manufacturing Practices, or cGMPs, and GCP requirements for any clinical trials that we conduct post-approval.

Manufacturers and manufacturers' facilities are required to comply with extensive FDA and comparable foreign regulatory authority requirements, including ensuring that quality control and manufacturing procedures conform to cGMP regulations. As such, we and our contract manufacturers will be subject to continual review and inspections to assess compliance with cGMP and adherence to commitments made in any NDA or BLA, other marketing application, and previous responses to inspection observations. Accordingly, we and others with whom we work must continue to expend time, money, and effort in all areas of regulatory compliance, including manufacturing, production and quality control.

Any regulatory approvals that we receive for our product candidates may be subject to limitations on the approved indicated uses for which the product may be marketed or to the conditions of approval, or contain requirements for potentially costly post-marketing testing, including Phase 4 clinical trials and surveillance to monitor the safety and efficacy of the product candidate. The FDA may also require a REMS program as a condition of approval of our product candidates, which could entail requirements for long-term patient follow-up, a medication guide, physician communication plans or additional elements to ensure safe use, such as restricted distribution methods, patient registries and other risk minimization tools. In addition, if the FDA or a comparable foreign regulatory authority approves our product candidates, we will have to comply with requirements including submissions of safety and other post-marketing information and reports and registration.

The FDA may impose consent decrees or withdraw approval if compliance with regulatory requirements and standards is not maintained or if problems occur after the product reaches the market. Later discovery of previously unknown problems with our product candidates, including adverse events of unanticipated severity or frequency, or with our third-party manufacturers or manufacturing processes, or failure to comply with regulatory requirements, may result in revisions to the approved labeling to add new safety information; imposition of post-market studies or clinical trials to assess new safety risks; or imposition of distribution restrictions or other restrictions under a REMS program. Other potential consequences include, among other things:

- restrictions on the marketing or manufacturing of our products, withdrawal of the product from the market or voluntary or mandatory product recalls;
- fines, warning letters or holds on clinical trials;
- refusal by the FDA to approve pending applications or supplements to approved applications filed by us or suspension or revocation of license approvals;
- product seizure or detention or refusal to permit the import or export of our product candidates; and
- injunctions or the imposition of civil or criminal penalties.

The FDA strictly regulates marketing, labeling, advertising, and promotion of products that are placed on the market. Products may be promoted only for the approved indications and in accordance with the provisions of the approved label. The FDA and other agencies actively enforce the laws and regulations prohibiting the promotion of off-label uses and a company that is found to have improperly promoted off-label uses may be subject to significant liability including, among other things, adverse publicity, warning letters, corrective advertising and potential civil and criminal penalties. Physicians may prescribe, in their independent professional medical judgment, legally available products for uses that are not described in the product's labeling and that differ from those tested by us and approved by the FDA. Physicians may believe that such off-label uses are the best treatment for many patients in varied circumstances. The FDA does not regulate the behavior of physicians in their choice of treatments. The FDA does, however, restrict manufacturer's communications on the subject of off-label use of their products. The federal government has levied large civil and criminal fines against companies for alleged improper promotion of off-label use and has enjoined companies from engaging in off-label promotion. The FDA and other regulatory agencies have also required that companies enter into consent decrees or permanent injunctions under which specified promotional conduct is changed or curtailed. However, companies may share truthful and not misleading information that is otherwise consistent with a product's FDA approved labeling.

The holder of an NDA or BLA must submit new or supplemental applications and obtain approval for certain changes to the approved product, product labeling, or manufacturing process. We could also be asked to conduct post-marketing clinical trials to confirm the safety and efficacy of our products in general or in specific patient subsets. If original marketing approval was obtained via the accelerated approval pathway, we could be required to conduct a successful post-marketing clinical trial to confirm clinical benefit for our products. An unsuccessful post-marketing study or failure to complete such a study could result in the withdrawal of marketing approval.

The policies of the FDA and of comparable foreign regulatory authorities may change and additional government regulations may be enacted that could prevent, limit or delay regulatory approval of our product candidates. We cannot predict the likelihood, nature or extent of government regulation that may arise from future legislation or administrative action, either in the United States or abroad. If we are slow or unable to adapt to changes in existing requirements or the adoption of new requirements or policies, or if we are not able to maintain regulatory compliance, we may lose any marketing approval that we may have obtained and we may not achieve or sustain profitability.

If approved, our investigational products regulated as biologics, including KER-050 and KER-012, may face competition from biosimilars approved through an abbreviated regulatory pathway.

We are developing KER-050 for the treatment of cytopenias, including anemia and thrombocytopenia, in patients with MDS and myelofibrosis, and KER-012 for the treatment of disorders associated with bone loss, such as osteoporosis and osteogenesis imperfecta, and for the treatment of PAH, both of which we anticipate will be regulated as a biological product. The Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act of 2010, or collectively the ACA, includes a subtitle called the Biologics Price Competition and Innovation Act of 2009, or BPCIA, which created an abbreviated approval pathway for biological products that are biosimilar to or interchangeable with an FDA-licensed reference biological product. Under the BPCIA, an application for a biosimilar product may not be submitted to the FDA until four years following the date that the reference product was first licensed by the FDA. In addition, the approval of a biosimilar product may not be made effective by the FDA until 12 years from the date on which the reference product was first

licensed. During this 12-year period of exclusivity, another company may still market a competing version of the reference product if the FDA approves a BLA for the competing product containing the sponsor's own preclinical data and data from adequate and well-controlled clinical trials to demonstrate the safety, purity, and potency of the other company's product. The law is complex and is still being interpreted and implemented by the FDA. As a result, its ultimate impact, implementation, and meaning are subject to uncertainty.

We believe that any of our product candidates approved as a biological product under a BLA should qualify for the 12-year period of exclusivity. However, there is a risk that this exclusivity could be shortened due to congressional action or otherwise, or that the FDA will not consider our investigational medicines to be reference products for competing products, potentially creating the opportunity for generic competition sooner than anticipated. Other aspects of the BPCIA, some of which may impact the BPCIA exclusivity provisions, have also been the subject of litigation. Moreover, the extent to which a biosimilar, once licensed, will be substituted for any one of our reference products in a way that is similar to traditional generic substitution for non-biological products is not yet clear, and will depend on a number of marketplace and regulatory factors that are still developing. If competitors are able to obtain marketing approval for biosimilars referencing our products, our products may become subject to competition from such biosimilars, with the attendant competitive pressure and consequences.

We may become exposed to costly and damaging liability claims, either when testing our product candidates in the clinic or at the commercial stage, and our product liability insurance may not cover all damages from such claims.

We are exposed to potential product liability and professional indemnity risks that are inherent in the research, development, manufacturing, marketing and use of biopharmaceutical products. Currently, we have no products that have been approved for commercial sale; however, the current and future use of product candidates by us and our collaborators in clinical trials, and the potential sale of any approved products in the future, may expose us to liability claims. These claims might be made by patients who use the product, healthcare providers, pharmaceutical companies, our collaborators or others selling such products. Any claims against us, regardless of their merit, could be difficult and costly to defend and could materially adversely affect the market for our product candidates or any prospects for commercialization of our product candidates. Regardless of the merits or eventual outcome, liability claims may result in:

- decreased demand for our products due to negative public perception;
- injury to our reputation;
- withdrawal of clinical trial participants or difficulties in recruiting new trial participants;
- initiation of investigations by regulators;
- costs to defend or settle the related litigation;
- a diversion of management's time and our resources;
- substantial monetary awards to trial participants or patients;
- product recalls, withdrawals or labeling, marketing or promotional restrictions;
- loss of revenues from product sales; and
- the inability to commercialize any of our product candidates, if approved.

Although we believe we maintain adequate product liability insurance for our product candidates, it is possible that our liabilities could exceed our insurance coverage. We intend to expand our insurance coverage to include the sale of commercial products if we obtain marketing approval for any of our product candidates. However, we may not be able to maintain insurance coverage at a reasonable cost or obtain insurance coverage that will be adequate to satisfy any liability that may arise. If a successful product liability claim or series of claims is brought against us for uninsured liabilities or in excess of insured liabilities, our assets may not be sufficient to cover such claims and our business operations could be impaired.

Should any of the events described above occur, this could have a material adverse effect on our business, financial condition and results of operations.

Due to our limited resources and access to capital, we must, and have in the past decided to, prioritize development of certain product candidates over other potential product candidates. These decisions may prove to have been wrong and may adversely affect our ability to develop our own programs, our attractiveness as a commercial partner and may ultimately have an impact on our commercial success.

Because we have limited resources and access to capital to fund our operations, we must decide which product candidates to pursue and the amount of resources to allocate to each. Our decisions concerning the allocation of research, collaboration, management and financial resources toward particular proprietary molecules in our library, product candidates or therapeutic areas may not lead to the development of viable commercial products and may divert resources away from better opportunities. Similarly, our decisions to delay, terminate or collaborate with third parties in respect of certain product development programs may also prove not to be optimal and could cause us to miss valuable opportunities. If we make incorrect determinations regarding the market potential of our product candidates or misread trends in the biopharmaceutical industry, in particular for our lead product candidates, KER-050 and KER-047, as well as for KER-012, our business, financial condition and results of operations could be materially adversely affected.

We may seek orphan drug designation for product candidates we develop, and we may be unsuccessful or may be unable to maintain the benefits associated with orphan drug designation, including the potential for market exclusivity.

As part of our business strategy, we may seek orphan drug designation for any product candidates we develop, and we may be unsuccessful. While we have not made a determination regarding whether we intend to seek orphan drug designation for any of our product candidates at this time, we may do so in the future. Regulatory authorities in some jurisdictions, including the United States, may designate drugs for relatively small patient populations as orphan drugs. Under the Orphan Drug Act in the United States, the FDA may designate a drug as an orphan drug if it is a drug intended to treat a rare disease or condition, which is generally defined as a patient population of fewer than 200,000 individuals annually in the United States, 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. In the United States, orphan drug designation entitles a party to financial incentives such as opportunities for grant funding towards certain clinical trial costs, tax advantages and user-fee waivers.

Generally in the United States, if a drug with an orphan drug designation subsequently receives the first 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 and indication for seven years, except in limited circumstances.

Even if we obtain orphan drug exclusivity for any of our product candidates, that exclusivity may not effectively protect the product candidate from competition because different therapies can be approved for the same condition and the same therapies can be approved for different conditions but used off-label. Even after an orphan drug is approved, the FDA can subsequently approve the same drug for the same condition if the FDA 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. In addition, a designated orphan drug may not receive orphan drug exclusivity if it is approved for a use that is broader than the indication for which it received orphan designation. Moreover, orphan drug exclusive marketing rights in the United States may be lost if the FDA later determines that the request for designation was materially defective 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. 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. While we may seek orphan drug designation for applicable indications for our current and any future product candidates, we may never receive such designations. Even if we do receive such designations, there is no guarantee that we will benefit from those designations.

Risks Related to Commercialization of Our Product Candidates

If we are unable to successfully commercialize any product candidate for which we receive regulatory approval, or experience significant delays in doing so, our business will be materially harmed.

If we are successful in obtaining marketing approval from applicable regulatory authorities for KER-050, KER-047, KER-012 or any other product candidate, our ability to generate revenues from any such products will depend on our success in:

- launching commercial sales of such products, whether alone or in collaboration with others;
- receiving approved labels with claims that are necessary or desirable for successful marketing, and that do not contain safety or other limitations that would impede our ability to market such products;
- creating market demand for such products through marketing, sales and promotion activities;
- hiring, training, and deploying a sales force or contracting with third parties to commercialize such products in the United States;

- creating strategic collaborations with, or offering licenses to, third parties to promote and sell such products in foreign markets where we receive marketing approval;
- manufacturing such products in sufficient quantities and at acceptable quality and cost to meet commercial demand at launch and thereafter;
- establishing and maintaining agreements with wholesalers, distributors, and group purchasing organizations on commercially reasonable terms;
- maintaining patent and trade secret protection and regulatory exclusivity for such products;
- achieving market acceptance of such products by patients, the medical community, and third-party payors;
- achieving coverage and adequate reimbursement from third-party payors for such products;
- patients' willingness to pay out-of-pocket in the absence of such coverage and adequate reimbursement from third-party payors;
- effectively competing with other therapies; and
- maintaining a continued acceptable safety profile of such products following launch.

To the extent we are not able to do any of the foregoing, our business, financial condition, results of operations, stock price and prospects will be materially harmed.

We face significant competition from other biotechnology and pharmaceutical companies, and our operating results will suffer if we fail to compete effectively.

The biopharmaceutical industry is characterized by intense competition and rapid innovation. Our competitors may be able to develop other compounds or drugs that are able to achieve similar or better results. Our potential competitors include major multinational pharmaceutical companies, established biotechnology companies, specialty pharmaceutical companies and universities and other research institutions. Many of our competitors have substantially greater financial, technical and other resources, such as larger research and development staff and experienced marketing and manufacturing organizations and well-established sales forces. Smaller or early-stage companies may also prove to be significant competitors, particularly as they develop novel approaches to treating disease indications that our product candidates are also focused on treating. Established pharmaceutical companies may also invest heavily to accelerate discovery and development of novel therapeutics or to in-license novel therapeutics that could make the product candidates that we develop obsolete. Mergers and acquisitions in the biotechnology and pharmaceutical industries may result in even more resources being concentrated in our competitors. Competition may increase further as a result of advances in the commercial applicability of technologies and greater availability of capital for investment in these industries. Our competitors, either alone or with collaborative partners, may succeed in developing, acquiring or licensing on an exclusive basis drug or biologic products that are more effective, safer, more easily commercialized or less costly than our product candidates or may develop proprietary technologies or secure patent protection that we may need for the development of our technologies and products. We believe the key competitive factors that will affect the development and commercial success of our product candidates are efficacy, safety, tolerability, reliability, convenience of use, price and reimbursement.

We compete in the segments of the biotechnology, pharmaceutical and other related industries that develop and market therapies for the treatment of hematological and musculoskeletal disorders. There are many other companies, including large biotechnology and pharmaceutical companies, that have commercialized and/or are developing therapies for the same therapeutic areas that our product candidates target. For example, FibroGen Inc. and Astellas Pharma Inc. are developing product candidates for the treatment of anemia, and Acceleron Pharma Inc., or Acceleron, Bristol-Myers Squibb Company and Disc Medicine are developing product candidates targeting diseases associated with MDS and myelofibrosis, including chronic anemia. Additionally, in April 2020, Acceleron received FDA approval of its product, Reblozyl, for the treatment of anemia failing an erythropoiesis stimulating agent and requiring two or more red blood cell units over eight weeks in adult patients with very low- to intermediate-risk MDS with ring sideroblasts or with myelodysplastic/myeloproliferative neoplasm with ring sideroblasts and thrombocytosis. In June 2020, Acceleron further announced that the European Commission approved Reblozyl for the treatment of transfusion-dependent anemia in adult patients with MDS or beta thalassemia and in September 2020, Acceleron announced that Health Canada approved Reblozyl for the treatment of adult patients with red blood cell transfusion-dependent anemia associated with beta thalassemia. Sierra Oncology, Inc. is developing momelotinib as a treatment for myelofibrosis. Additionally, Constellation Pharmaceutics, Inc., which was acquired by MorphoSys AG, is also developing a product candidate as a treatment for myelofibrosis, and Incyte Corporation is developing an ALK2 inhibitor product candidate for the treatment of myelofibrosis.

Other companies that are developing product candidates that are designed to target the TGF-ß signaling pathways include Scholar Rock Holding Corporation, Biogen Inc. and Regeneron Pharmaceuticals, Inc.

There are currently no approved drugs for the treatment of FOP. However, Ipsen, through its subsidiary Clementia Pharmaceuticals Inc. and pursuant to a collaboration with Blueprint Medicines Corporation, as well as Regeneron Pharmaceuticals, Inc., BioCryst Pharmaceuticals, Inc. and Incyte Corporation are developing product candidates for the treatment of FOP that are intended to work, at least in part, through inhibition of aberrant ALK2 signaling.

There are currently no approved drugs for the treatment of osteogenesis imperfecta. However, Mereo BioPharma Group plc, in collaboration with Ultragenyx Pharmaceutical Inc., is developing an anti-sclerostin product candidate for the treatment of osteogenesis imperfecta.

All of the currently-approved therapies for PAH are vasodilators, which are medications that dilate blood vessels. However, Acceleron is developing sotatercept, an activin receptor ligand trap, for the treatment of PAH.

We anticipate that we will continue to face intense and increasing competition as new treatments enter the market and advanced technologies become available. There can be no assurance that our competitors are not currently developing, or will not in the future develop, products that are equally or more effective or are more economically attractive than any of our current or future product candidates. Competing products may gain faster or greater market acceptance than our products, if any, and medical advances or rapid technological development by competitors may result in our product candidates becoming non-competitive or obsolete before we are able to recover our research and development and commercialization expenses. If we or our product candidates do not compete effectively, it may have a material adverse effect on our business, financial condition and results of operations.

We do not have a sales or marketing infrastructure and have no experience in the sale or marketing of biopharmaceutical products. To achieve commercial success for any approved product, we must develop or acquire a sales and marketing organization, outsource these functions to third parties or enter into strategic collaborations.

We may decide to establish our own sales and marketing capabilities and promote our product candidates if and when regulatory approval has been obtained in the United States or in other jurisdictions. There are risks involved if we decide to establish our own sales and marketing capabilities or enter into arrangements with third parties to perform these services. Even if we establish sales and marketing capabilities, we may fail to launch our products effectively or to market our products effectively since we have no experience in the sales and marketing of biopharmaceutical products. In addition, recruiting and training a sales force is expensive and time consuming and could delay any product launch. In the event that any such launch is delayed or does not occur for any reason, we would have prematurely or unnecessarily incurred these commercialization expenses, and our investment would be lost if we cannot retain or reposition our sales and marketing personnel. Factors that may inhibit our efforts to commercialize our products on our own include:

- our inability to recruit, train and retain adequate numbers of effective sales and marketing personnel;
- the inability of sales personnel to obtain access to or educate adequate numbers of physicians on the benefits of our products;
- the lack of complementary products to be offered by sales personnel, which may put us at a competitive disadvantage relative to companies with more extensive product lines;
- unforeseen costs and expenses associated with creating an independent sales and marketing organization; and
- costs of marketing and promotion above those anticipated by us.

If we enter into arrangements with third parties to perform sales and marketing services, our product revenues or the profitability of these product revenues to us could be lower than if we were to market and sell any products that we develop ourselves. Such collaborative arrangements with partners may place the commercialization of our products outside of our control and would make us subject to a number of risks including that we may not be able to control the amount or timing of resources that our collaborative partner devotes to our products or that our collaborator’s willingness or ability to complete its obligations, and our obligations under our arrangements may be adversely affected by business combinations or significant changes in our collaborator’s business strategy. In addition, we may not be successful in entering into arrangements with third parties to sell and market our products or may be unable to do so on terms that are favorable to us. Acceptable third parties may fail to devote the necessary resources and attention to sell and market our products effectively.

If we do not establish sales and marketing capabilities successfully, either on our own or in collaboration with third parties, we may not be successful in commercializing our products, if any, which in turn would have a material adverse effect on our business, financial condition and results of operations.

Even if a product candidate we develop receives marketing approval, it may fail to achieve the degree of market acceptance by physicians, patients, third-party payors and others in the medical community necessary for commercial success. The revenues that we generate from their sales may be limited, and we may never become profitable.

We have never commercialized a product candidate for any indication. Even if our product candidates are approved by the appropriate regulatory authorities for marketing and sale, they may not gain acceptance among physicians, patients, third-party payors and others in the medical community. If any product candidates for which we obtain regulatory approval does not gain an adequate level of market acceptance, we could be prevented from or significantly delayed in achieving profitability. Market acceptance of our product candidates by the medical community, patients and third-party payors will depend on a number of factors, some of which are beyond our control. For example, physicians are often reluctant to switch their patients and patients may be reluctant to switch from existing therapies even when new and potentially more effective or safer treatments enter the market.

Efforts to educate the medical community and third-party payors on the benefits of our product candidates may require significant resources and may not be successful. If any of our product candidates are approved but do not achieve an adequate level of market acceptance, we could be prevented from or significantly delayed in achieving profitability. The degree of market acceptance of any product for which we receive marketing approval will depend on a number of factors, including:

- the clinical indications for which our product candidates are approved;
- physicians, hospitals and patients considering our product candidates as a safe and effective treatment;
- the potential and perceived advantages of our product candidates over alternative treatments;
- the prevalence and severity of any side effects;
- product labeling or product insert requirements of the FDA or comparable foreign regulatory authorities;
- limitations or warnings contained in the labeling approved by the FDA or comparable foreign regulatory authorities;
- the timing of market introduction of our product candidates in relation to other potentially competitive products;
- the cost of our product candidates in relation to alternative treatments;
- the amount of upfront costs or training required for physicians to administer our product candidates;
- the availability of coverage and adequate reimbursement from third-party payors and government authorities;
- the willingness of patients to pay out-of-pocket in the absence of comprehensive coverage and reimbursement by third-party payors and government authorities;
- the relative convenience and ease of administration, including as compared to alternative treatments and competitive therapies;
- the effectiveness of our sales and marketing efforts and distribution support; and
- the presence or perceived risk of potential product liability claims.

Enacted and future healthcare legislation may increase the difficulty and cost for us to progress our clinical programs and obtain marketing approval of and commercialize our product candidates and may affect the prices we may set.

In the United States and other jurisdictions, there have been, and we expect there will continue to be, a number of legislative and regulatory changes and proposed changes to the healthcare system that could affect our future results of operations. In particular, there have been and continue to be a number of initiatives at the U.S. federal and state levels that seek to reduce healthcare costs and improve the quality of healthcare. For example, in March 2010, the ACA was enacted, which substantially changed the way healthcare is financed by both governmental and private insurers. Among the provisions of the ACA, those of greatest importance to the pharmaceutical and biotechnology industries include the following:

- an annual, non-deductible fee payable by any entity that manufactures or imports certain branded prescription drugs and biologic agents (other than those designated as orphan drugs), which is apportioned among these entities according to their market share in certain government healthcare programs;
- a new methodology by which rebates owed by manufacturers under the Medicaid Drug Rebate Program are calculated for drugs that are inhaled, infused, instilled, implanted or injected;
- expansion of eligibility criteria for Medicaid programs by, among other things, allowing states to offer Medicaid coverage to certain individuals with income at or below 133% of the federal poverty level, thereby potentially increasing a manufacturer’s Medicaid rebate liability;
- a licensure framework for follow on biologic products;

- a new Patient-Centered Outcomes Research Institute to oversee, identify priorities in and conduct comparative clinical effectiveness research, along with funding for such research; and
- establishment of a Center for Medicare & Medicaid Innovation at the Centers for Medicare & Medicaid Services, or CMS, to test innovative payment and service delivery models to lower Medicare and Medicaid spending, potentially including prescription drug spending.

Since its enactment, there have been judicial, Congressional and executive branch challenges to certain aspects of the ACA. For example, on June 17, 2021, the U.S. Supreme Court dismissed a challenge on procedural grounds that argued the ACA is unconstitutional in its entirety because the "individual mandate" was repealed by Congress. Thus, the ACA will remain in effect in its current form. Further, prior to the U.S. Supreme Court ruling, on January 28, 2021, President Biden issued an executive order that initiated a special enrollment period for purposes of obtaining health insurance coverage through the ACA marketplace, which began on February 15, 2021 and remained open through August 15, 2021. The executive order also instructed certain governmental agencies to review and reconsider their existing policies and rules that limit access to healthcare, including among others, reexamining Medicaid demonstration projects and waiver programs that include work requirements, and policies that create unnecessary barriers to obtaining access to health insurance coverage through Medicaid or the ACA. It is possible that the ACA will be subject to additional challenges in the future. It is unclear how any such challenges and the healthcare reform measures of the Biden administration will impact the ACA and our business. In addition, other legislative changes have been proposed and adopted in the United States since the ACA was enacted. In August 2011, the Budget Control Act of 2011, among other things, led to aggregate reductions of Medicare payments to providers of 2% per fiscal year. These reductions went into effect in April 2013 and, due to subsequent legislative amendments to the statute will remain in effect through 2030, with the exception of a temporary suspension from May 1, 2020 through December 31, 2021, unless additional action is taken by Congress. In January 2013, the American Taxpayer Relief Act of 2012 was signed into law, which, among other things, further reduced Medicare payments to several types of providers, including hospitals, imaging centers and cancer treatment centers, and increased the statute of limitations period for the government to recover overpayments to providers from three to five years. These new laws or any other similar laws introduced in the future may result in additional reductions in Medicare and other health care funding, which could negatively affect our customers and accordingly, our financial operations.

Moreover, payment methodologies may be subject to changes in healthcare legislation and regulatory initiatives. For example, CMS may develop new payment and delivery models, such as bundled payment models. In addition, recently there has been heightened governmental scrutiny over the manner in which manufacturers set prices for their marketed products, which has resulted in several U.S. Congressional inquiries and proposed and enacted federal legislation designed to, among other things, bring more transparency to drug pricing, reduce the cost of prescription drugs under Medicare and review the relationship between pricing and manufacturer patient programs. At the federal level, the Trump administration used several means to propose or implement drug pricing reform, including through federal budget proposals, executive orders and policy initiatives. For example, on July 24, 2020 and September 13, 2020, the Trump administration announced several executive orders related to prescription drug pricing that seek to implement several of the administration's proposals. As a result, the FDA released a final rule on September 24, 2020, effective November 30, 2020, providing guidance for states to build and submit importation plans for drugs from Canada. Further, on November 20, 2020, the U.S. Department of Health and Human Services, or HHS, finalized a regulation removing safe harbor protection for price reductions from pharmaceutical manufacturers to plan sponsors under Medicare Part D, either directly or through pharmacy benefit managers, unless the price reduction is required by law. The implementation of the rule has been delayed by the Biden administration from January 1, 2022 to January 1, 2023 in response to ongoing litigation. The rule also creates a new safe harbor for price reductions reflected at the point-of-sale, as well as a new safe harbor for certain fixed fee arrangements between pharmacy benefit managers and manufacturers, the implementation of which have also been delayed until January 1, 2023. On November 20, 2020, CMS issued an interim final rule implementing the Trump administration's Most Favored Nation executive order, which would tie Medicare Part B payments for certain physician-administered drugs to the lowest price paid in other economically advanced countries, effective January 1, 2021. As a result of litigation challenging the Most Favored Nation model, on August 10, 2021, CMS published a proposed rule that seeks to rescind the Most Favored Nation Model interim final rule. Additionally, on March 11, 2021, President Biden signed the American Rescue Plan Act of 2021 into law, which eliminates the statutory Medicaid drug rebate cap, currently set at 100% of a drug's average manufacturer price, for single source and innovator multiple source drugs, beginning January 1, 2024. Further, in July 2021, the Biden administration released an executive order that included multiple provisions aimed at prescription drugs. In response to Biden's executive order, on September 9, 2021, HHS released a Comprehensive Plan for Addressing High Drug Prices that outlines principles for drug pricing reform. The plan sets out a variety of potential legislative policies that Congress could pursue as well as potential administrative actions HHS can take to advance these principles. No legislation or administrative actions have been finalized to implement these principles. In addition, Congress is considering drug pricing as part of the budget reconciliation process. We expect that additional U.S. federal healthcare reform measures will be adopted in the future, any of which could limit the amounts that the

U.S. federal government will pay for healthcare products and services, which could result in reduced demand for our product candidates or additional pricing pressures.

Individual states in the United States have also increasingly passed legislation and implemented regulations designed to control pharmaceutical and biological product pricing, including price or patient reimbursement constraints, discounts, restrictions on certain product access and marketing cost disclosure and transparency measures, and, in some cases, designed to encourage importation from other countries and bulk purchasing. Legally mandated price controls on payment amounts by third-party payors or other restrictions could harm our business, results of operations, financial condition and prospects. In addition, regional healthcare authorities and individual hospitals are increasingly using bidding procedures to determine what pharmaceutical products and which suppliers will be included in their prescription drug and other healthcare programs. This could reduce the ultimate demand for our product candidates or put pressure on our product pricing.

In markets outside of the United States, reimbursement and healthcare payment systems vary significantly by country, and many countries have instituted price ceilings on specific products and therapies.

We cannot predict the likelihood, nature or extent of government regulation that may arise from future legislation or administrative action in the United States or any other jurisdiction. Further, it is possible that additional governmental action is taken in response to the COVID-19 pandemic. If we or any third parties we may engage are slow or unable to adapt to changes in existing requirements or the adoption of new requirements or policies, or if we or such third parties are not able to maintain regulatory compliance, our product candidates may lose any regulatory approval that may have been obtained and we may not achieve or sustain profitability.

Disruptions at the FDA, the SEC and other government agencies caused by funding shortages or global health concerns could hinder their ability to hire and retain key leadership and other personnel, otherwise prevent new products and services from being developed, approved or commercialized in a timely manner or at all, or otherwise prevent those agencies from performing normal business functions on which the operation of our business may rely, which could negatively impact our business.

The ability of the FDA to review and approve new products can be affected by a variety of factors, including government budget and funding levels, ability to hire and retain key personnel and accept the payment of user fees, statutory, regulatory and policy changes, and other events that may otherwise affect the FDA's ability to perform routine functions. Average review times at the agency have fluctuated in recent years as a result. In addition, government funding of the Securities and Exchange Commission, or the SEC, and other government agencies on which our operations may rely, including those that fund research and development activities is subject to the political process, which is inherently fluid and unpredictable.

Disruptions at the FDA and other agencies may also slow the time necessary for new drugs to be reviewed and/or approved by necessary government agencies, which would adversely affect our business. For example, in recent years, including in 2018 and 2019, the U.S. government shut down several times and certain regulatory agencies, such as the FDA and the SEC, had to furlough critical employees and stop critical activities. Separately, in response to the COVID-19 pandemic, the FDA had postponed most inspections of foreign and domestic manufacturing facilities and products, and as of July 2021, has restarted inspections on a risk-based basis. Regulatory authorities outside the United States may continue to adopt similar restrictions or other policy measures in response to the COVID-19 pandemic. If a prolonged government shutdown occurs, or if global health concerns continue to prevent the FDA or other regulatory authorities from conducting their regular inspections, reviews, or other regulatory activities, it could significantly impact the ability of the FDA to timely review and process our regulatory submissions, which could have a material adverse effect on our business. Further, future government shutdowns or delays could impact our ability to access the public markets and obtain necessary capital in order to properly capitalize and continue our operations.

Our business operations and current and future relationships with investigators, healthcare professionals, consultants, third-party payors, patient organizations and customers may be subject to applicable healthcare regulatory laws, which could expose us to penalties.

Our business operations and current and future arrangements with investigators, healthcare professionals, consultants, third-party payors, patient organizations and customers, may expose us to broadly applicable fraud and abuse and other healthcare laws and regulations. These laws may constrain the business or financial arrangements and relationships through which we conduct our operations, including how we research, market, sell and distribute our product candidates, if approved. Such laws include:

- 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 U.S. federal and state healthcare programs such as Medicare and Medicaid. 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 the civil False Claims Act, which can be enforced by private individuals on behalf of the government through civil whistleblower or qui tam actions, and civil monetary penalties laws 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. In addition, the government may assert that a claim including items and services resulting from a violation of the U.S. federal Anti-Kickback Statute constitutes a false or fraudulent claim for purposes of the civil False Claims Act;
- the U.S. federal Health Insurance Portability and Accountability Act of 1996, or HIPAA, which created additional federal civil and criminal 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 U.S. 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;
- HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act of 2009, or HITECH, and their implementing regulations, which impose certain obligations, including mandatory contractual terms, with respect to safeguarding the privacy, security and transmission of individually identifiable health information without appropriate authorization by covered entities subject to the rule, such as health plans, healthcare clearinghouses and certain healthcare providers and their business associates, independent contractors of a covered entity that perform certain services involving the use or disclosure of individually identifiable health information, as well as their covered subcontractors;
- the Federal Food, Drug, and Cosmetic Act, which prohibits, among other things, the adulteration or misbranding of drugs, biologics and medical devices;
- the U.S. Public Health Service Act, which prohibits, among other things, the introduction into interstate commerce of a biological product unless a biologics license is in effect for that product;
- the U.S. Physician Payments Sunshine Act and its implementing regulations, which require certain manufacturers of drugs, devices, biologics and medical supplies that are reimbursable under Medicare, Medicaid, or the Children's Health Insurance Program, with specific exceptions, to report annually to CMS information related to certain payments and other transfers of value made in the prior year to physicians (defined to include doctors, dentists, optometrists, podiatrists, and chiropractors) and teaching hospitals, as well as ownership and investment interests held by such physicians and their immediate family members. Beginning in 2022, applicable manufacturers also will be required to report information regarding payments and other transfers of value provided during the previous year to physician assistants, nurse practitioners, clinical nurse specialists, certified registered nurse anesthetists, anesthesiologist assistants and certified nurse midwives; and
- 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 and local laws and regulations that require drug manufacturers to file reports relating to drug pricing and marketing information, which requires tracking gifts and other remuneration and items of value provided to healthcare professionals and entities; state and local laws that require the registration of pharmaceutical sales representatives; and state laws governing the privacy and security of health information in certain circumstances, many of which differ from each other in significant ways and often are not preempted by HIPAA, thus complicating compliance efforts.

In addition, our activities are also subject to certain federal and state consumer protection and unfair competition laws, which broadly regulate marketplace activities and activities that potentially harm consumers.

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 possible that governmental authorities will conclude that our business practices do not comply with current or future statutes, regulations, agency guidance or case law involving applicable fraud and abuse or other healthcare laws and regulations. If our operations are found to be in violation of any of 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 non-compliance, disgorgement, imprisonment, contractual damages, reputational harm, diminished profits and the curtailment or restructuring of our operations. If any of the physicians or other providers or entities with whom we expect to do business are found to not be in compliance with applicable laws, they may be subject to significant criminal, civil or administrative sanctions, including exclusions from government funded healthcare programs and imprisonment, which could affect our ability to operate our business. 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.

If the market opportunities for our product candidates are smaller than we believe they are, even assuming approval of a product candidate, our business may suffer.

Our projections of both the number of people who are affected by disease within our potential target indications, as well as the subset of these people who have the potential to benefit from treatment with our product candidates, are based on our beliefs and estimates. These estimates have been derived from a variety of sources, including the scientific literature, healthcare utilization databases and market research, and may prove to be incorrect. Further, new studies may change the estimated incidence or prevalence of these diseases. The number of patients may turn out to be lower than expected. Likewise, the potentially addressable patient population for each of our product candidates may be limited or may not be amenable to treatment with our product candidates, and new patients may become increasingly difficult to identify or gain access to, which would adversely affect our business, financial condition and results of operations.

Any product candidates we develop may become subject to unfavorable third-party coverage and reimbursement practices, as well as pricing regulations.

The availability and extent of coverage and adequate reimbursement by third-party payors, including government health administration authorities, private health coverage insurers, managed care organizations and other third-party payors is essential for most patients to be able to afford expensive treatments. Sales of any of our product candidates that receive marketing approval will depend substantially, both in the United States and internationally, on the extent to which the costs of our product candidates will be covered and reimbursed by third-party payors. If reimbursement is not available, or is available only to limited levels, we may not be able to successfully commercialize our product candidates. Even if coverage is provided, the approved reimbursement amount may not be high enough to allow us to establish or maintain pricing sufficient to realize an adequate return on our investment. Coverage and reimbursement may impact the demand for, or the price of, any product candidate for which we obtain marketing approval. If coverage and reimbursement are not available or reimbursement is available only to limited levels, we may not successfully commercialize any product candidate for which we obtain marketing approval.

There is significant uncertainty related to third-party payor coverage and reimbursement of newly approved products. In the United States, for example, principal decisions about reimbursement for new products are typically made by the CMS. CMS decides whether and to what extent a new product will be covered and reimbursed under Medicare, and private third-party payors often follow CMS's decisions regarding coverage and reimbursement to a substantial degree. However, one third-party payor's determination to provide coverage for a product candidate does not assure that other payors will also provide coverage for the product candidate. As a result, the coverage determination process is often time-consuming and costly. This process will require us to provide scientific and clinical support for the use of our products to each third-party payor separately, with no assurance that coverage and adequate reimbursement will be applied consistently or obtained in the first instance.

Increasingly, third-party payors are requiring that drug companies provide them with predetermined discounts from list prices and are challenging the prices charged for medical products. Further, such payors are increasingly challenging the price, examining the medical necessity and reviewing the cost effectiveness of medical product candidates. There may be especially significant delays in obtaining coverage and reimbursement for newly approved drugs. Third-party payors may limit coverage to specific product candidates on an approved list, known as a formulary, which might not include all FDA-approved drugs for

a particular indication. We may need to conduct expensive pharmaco-economic studies to demonstrate the medical necessity and cost effectiveness of our products. Nonetheless, our product candidates may not be considered medically necessary or cost effective. We cannot be sure that coverage and reimbursement will be available for any product that we commercialize and, if reimbursement is available, what the level of reimbursement will be.

Furthermore, obtaining coverage and adequate reimbursement for products administered under the supervision of a physician may be particularly difficult because of the higher prices often associated with such drugs. Additionally, separate reimbursement for the product itself or the treatment or procedure in which the product is used may not be available, which may impact physician utilization. In addition, companion diagnostic tests require coverage and reimbursement separate and apart from the coverage and reimbursement for their companion pharmaceutical or biological products. Similar challenges to obtaining coverage and reimbursement, applicable to pharmaceutical or biological products, will apply to companion diagnostics.

Outside the United States, international operations are generally subject to extensive governmental price controls and other market regulations, and we believe the increasing emphasis on cost containment initiatives in Europe, Canada and other countries has and will continue to put pressure on the pricing and usage of therapeutics such as our product candidates. In many countries, particularly the countries of the European Union, medical product prices are subject to varying price control mechanisms as part of national health systems. In these countries, pricing negotiations with governmental authorities can take considerable time after a product receives marketing approval. To obtain reimbursement or pricing approval in some countries, we may be required to conduct a clinical trial that compares the cost-effectiveness of our product candidate to other available therapies. In general, product prices under such systems are substantially lower than in the United States. Other countries allow companies to fix their own prices for products, but monitor and control company profits. Additional foreign price controls or other changes in pricing regulation could restrict the amount that we are able to charge for our product candidates. Accordingly, in markets outside the United States, the reimbursement for our products may be reduced compared with the United States and may be insufficient to generate commercially reasonable revenue and profits.

If we are unable to establish or sustain coverage and adequate reimbursement for any future product candidates from third-party payors, the adoption of those products and sales revenue will be adversely affected, which, in turn, could adversely affect the ability to market or sell those product candidates, if approved. Coverage policies and third-party payor reimbursement rates may change at any time. Even if favorable coverage and reimbursement status is attained for one or more products for which we receive regulatory approval, less favorable coverage policies and reimbursement rates may be implemented in the future.

Risks Related to Our Intellectual Property

Our success depends in part on our ability to protect our intellectual property. It is difficult and costly to protect our proprietary rights and technology, and we may not be able to ensure their protection.

Our commercial success will depend in large part on obtaining and maintaining patent, trademark and trade secret protection of our proprietary technologies and our product candidates, their respective components, formulations, combination therapies, methods used to manufacture them and methods of treatment, as well as successfully defending these patents against third-party challenges. Our ability to stop unauthorized third parties from making, using, selling, offering to sell or importing our product candidates is dependent upon the extent to which we have rights under valid and enforceable patents that cover these activities. If we are unable to secure and maintain patent protection for any product or technology we develop, or if the scope of the patent protection secured is not sufficiently broad, our competitors could develop and commercialize products and technology similar or identical to ours, and our ability to commercialize any product candidates we may develop may be adversely affected.

The patenting process is expensive and time-consuming, and we may not be able to file, prosecute and maintain all necessary or desirable patent applications at a reasonable cost or in a timely manner. In addition, we may not pursue, obtain or maintain patent protection in all relevant markets. It is also possible that we will fail to identify patentable aspects of our research and development output before it is too late to obtain patent protection. Moreover, in some circumstances, we may not have the right to control the preparation, filing and prosecution of patent applications, or to maintain the patents, covering technology that we license from or license to third parties and are reliant on our licensors or licensees. Therefore, these patents and applications may not be prosecuted and enforced in a manner consistent with the best interests of our business.

The strength of patents in the biotechnology and pharmaceutical field involves complex legal and scientific questions and can be uncertain. The patent applications that we own or in-license may fail to result in issued patents with claims that cover our product candidates or uses thereof in the United States or in other foreign countries. Even if the patents do successfully issue, third parties may challenge the validity, enforceability or scope thereof, which may result in such patents being narrowed, invalidated or held unenforceable. Furthermore, even if they are unchallenged, our patents and patent applications may not adequately protect our intellectual property or prevent others from designing around our claims. If the breadth or strength of protection provided by the patent applications we hold with respect to our product candidates is threatened, it could dissuade companies from collaborating with us to develop, and threaten our ability to commercialize, our product candidates. Further, if we encounter delays in our clinical trials, the period of time during which we could market our product candidates under patent protection would be reduced.

Since patent applications in the United States and most other countries are confidential for a period of time after filing, we cannot be certain that we were the first to file any patent application related to our product candidates. Furthermore, for United States applications in which all claims are entitled to a priority date before March 16, 2013, an interference proceeding can be provoked by a third party or instituted by the United States Patent and Trademark Office, or USPTO, to determine who was the first to invent any of the subject matter covered by the patent claims of our applications.

We cannot be certain that we are the first to invent the inventions covered by pending patent applications and, if we are not, we may be subject to priority disputes. We may be required to disclaim part or all of the term of certain patents or all of the term of certain patent applications. There may be prior art of which we are not aware that may affect the validity or enforceability of a patent claim, and we may be subject to a third-party preissuance submission of prior art to the USPTO. There also may be prior art of which we are aware, but which we do not believe affects the validity or enforceability of a claim, which may, nonetheless, ultimately be found to affect the validity or enforceability of a claim. No assurance can be given that if challenged, our patents would be declared by a court to be valid or enforceable or that even if found valid and enforceable, a competitor's technology or product would be found by a court to infringe our patents. We may analyze patents or patent applications of our competitors that we believe are relevant to our activities, and consider that we are free to operate in relation to our product candidates, but our competitors may achieve issued claims, including in patents we consider to be unrelated, which block our efforts or may potentially result in our product candidates or our activities infringing such claims. The possibility exists that others will develop products which have the same effect as our products on an independent basis which do not infringe our patents or other intellectual property rights, or will design around the claims of patents that we have had issued that cover our products.

Recent or future patent reform legislation could increase the uncertainties and costs surrounding the prosecution of our patent applications and the enforcement or defense of our issued patents. Under the enacted Leahy-Smith America Invents Act, or America Invents Act, enacted in 2013, the United States moved from a "first to invent" to a "first-to-file" system. Under a "first-to-file" system, assuming the other requirements for patentability are met, the first inventor to file a patent application generally will be entitled to a patent on the invention regardless of whether another inventor had made the invention earlier. The America Invents Act includes a number of other significant changes to U.S. patent law, including provisions that affect the way patent applications are prosecuted, redefine prior art and establish a new post-grant review system. The effects of these changes are currently unclear as the USPTO only recently developed new regulations and procedures in connection with the America Invents Act and many of the substantive changes to patent law, including the "first-to-file" provisions, only became effective in March 2013. In addition, the courts have yet to address many of these provisions and the applicability of the act and new regulations on specific patents discussed herein have not been determined and would need to be reviewed. However, the America Invents Act and its implementation could increase the uncertainties and costs surrounding the prosecution of our patent applications and the enforcement or defense of our issued patents, all of which could have a material adverse effect on our business and financial condition.

The degree of future protection for our proprietary rights is uncertain because legal means afford only limited protection and may not adequately protect our rights or permit us to gain or keep our competitive advantage. For example:

- others may be able to make or use compounds or cells that are similar to the biological compositions of our product candidates but that are not covered by the claims of our patents;
- the active biological ingredients in our current product candidates will eventually become commercially available in biosimilar drug products, and no patent protection may be available with regard to formulation or method of use;
- we or our licensors, as the case may be, may fail to meet our obligations to the U.S. government in regards to any in-licensed patents and patent applications funded by U.S. government grants, leading to the loss of patent rights;
- we or our licensors, as the case may be, might not have been the first to file patent applications for these inventions;

- others may independently develop similar or alternative technologies or duplicate any of our technologies;
- it is possible that our pending patent applications will not result in issued patents;
- it is possible that there are prior public disclosures that could invalidate our or our licensors' patents, as the case may be, or parts of our or their patents;
- it is possible that others may circumvent our owned or in-licensed patents;
- it is possible that there are unpublished applications or patent applications maintained in secrecy that may later issue with claims covering our products or technology similar to ours;
- the laws of foreign countries may not protect our or our licensors', as the case may be, proprietary rights to the same extent as the laws of the United States;
- the claims of our owned or in-licensed issued patents or patent applications, if and when issued, may not cover our product candidates;
- our owned or in-licensed issued patents may not provide us with any competitive advantages, may be narrowed in scope, or be held invalid or unenforceable as a result of legal challenges by third parties;
- the inventors of our owned or in-licensed patents or patent applications may become involved with competitors, develop products or processes which design around our patents, or become hostile to us or the patents or patent applications on which they are named as inventors;
- it is possible that our owned or in-licensed patents or patent applications omit individual(s) that should be listed as inventor(s) or include individual(s) that should not be listed as inventor(s), which may cause these patents or patents issuing from these patent applications to be held invalid or unenforceable;
- we have engaged in scientific collaborations in the past, and will continue to do so in the future. Such collaborators may develop adjacent or competing products to ours that are outside the scope of our patents;
- we may not develop additional proprietary technologies for which we can obtain patent protection;
- it is possible that product candidates or diagnostic tests we develop may be covered by third parties' patents or other exclusive rights; or
- the patents of others may have an adverse effect on our business.

We depend on intellectual property licensed from third parties and termination of any of these licenses could result in the loss of significant rights, which would harm our business.

We are dependent on patents, know-how and proprietary technology, both our own and licensed from others. Any termination of these licenses could result in the loss of significant rights and could harm our ability to commercialize our product candidates. See the section titled "Management's Discussion and Analysis of Financial Condition and Results of Operations—Licensing Agreements" set forth in Part I, Item 2 of this Quarterly Report on Form 10-Q for additional information regarding our license agreements.

Disputes may also arise between us and our licensors regarding intellectual property subject to a license agreement, including:

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

In addition, intellectual property license agreements are complex, and certain provisions in such agreements may be susceptible to multiple interpretations. The resolution of any contract interpretation disagreement that may arise could narrow what we believe to be the scope of our rights to the relevant intellectual property or technology, or increase what we believe to be our financial or other obligations under the relevant agreement, either of which could have a material adverse effect on our business, financial condition, results of operations and prospects. If disputes over intellectual property that we have licensed prevent or impair our ability to maintain our current licensing arrangements on acceptable terms, we may be unable to successfully develop and commercialize the affected product candidates.

We are generally also subject to all of the same risks with respect to protection of intellectual property that we license, as we are for intellectual property that we own, which are described below. If we or our licensors fail to adequately protect this intellectual property, our ability to commercialize products could suffer.

If we fail to comply with our obligations under our patent license with a third party, we could lose license rights that are important to our business.

We are a party to a license agreement pursuant to which we in-license key patent and patent applications for our product candidates. These existing licenses impose various diligence, milestone payment, royalty, insurance and other obligations on us. If we fail to comply with these obligations, our licensor may have the right to terminate the license, in which event we would not be able to develop or market the products covered by such licensed intellectual property. Termination of these agreements or reduction or elimination of our rights under these agreements, or restrictions on our ability to freely assign or sublicense our rights under such agreements when it is in the interest of our business to do so, may impede, delay or prohibit the further development or commercialization of one or more product candidates that rely on such agreements.

We may have limited control over the maintenance and prosecution of these in-licensed patents and patent applications, activities or any other intellectual property that may be related to our in-licensed intellectual property. For example, we cannot be certain that such activities by our licensor have been or will be conducted in compliance with applicable laws and regulations or will result in valid and enforceable patents and other intellectual property rights.

If we are unable to protect the confidentiality of our trade secrets, our business and competitive position would be harmed.

In addition to patent protection, we rely heavily upon know-how and to some extent trade secret protection, as well as non-disclosure agreements and invention assignment agreements with our employees, consultants and third-parties, to protect our confidential and proprietary information, especially where we do not believe patent protection is appropriate or obtainable. In addition to contractual measures, we try to protect the confidential nature of our proprietary information using physical and technological security measures. Such measures may not, for example, in the case of misappropriation of a trade secret by an employee or third party with authorized access, provide adequate protection for our proprietary information. Our security measures may not prevent an employee or consultant from misappropriating our trade secrets and providing them to a competitor, and recourse we take against such misconduct may not provide an adequate remedy to protect our interests fully. Enforcing a claim that a party illegally disclosed or misappropriated a trade secret can be difficult, expensive, and time-consuming, and the outcome is unpredictable. In addition, trade secrets may be independently developed by others in a manner that could prevent legal recourse by us. If any of our confidential or proprietary information, such as our trade secrets, were to be disclosed or misappropriated, or if any such information was independently developed by a competitor, our competitive position could be harmed.

In addition, courts outside the United States are sometimes less willing to protect trade secrets. If we choose to go to court to stop a third party from using any of our trade secrets, we may incur substantial costs. These lawsuits may consume our time and other resources even if we are successful. Although we take steps to protect our proprietary information and trade secrets, including through contractual means with our employees and consultants, third parties may independently develop substantially equivalent proprietary information and techniques or otherwise gain access to our trade secrets or disclose our technology. Thus, we may not be able to meaningfully protect our trade secrets. It is our policy to require our employees, consultants, outside scientific collaborators, sponsored researchers and other advisors to execute confidentiality agreements upon the commencement of employment or consulting relationships with us. These agreements provide that all confidential information concerning our business or financial affairs developed or made known to the individual or entity during the course of the party's relationship with us is to be kept confidential and not disclosed to third parties except in specific circumstances. In the case of employees, the agreements provide that all inventions conceived by the individual, and which are related to our current or planned business or research and development or made during normal working hours, on our premises or using our equipment or proprietary information, are our exclusive property. In addition, we take other appropriate precautions, such as physical and technological security measures, to guard against misappropriation of our proprietary technology by third parties. We have also adopted policies and conduct training that provides guidance on our expectations, and our advice for best practices, in protecting our trade secrets.

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

Our commercial success depends in part on our ability to develop, manufacture, market and sell our product candidates and use our proprietary technologies without infringing the proprietary rights of third parties. There is a substantial amount of litigation involving patents and other intellectual property rights in the biotechnology and pharmaceutical industries, as well as administrative proceedings for challenging patents, including interference, derivation, *inter partes* review, post grant review, and reexamination proceedings before the USPTO or oppositions and other comparable proceedings in foreign jurisdictions. We may be exposed to, or threatened with, future litigation by third parties having patent or other intellectual property rights alleging that our product candidates and/or proprietary technologies infringe their intellectual property rights. Numerous U.S. and foreign issued patents and pending patent applications, which are owned by third parties, exist in the fields in which we are developing our product candidates. There may be third-party patents or patent applications with claims to materials, formulations, methods of manufacture or methods for treatment related to our product candidates and programs. As the biotechnology and pharmaceutical industries expand and more patents are issued, the risk increases that our product candidates may give rise to claims of infringement of the patent rights of others. Moreover, it is not always clear to industry participants, including us, which patents cover various types of drugs, products or their methods of use or manufacture. Thus, because of the large number of patents issued and patent applications filed in our fields, there may be a risk that third parties may allege they have patent rights encompassing our product candidates, technologies or methods.

If a third-party claims that we infringe its intellectual property rights, we may face a number of issues, including, but not limited to:

- infringement and other intellectual property claims which, regardless of merit, may be expensive and time-consuming to litigate and may divert our management's attention from our core business;
- substantial damages for infringement, which we may have to pay if a court decides that the product candidate or technology at issue infringes on or violates the third party's rights, and, if the court finds that the infringement was willful, we could be ordered to pay treble damages and the patent owner's attorneys' fees;
- a court prohibiting us from developing, manufacturing, marketing or selling our product candidates, or from using our proprietary technologies, unless the third party licenses its product rights to us, which it is not required to do;
- if a license is available from a third party, we may have to pay substantial royalties, upfront fees and other amounts, and/or grant cross-licenses to intellectual property rights for our products; and
- redesigning our product candidates or processes so they do not infringe, which may not be possible or may require substantial monetary expenditures and time.

Some of our competitors may be able to sustain the costs of complex patent litigation more effectively than we can because they have substantially greater resources. In addition, any uncertainties resulting from the initiation and continuation of any litigation could have a material adverse effect on our ability to raise the funds necessary to continue our operations or could otherwise have a material adverse effect on our business, results of operations, financial condition and prospects.

Third parties may assert that we are employing their proprietary technology without authorization. Generally, conducting clinical trials and other development activities in the United States is protected under the Safe Harbor exemption as set forth in 35 U.S.C. § 271. If and when KER-050, KER-047, KER-012 or another one of our product candidates is approved by the FDA, that certain third party may then seek to enforce its patent by filing a patent infringement lawsuit against us. While we do not believe that any claims of such patent that could otherwise materially adversely affect commercialization of our product candidates, if approved, are valid and enforceable, we may be incorrect in this belief, or we may not be able to prove it in a litigation. In this regard, patents issued in the United States by law enjoy a presumption of validity that can be rebutted only with evidence that is "clear and convincing," a heightened standard of proof. There may be third-party patents of which we are currently unaware with claims to materials, formulations, methods of manufacture or methods for treatment related to the use or manufacture of our product candidates. Because patent applications can take many years to issue, there may be currently pending patent applications which may later result in issued patents that our product candidates 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 of competent jurisdiction to cover the manufacturing process of our product candidates, constructs or molecules used in or formed during the manufacturing process, or any final product itself, the holders of any such patents may be able to block our ability to commercialize the product candidate unless we obtained a license under the applicable patents, or until such patents expire or they are finally determined to be held invalid or unenforceable. Similarly, if any third-party patent were held by a court of competent jurisdiction to cover aspects of our formulations, processes for manufacture or methods of use, the holders of any such patent may be able to block our ability to develop and commercialize the product candidate unless we obtained a license or until such patent expires or is finally determined to be held invalid or unenforceable. In either case, such a license may not be available on commercially reasonable terms or at all. If we are unable to obtain a necessary license to a third-party patent on commercially reasonable terms, or at all, our ability to

commercialize our product candidates may be impaired or delayed, which could in turn significantly harm our business. Even if we obtain a license, it may be non-exclusive, thereby giving our competitors access to the same technologies licensed to us. In addition, 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 current or future product candidates.

Parties making claims against us may seek and obtain injunctive or other equitable relief, which could effectively block our ability to further develop and commercialize our product candidates. Defense of these claims, regardless of their merit, would involve substantial litigation expense and would be a substantial diversion of employee resources from our business. In the event of a successful claim of infringement against us, we may have to pay substantial damages, including treble damages and attorneys' fees for willful infringement, obtain one or more licenses from third parties, pay royalties or redesign our infringing products, which may be impossible or require substantial time and monetary expenditure. We cannot predict whether any such license would be available at all or whether it would be available on commercially reasonable terms. Even if such a license is available, it may be non-exclusive, which could result in our competitors gaining access to the same intellectual property. Furthermore, even in the absence of litigation, we may need to obtain licenses from third parties to advance our research or allow commercialization of our product candidates. We may fail to obtain any of these licenses at a reasonable cost or on reasonable terms, if at all. In that event, we would be unable to further develop and commercialize our product candidates, which could harm our business significantly.

Lastly, we may need to indemnify our customers and distributors against claims relating to the infringement of intellectual property rights of third parties related to our product candidates, including KER-050, KER-047 and KER-012. Third parties may assert infringement claims against our customers or distributors. These claims may require us to initiate or defend protracted and costly litigation on behalf of our customers or distributors, regardless of the merits of these claims. If any of these claims succeed, we may be forced to pay damages on behalf of our customers, suppliers or distributors, or may be required to obtain licenses for the product candidates or services they use. If we cannot obtain all necessary licenses on commercially reasonable terms, our customers may be forced to stop using our products or services.

Third parties may assert that our employees or consultants have wrongfully used or disclosed confidential information or misappropriated trade secrets.

As is common in the biotechnology and pharmaceutical industries, we employ individuals who were previously employed at universities or other biopharmaceutical or pharmaceutical companies, including our competitors or potential competitors. Although no claims against us are currently pending, and although we try to ensure that our employees and consultants do not use the proprietary information or know-how of others in their work for us, we may be subject to claims that we or our employees, consultants or independent contractors have inadvertently or otherwise used or disclosed intellectual property, including trade secrets or other proprietary information, of a former employer or other third parties. Litigation may be necessary to defend against these claims. If we fail in defending any such claims, in addition to paying monetary damages, we may lose valuable intellectual property rights or personnel. Even if we are successful in defending against such claims, litigation or other legal proceedings relating to intellectual property claims may cause us to incur significant expenses, and could distract our technical and management personnel from their normal responsibilities. In addition, there could be public announcements of the results of hearings, motions or other interim proceedings or developments, and, if securities analysts or investors perceive these results to be negative, it could have a substantial adverse effect on the price of our common stock. This type of litigation or proceeding 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 intellectual property related proceedings could adversely affect our ability to compete in the marketplace.

We may not be successful in obtaining or maintaining necessary rights to develop any future product candidates on acceptable terms.

Because our programs may involve additional product candidates that may require the use of proprietary rights held by third parties, the growth of our business may depend in part on our ability to acquire, in-license or use these proprietary rights.

Our product candidates may also require specific formulations to work effectively and efficiently and these rights may be held by others. We may develop products containing our compounds and pre-existing pharmaceutical compounds. We may be required by the FDA or comparable foreign regulatory authorities to provide a companion diagnostic test or tests with our

product candidates. These diagnostic test or tests may be covered by intellectual property rights held by others. We may be unable to acquire or in-license any compositions, methods of use, processes or other third-party intellectual property rights from third parties that we identify as necessary or important to our business operations. We may fail to obtain any of these licenses at a reasonable cost or on reasonable terms, if at all, which would harm our business. We may need to cease use of the compositions or methods covered by such third-party intellectual property rights, and may need to seek to develop alternative approaches that do not infringe on such intellectual property rights which may entail additional costs and development delays, even if we were able to develop such alternatives, which may not be feasible. Even if we are able to obtain a license, it may be non-exclusive, thereby giving our competitors access to the same technologies licensed to us. In that event, we may be required to expend significant time and resources to develop or license replacement technology.

Additionally, we sometimes collaborate with academic institutions to accelerate our preclinical research or development under written agreements with these institutions. In certain cases, these institutions provide us with an option to negotiate a license to any of the institution's rights in technology resulting from the collaboration. Regardless of such option, we may be unable to negotiate a license within the specified timeframe or under terms that are acceptable to us. If we are unable to do so, the institution may offer the intellectual property rights to others, potentially blocking our ability to pursue our program. If we are unable to successfully obtain rights to required third-party intellectual property or to maintain the existing intellectual property rights we have, we may have to abandon development of such program and our business and financial condition could suffer.

The licensing and acquisition of third-party intellectual property rights is a competitive area, and companies, which may be more established, or have greater resources than we do, may also be pursuing strategies to license or acquire third-party intellectual property rights that we may consider necessary or attractive in order to commercialize our product candidates. More established companies may have a competitive advantage over us due to their size, cash resources and greater clinical development and commercialization capabilities. There can be no assurance that we will be able to successfully complete such negotiations and ultimately acquire the rights to the intellectual property surrounding the additional product candidates that we may seek to acquire.

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

Competitors may infringe our patents or the patents of our licensors. To counter infringement or unauthorized use, we may be required to file infringement claims, which can be expensive and time-consuming. In addition, in an infringement proceeding, a court may decide that one or more of our patents is not valid or is unenforceable, or may refuse to stop the other party from using the technology at issue on the grounds that our patents do not cover the technology in question. An adverse result in any litigation or defense proceedings could put one or more of our patents at risk of being invalidated, held unenforceable, or interpreted narrowly and could put our patent applications at risk of not issuing. Defense of these claims, regardless of their merit, would involve substantial litigation expense and would be a substantial diversion of employee resources from our business.

We may choose to challenge the patentability of claims in a third party's U.S. patent by requesting that the USPTO review the patent claims in an *ex-parte* re-exam, *inter partes* review or post-grant review proceedings. These proceedings are expensive and may consume our time or other resources. We may choose to challenge a third party's patent in patent opposition proceedings in the foreign patent offices. The costs of these opposition proceedings could be substantial, and may consume our time or other resources. If we fail to obtain a favorable result at the USPTO or other patent office then we may be exposed to litigation by a third party alleging that the patent may be infringed by our product candidates or proprietary technologies.

In addition, because some patent applications in the United States may be maintained in secrecy until the patents are issued, patent applications in the United States and many foreign jurisdictions are typically not published until 18 months after filing, and publications in the scientific literature often lag behind actual discoveries, we cannot be certain that others have not filed patent applications for technology covered by our owned and in-licensed issued patents or our pending applications, or that we or, if applicable, a licensor were the first to invent the technology. Our competitors may have filed, and may in the future file, patent applications covering our products or technology similar to ours. Any such patent application may have priority over our owned and in-licensed patent applications or patents, which could require us to obtain rights to issued patents covering such technologies. If another party has filed a U.S. patent application on inventions similar to those owned by or in-licensed to us, we or, in the case of in-licensed technology, the licensor may have to participate in an interference proceeding declared by the USPTO to determine priority of invention in the United States. If we or one of our licensors is a party to an interference proceeding involving a U.S. patent application on inventions owned by or in-licensed to us, we may incur substantial costs, divert management's time and expend other resources, even if we are successful.

Interference proceedings provoked by third parties or brought by the USPTO may be necessary to determine the priority of inventions with respect to our patents or patent applications or those of our licensors. An unfavorable outcome could result in a loss of our current patent rights and could require us to cease using the related technology or to attempt to license rights to it from the prevailing party. Our business could be harmed if the prevailing party does not offer us a license on commercially reasonable terms or at all. Litigation or interference proceedings may result in a decision adverse to our interests and, even if we are successful, may result in substantial costs and distract our management and other employees. We may not be able to prevent, alone or with our licensors, misappropriation of our trade secrets or confidential information, particularly in countries where the laws may not protect those rights as fully as in the United States.

Furthermore, because of the substantial amount of discovery required in connection with intellectual property litigation, there is a risk that some of our confidential information could be compromised by disclosure during this type of litigation. In addition, there could be public announcements of the results of hearings, motions or other interim proceedings or developments. If securities analysts or investors perceive these results to be negative, it could have a substantial adverse effect on the price of our common stock.

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

Periodic maintenance fees on any issued patent are due to be paid to the USPTO and foreign patent agencies in several stages over the lifetime of the patent. The USPTO and various foreign governmental patent agencies require compliance with a number of procedural, documentary, fee payment and other provisions during the patent application process and following the issuance of a patent. While an inadvertent lapse, including due to the effect of the COVID-19 pandemic on us or our licensors' patent maintenance vendors, can in many cases be cured by payment of a late fee or by other means in accordance with the applicable rules, there are situations in which noncompliance can result in abandonment or lapse of the patent or patent application, resulting in partial or complete loss of patent rights in the relevant jurisdiction. Noncompliance events that could result in abandonment or lapse of a patent or patent application include, but are not limited to, failure to respond to official actions within prescribed time limits, non-payment of fees and failure to properly legalize and submit formal documents. In such an event, our competitors might be able to enter the market, which would have a material adverse effect on our business.

Issued patents covering our product candidates could be found invalid or unenforceable if challenged in court or the USPTO.

If we or one of our licensing partners initiate legal proceedings against a third party to enforce a patent covering one of our product candidates, the defendant could counterclaim that the patent covering our product candidate, as applicable, is invalid and/or unenforceable. In patent litigation in the United States, defendant counterclaims alleging invalidity and/or unenforceability are commonplace, and there are numerous grounds upon which a third-party can assert invalidity or unenforceability of a patent. Third parties may also raise similar claims before administrative bodies in the United States or abroad, even outside the context of litigation. Such mechanisms include re-examination, post grant review, and equivalent proceedings in foreign jurisdictions (e.g., opposition proceedings). Such proceedings could result in revocation or amendment to our patents in such a way that they no longer cover our product candidates. The outcome following legal assertions of invalidity and unenforceability is unpredictable. With respect to the validity question, for example, we cannot be certain that there is no invalidating prior art, of which we, our patent counsel and the patent examiner were unaware during prosecution. If a defendant were to prevail on a legal assertion of invalidity and/or unenforceability, or if we are otherwise unable to adequately protect our rights, we would lose at least part, and perhaps all, of the patent protection on our product candidates. Such a loss of patent protection could have a material adverse impact on our business and our ability to commercialize or license our technology and product candidates.

Moreover, the patents included in our patent portfolio may expire before, or soon after, our first product achieves marketing approval in the United States or foreign jurisdictions. For example, the patents related to novel ALK2 inhibitors in the patent family that we license from The General Hospital Corporation are expected to expire in April 2038, without taking into account any possible patent term adjustments or extensions. Upon the expiration of our current or future owned or licensed patents, we may lose the right to exclude others from practicing these inventions. The expiration of these patents could also have a similar material adverse effect on our business, results of operations, financial condition and prospects. We own pending patent applications covering our proprietary technologies or our product candidates that if issued as patents are expected to

expire from 2037 through 2039, without taking into account any possible patent term adjustments or extensions. However, we cannot be assured that the USPTO or relevant foreign patent offices will grant any of these patent applications.

Changes in patent law in the U.S. and in ex-U.S. jurisdictions could diminish the value of patents in general, thereby impairing our ability to protect our products.

As is the case with other biopharmaceutical companies, our success is heavily dependent on intellectual property, particularly patents. Obtaining and enforcing patents in the biopharmaceutical industry involve both technological and legal complexity, and is therefore costly, time-consuming and inherently uncertain. Changes in either the patent laws or interpretation of the patent laws in the United States or in ex-U.S. jurisdictions could increase the uncertainties and costs surrounding the prosecution of patent applications and the enforcement or defense of issued patents. In addition, the United States has recently enacted and is currently implementing wide-ranging patent reform legislation. Recent U.S. Supreme Court rulings have narrowed the scope of patent protection available in certain circumstances and weakened the rights of patent owners in certain situations. In addition to increasing uncertainty with regard to our ability to obtain patents in the future, this combination of events has created uncertainty with respect to the value of patents, once obtained. Depending on decisions by the U.S. Congress, the federal courts, and the USPTO, the laws and regulations governing patents could change in unpredictable ways that would weaken our ability to obtain new patents or to enforce our existing patents and patents that we might obtain in the future. For example, in the case *Amgen Inc. v. Sanofi,* the Federal Circuit held that a well-characterized antigen is insufficient to satisfy the written description requirement of certain claims directed to a genus of antibodies that are solely defined by function; and in the case of *Assoc. for Molecular Pathology v. Myriad Genetics, Inc.,* the U.S. Supreme Court held that certain claims to DNA molecules are not patentable. We cannot predict how these decisions or any future decisions by the courts, the U.S. Congress or the USPTO may impact the value of our patents. Similarly, any adverse changes in the patent laws of other jurisdictions could have a material adverse effect on our business and financial condition.

Some of our in-licensed intellectual property that was discovered through government-funded programs may be subject to federal regulation such as "march-in" rights, certain reporting requirements and a preference for U.S. industry. Compliance with such regulations may limit our exclusive rights, subject us to expenditure of resources with respect to reporting requirements and limit our ability to contract with foreign manufacturers.

At least one of our in-licensed patent cases related to our KER-047 product candidate has been funded in part by the U.S. government and, therefore, is subject to certain federal regulations pursuant to the Bayh-Dole Act of 1980, or the Bayh-Dole Act, and it is possible that additional patent filings we may choose to in-license in the future may also be subject to similar regulations. In particular, the federal government retains a "nonexclusive, nontransferable, irrevocable, paid-up license" for its own benefit to inventions produced with its financial assistance. The Bayh-Dole Act also provides federal agencies with "march-in rights." March-in rights allow the government, in specified circumstances, to require the contractor or successors in title to the patent to grant a "nonexclusive, partially exclusive, or exclusive license" to a "responsible applicant or applicants." If the patent owner refuses to do so, the government may grant the license itself. Intellectual property discovered under government-funded programs are also subject to certain reporting requirements, compliance with which may require us or our licensors to expend substantial resources. Such intellectual property is also subject to a preference for U.S. industry, which may limit our ability to contract with foreign product manufacturers for products covered by such intellectual property. Moreover, we sometimes collaborate with academic institutions to accelerate our preclinical research or development. While it is our policy to avoid engaging our university partners in projects in which there is a risk that federal funds may be commingled, we cannot be sure that any co-developed intellectual property will be free from government rights pursuant to the Bayh-Dole Act. Further, we may choose to license intellectual property in the future that may be subject to government rights pursuant to the Bayh-Dole Act. If, in the future, we co-own or license in technology which is critical to our business that is developed in whole or in part with federal funds subject to the Bayh-Dole Act, our ability to enforce or otherwise exploit patents covering such technology may be adversely affected.

We have limited foreign intellectual property rights and may not be able to protect our intellectual property rights throughout the world.

We have limited intellectual property rights outside the United States. Filing, prosecuting and defending patents on product candidates in all countries throughout the world would be prohibitively expensive, and our intellectual property rights in some countries outside the United States can be less extensive than those in the United States. In addition, the laws of some foreign countries do not protect intellectual property rights to the same extent as do federal and state laws in the United States. Consequently, we may not be able to prevent third parties from practicing our inventions in all countries outside the United States, or from selling or importing products made using our inventions in and into the United States or other

jurisdictions. Many countries have compulsory licensing laws under which a patent owner may be compelled to grant licenses to third parties. In addition, many countries limit the enforceability of patents against government agencies or government contractors. In these countries, the patent owner may have limited remedies, which could materially diminish the value of such patent. If we or any of our licensors are forced to grant a license to third parties with respect to any patents relevant to our business, our competitive position may be impaired, and our business, financial condition, results of operations and prospects may be adversely affected. Also, competitors may use our technologies in jurisdictions where we have not obtained patent protection to develop their own products and, further, may export otherwise infringing products to territories where we have patent protection but where enforcement is not as strong as that in the United States. These products may compete with our products in jurisdictions where we do not have any issued patents and our patent claims or other intellectual property rights may not be effective or sufficient to prevent them from competing.

Many companies have encountered significant problems in protecting and defending intellectual property rights in foreign jurisdictions. The legal systems of certain countries, particularly certain developing countries, do not favor the enforcement of patents, trade secrets and other intellectual property protection, particularly those relating to biopharmaceutical products, which could make it difficult for us to stop the infringement of our patents or marketing of competing products against third parties in violation of our proprietary rights generally. The initiation of proceedings by third parties to challenge the scope or validity of our patent rights in foreign jurisdictions could result in substantial cost and divert our efforts and attention from other aspects of our business. Proceedings to enforce our patent rights in foreign jurisdictions could result in substantial costs and divert our efforts and attention from other aspects of our business, could put our patents at risk of being invalidated or interpreted narrowly and our patent applications at risk of not issuing and could provoke third parties to assert claims against us. We may not prevail in any lawsuits that we initiate and the damages or other remedies awarded, if any, may not be commercially meaningful. Accordingly, our efforts to enforce our intellectual property rights around the world may be inadequate to obtain a significant commercial advantage from the intellectual property that we develop or license.

We may incur substantial costs as a result of litigation or other proceedings relating to patents, and we may be unable to protect our rights to our products and technology.

If we or our licensors choose to go to court to stop a third party from using the inventions claimed in our owned or in-licensed patents, that third party may ask the court to rule that the patents are invalid and/or should not be enforced against that third party. These lawsuits are expensive and would consume time and other resources even if we or they, as the case may be, were successful in stopping the infringement of these patents. In addition, there is a risk that the court will decide that these patents are not valid and that we or they, as the case may be, do not have the right to stop others from using the inventions.

There is also the risk that, even if the validity of these patents is upheld, the court will refuse to stop the third party on the ground that such third party's activities do not infringe our owned or in-licensed patents. In addition, the U.S. Supreme Court has recently changed some legal principles that affect patent applications, granted patents and assessment of the eligibility or validity of these patents. As a consequence, issued patents may be found to contain invalid claims according to the newly revised eligibility and validity standards. Some of our owned or in-licensed patents may be subject to challenge and subsequent invalidation or significant narrowing of claim scope in proceedings before the USPTO, or during litigation, under the revised criteria which could also make it more difficult to obtain patents.

We, or our licensors, may not be able to detect infringement against our owned or in-licensed patents, as the case may be, which may be especially difficult for manufacturing processes or formulation patents. Even if we or our licensors detect infringement by a third party of our owned or in-licensed patents, we or our licensors, as the case may be, may choose not to pursue litigation against or settlement with the third party. If we, or our licensors, later sue such third party for patent infringement, the third party may have certain legal defenses available to it, which otherwise would not be available except for the delay between when the infringement was first detected and when the suit was brought. Such legal defenses may make it impossible for us or our licensors to enforce our owned or in-licensed patents, as the case may be, against such third party.

If another party questions the patentability of any of our claims in our owned or in-licensed U.S. patents, the third-party can request that the USPTO review the patent claims such as in an *inter partes* review, *ex parte* re-exam or post-grant review proceedings. These proceedings are expensive and may result in a loss of scope of some claims or a loss of the entire patent. In addition to potential USPTO review proceedings, we may become a party to patent opposition proceedings in foreign patent offices, where either our owned or in-licensed foreign patents are challenged.

In the future, we may be involved in similar proceedings challenging the patent rights of others, and the outcome of such proceedings is highly uncertain. An adverse determination in any such proceeding could reduce the scope of, or invalidate,

our patent rights, allow third parties to commercialize our technology or products and compete directly with us, without payment to us, or result in our inability to manufacture or commercialize products without infringing third-party patent rights. The costs of these opposition or similar proceedings could be substantial, and may result in a loss of scope of some claims or a loss of the entire patent. An unfavorable result at the USPTO or other patent office may result in the loss of our right to exclude others from practicing one or more of our inventions in the relevant country or jurisdiction, which could have a material adverse effect on our business.

Patent terms may be inadequate to protect our competitive position on our product candidates for an adequate amount of time.

Patents have a limited lifespan. In the United States, if all maintenance fees are timely paid, the natural expiration of a patent is generally 20 years from its earliest U.S. non-provisional filing date. Various extensions such as patent term adjustments and/or extensions, may be available, but the life of a patent, and the protection it affords, is limited. Even if patents covering our product candidates are obtained, once the patent life has expired, we may be open to competition from competitive products, including biosimilars. Given the amount of time required for the development, testing and regulatory review of new product candidates, patents protecting such candidates might expire before or shortly after such candidates are commercialized. As a result, our owned and licensed patent portfolio may not provide us with sufficient rights to exclude others from commercializing products similar or identical to ours.

If we do not obtain patent term extension and data exclusivity for any product candidates we may develop, our business may be materially harmed.

Depending upon the timing, duration and specifics of any FDA marketing approval of any product candidates we may develop, one or more of our U.S. patents may be eligible for limited patent term extension under the Drug Price Competition and Patent Term Restoration Action of 1984 Hatch-Waxman Amendments. The Hatch-Waxman Amendments permit a patent extension term of up to five years as compensation for patent term lost during the FDA regulatory review process. A patent term extension cannot extend the remaining term of a patent beyond a total of 14 years from the date of product approval, only one patent may be extended and only those claims covering the approved drug, a method for using it, or a method for manufacturing it may be extended. However, we may not be granted an extension because of, for example, failing to exercise due diligence during the testing phase or regulatory review process, failing to apply within applicable deadlines, failing to apply prior to expiration of relevant patents, or otherwise failing to satisfy applicable requirements. Moreover, the applicable time period or the scope of patent protection afforded could be less than we request. If we are unable to obtain patent term extension or term of any such extension is less than we request, our competitors may obtain approval of competing products following our patent expiration, and our business, financial condition, results of operations, and prospects could be materially harmed. Further, for our licensed patents, we may not have the right to control prosecution, including filing with the USPTO, of a petition for patent term extension under the Hatch-Waxman Act. Thus, if one of our licensed patents is eligible for patent term extension under the Hatch-Waxman Act, we may not be able to control whether a petition to obtain a patent term extension is filed, or obtained, from the USPTO.

If our trademarks and trade names are not adequately protected, then we may not be able to build name recognition in our markets of interest and our business may be adversely affected.

Our trademarks or trade names may be challenged, infringed, circumvented or declared generic or determined to be infringing on other marks. We may not be able to protect our rights to these trademarks and trade names or may be forced to stop using these names, which we need for name recognition by potential partners or customers in our markets of interest. At times, competitors may adopt trade names or trademarks similar to ours, thereby impeding our ability to build brand identity and possibly leading to market confusion. In addition, there could be potential trade name or trademark infringement claims brought by owners of other registered trade names or trademarks that incorporate variations of our unregistered trade names or trademarks. If we are unable to establish name recognition based on our trademarks and trade names, we may not be able to compete effectively and our business may be adversely affected.

Risks Related to Our Reliance on Third Parties

We rely, and expect to continue to rely, on third parties, including independent clinical investigators, contracted laboratories and CROs, to conduct our preclinical studies and clinical trials. If these third parties do not successfully carry out their contractual duties or meet expected deadlines, we may not be able to obtain regulatory approval for or commercialize our product candidates and our business could be substantially harmed.

We have relied upon and plan to continue to rely upon third parties, including independent clinical investigators, contracted laboratories and third-party CROs, to conduct our preclinical studies and clinical trials in accordance with applicable regulatory requirements and to monitor and manage data for our ongoing preclinical and clinical programs. We rely on these parties for execution of our preclinical studies and clinical trials, and control only certain aspects of their activities. Nevertheless, we are responsible for ensuring that each of our studies and trials is conducted in accordance with the applicable protocol, legal and regulatory requirements and scientific standards, and our reliance on these third parties does not relieve us of our regulatory responsibilities. We and our third-party contractors and CROs are required to comply with good laboratory practices, or GLPs, as applicable, and GCP requirements, which are regulations and guidelines enforced by the FDA and comparable foreign regulatory authorities for conducting, recording and reporting the results of clinical trials to assure that data and reported results are credible, reproducible and accurate and that the rights, integrity, and confidentiality of trial participants are protected. Regulatory authorities enforce these GLPs and GCPs through periodic inspections of laboratories conducting GLP studies, trial sponsors, principal investigators and trial sites. If we, our investigators or any of our CROs or contracted laboratories fail to comply with applicable GLPs and GCPs, 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 preclinical studies or clinical trials before approving our marketing applications. We cannot assure you that upon inspection by a given regulatory authority, such regulatory authority will determine that any of our preclinical studies or clinical trials comply with applicable GLP or GCP regulations. In addition, our clinical trials must be conducted with product, including biologic product, produced in compliance with applicable cGMP regulations. Our failure to comply with these regulations may require us to repeat preclinical studies or clinical trials, which would delay the regulatory approval process.

Further, these laboratories, investigators and CROs are not our employees and we will not be able to control, other than by contract, the amount of resources, including time, which they devote to our product candidates and clinical trials. If independent laboratories, investigators or CROs fail to devote sufficient resources to the development of our product candidates, or if their performance is substandard, it may delay or compromise the prospects for approval and commercialization of any product candidates that we develop. In addition, the use of third-party service providers requires us to disclose our proprietary information to these parties, which could increase the risk that this information will be misappropriated.

Our CROs have the right to terminate their agreements with us in the event of an uncured material breach. In addition, some of our CROs have an ability to terminate their respective agreements with us if it can be reasonably demonstrated that the safety of the subjects participating in our clinical trials warrants such termination, if we make a general assignment for the benefit of our creditors or if we are liquidated.

The COVID-19 pandemic and government measures taken in response have also had a significant impact on our CROs, and we expect that they will face further disruption which may affect our ability to initiate and complete our preclinical studies and clinical trials.

There is a limited number of third-party service providers that specialize or have the expertise required to achieve our business objectives. If any of our relationships with these third-party laboratories, CROs or clinical investigators terminate, we may not be able to enter into arrangements with alternative laboratories, CROs or investigators or to do so in a timely manner or on commercially reasonable terms. If laboratories, CROs or clinical investigators do not successfully carry out their contractual duties or obligations or meet expected deadlines, if they need to be replaced or if the quality or accuracy of the clinical data they obtain is compromised due to the failure to adhere to our preclinical or clinical protocols, regulatory requirements or for other reasons, our preclinical or clinical trials may be extended, delayed or terminated and we may not be able to obtain regulatory approval for or successfully commercialize our product candidates. As a result, our results of operations and the commercial prospects for our product candidates would be harmed, our costs could increase and our ability to generate revenues could be delayed.

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

In addition, clinical investigators may serve as scientific advisors or consultants to us from time to time and may receive cash or equity compensation in connection with such services. If these relationships and any related compensation result in perceived or actual conflicts of interest, or the FDA concludes that the financial relationship may have affected the interpretation of the preclinical study or clinical trial, the integrity of the data generated at the applicable preclinical study or clinical trial site may be questioned and the utility of the preclinical study or clinical trial itself may be jeopardized, which could result in the delay or rejection by the FDA. Any such delay or rejection could prevent us from commercializing our clinical-stage product candidate or any future product candidates.

We rely on third parties to supply and manufacture our product candidates, and we expect to continue to rely on third parties to manufacture our products, if approved. The development of such product candidates and the commercialization of any products, if approved, could be stopped, delayed or made less profitable if any such third party fails to provide us with sufficient quantities of product candidates or products or fails to do so at acceptable quality levels or prices or fails to maintain or achieve satisfactory regulatory compliance.

We do not currently have the infrastructure or capability internally to manufacture our product candidates for use in the conduct of our preclinical studies and clinical trials or for commercial supply, if our products are approved. We rely on, and expect to continue to rely on, contract manufacturing organizations, or CMOs. Any replacement of our CMOs could require significant effort and expertise because there may be a limited number of qualified CMOs. This could be particularly problematic where we rely on a single-source supplier, as is currently the case for the manufacture of each of KER-050, KER-047 and KER-012.

Reliance on third-party providers may expose us to more risk than if we were to manufacture our product candidates ourselves. We are dependent on our CMOs for the production of our product candidates in accordance with relevant regulations, such as cGMP, which includes, among other things, quality control, quality assurance and the maintenance of records and documentation. Moreover, many of the third parties with whom we contract may also have relationships with other commercial entities, including our competitors, for whom they may also be conducting product development activities that could harm our competitive position.

If we were to experience an unexpected loss of supply of or if any supplier were unable to meet our demand for any of our product candidates, we could experience delays in our research or planned clinical trials or commercialization. For example, the extent to which the COVID-19 pandemic impacts our ability to procure sufficient supplies for the development of our 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 could be unable to find alternative suppliers of acceptable quality, in the appropriate volumes and at an acceptable cost. Moreover, our suppliers are often subject to strict manufacturing requirements and rigorous testing requirements, which could limit or delay production. Any changes in regulatory requirements, policy and guidelines, including the imposition of additional regulatory oversight around manufacturing and testing requirements generally or with respect to our technology in particular, could also limit or delay production. The long transition periods necessary to switch manufacturers and suppliers, if necessary, could significantly delay our clinical studies and the commercialization of our products, if approved, which could materially adversely affect our business, financial condition and results of operation.

In complying with the applicable manufacturing regulations of the FDA and comparable foreign regulatory authorities, we and our third-party suppliers must spend significant time, money and effort in the areas of design and development, testing, production, record-keeping and quality control to assure that the products meet applicable specifications and other regulatory requirements. The facilities used by our contract manufacturers to manufacture our product candidates are subject to review by the FDA pursuant to inspections that will be conducted after we submit our NDA or BLA to the FDA. We do not control the manufacturing process of, and are completely dependent on, our contract manufacturing partners for compliance with cGMP requirements for manufacture of drug and biologic products. If our contract manufacturers cannot successfully manufacture material that conforms to our specifications and the strict regulatory requirements of the FDA or others, we will not be able to secure or maintain regulatory approval for our product candidates manufactured at these manufacturing facilities. In addition, we have no control over the ability of our contract manufacturers to maintain adequate quality control, quality assurance and qualified personnel. If the FDA or a comparable foreign regulatory agency does not approve these facilities for the manufacture of our product candidates or if any agency withdraws its approval in the future, we and they may need to find alternative manufacturing facilities, which would negatively impact the ability to develop, obtain regulatory approval for or market our product candidates, if approved. The failure of our manufacturers to comply with regulatory requirements could also result in an enforcement action against us, including the seizure of products and shutting down of production. If any of our third-party suppliers fails to comply with cGMP or other applicable manufacturing regulations, our ability to develop and commercialize the products could suffer significant interruptions. We face risks inherent in relying on a single CMO, as any

disruption, such as a fire, natural hazards or vandalism at the CMO could significantly interrupt our manufacturing capability. All of our CMOs currently do not have alternative production plans in place or disaster-recovery facilities available. In case of a disruption, we will have to establish alternative manufacturing sources. This would require substantial capital on our part, which we may not be able to obtain on commercially acceptable terms or at all. Additionally, we would likely experience months of manufacturing delays as the CMO builds or locates replacement facilities and seeks and obtains necessary regulatory approvals. If this occurs, we will be unable to satisfy manufacturing needs on a timely basis, if at all.

Our future collaborations will be important to our business. If we are unable to enter into new collaborations, or if these collaborations are not successful, our business could be adversely affected.

A part of our strategy is to strategically evaluate and, as deemed appropriate, enter into additional strategic collaborations in the future when strategically attractive, including potentially with major biotechnology or pharmaceutical companies. We have limited capabilities for product development and do not yet have any capability for commercialization. Accordingly, we may enter into collaborations with other companies to provide us with important technologies and funding for our programs and technology. If we fail to enter into or maintain collaborations on reasonable terms or at all, our ability to develop our existing or future research programs and product candidates could be delayed, the commercial potential of our product could change and our costs of development and commercialization could increase. Furthermore, we may find that our programs require the use of intellectual property rights held by third parties, and the growth of our business may depend in part on our ability to acquire or in-license these intellectual property rights.

Any future collaborations we enter into may pose a number of risks, including, but not limited to, the following:

- collaborators have significant discretion in determining the efforts and resources that they will apply;
- collaborators may not perform their obligations as expected;
- collaborators may not pursue development and commercialization of any product candidates that achieve regulatory approval or may elect not to continue or renew development or commercialization programs or license arrangements based on clinical trial results, changes in the collaborators' strategic focus or available funding, or external factors, such as a strategic transaction that may divert resources or create competing priorities;
- collaborators may delay clinical trials, provide insufficient funding for a clinical trial program, stop a clinical trial or abandon a product candidate, repeat or conduct new clinical trials or require a new formulation of a product candidate for clinical testing;
- collaborators could independently develop, or develop with third parties, products that compete directly or indirectly with our products and product candidates if the collaborators believe that the competitive products are more likely to be successfully developed or can be commercialized under terms that are more economically attractive than ours;
- product candidates discovered in collaboration with us may be viewed by our collaborators as competitive with their own product candidates or products, which may cause collaborators to cease to devote resources to the commercialization of our product candidates;
- collaborators may fail to comply with applicable regulatory requirements regarding the development, manufacture, distribution or marketing of a product candidate or product;
- collaborators with marketing and distribution rights to one or more of our product candidates that achieve regulatory approval may not commit sufficient resources to the marketing and distribution of such product or products;
- disagreements with collaborators, including disagreements over proprietary rights, contract interpretation or the preferred course of development, might cause delays or terminations of the research, development or commercialization of product candidates, might lead to additional responsibilities for us with respect to product candidates, or might result in litigation or arbitration, any of which would be time-consuming and expensive;
- collaborators may not properly maintain or defend our intellectual property rights or may use our proprietary information in such a way as to invite litigation that could jeopardize or invalidate our intellectual property or proprietary information or expose us to potential litigation;
- collaborators may infringe the intellectual property rights of third parties, which may expose us to litigation and potential liability;
- if a collaborator of ours is involved in a business combination, the collaborator might de-emphasize or terminate the development or commercialization of any product candidate licensed to it by us; and
- collaborations may be terminated by the collaborator, and, if terminated, we could be required to raise additional capital to pursue further development or commercialization of the applicable product candidates.

If our collaborations do not result in the successful discovery, development and commercialization of product candidates or if one of our collaborators terminates its agreement with us, we may not receive any future research funding or milestone or

royalty payments under such collaboration. All of the risks relating to product development, regulatory approval and commercialization described in this Quarterly Report on Form 10-Q also apply to the activities of our therapeutic collaborators.

Additionally, if one of our collaborators terminates its agreement with us, we may find it more difficult to attract new collaborators and our perception in the business and financial communities could be adversely affected.

We face significant competition in seeking appropriate collaborative partners. Our ability to reach a definitive agreement for a collaboration will depend, among other things, upon an assessment of the collaborator's resources and expertise, the terms and conditions of the proposed collaboration and the proposed collaborator's evaluation of a number of factors. These factors may include the design or results of preclinical studies or clinical trials, the likelihood of regulatory approval, the potential market for the subject product candidate, the costs and complexities of manufacturing and delivering such product candidate to patients, the potential of competing products, the existence of any uncertainty with respect to our ownership of technology (which can exist if there is a challenge to such ownership regardless of the merits of the challenge) and industry and market conditions generally. The collaborator may also consider alternative product candidates or technologies for similar indications that may be available to collaborate on and whether such a collaboration could be more attractive than the one with us.

We may not be able to negotiate collaborations on a timely basis, on acceptable terms, or at all. If we are unable to do so, we may have to curtail the development of the product candidate for which we are seeking to collaborate, reduce or delay its development program or one or more of our other development programs, delay its potential commercialization, reduce the scope of any sales or marketing activities or increase our expenditures and undertake development or commercialization activities at our own expense. If we elect to increase our expenditures to fund development or commercialization activities on our own, we may need to obtain additional capital, which may not be available to us on acceptable terms or at all. If we do not have sufficient funds, we may not be able to further develop product candidates or bring them to market and generate product revenue.

If we engage in future acquisitions or strategic collaborations, this may increase our capital requirements, dilute our stockholders, cause us to incur debt or assume contingent liabilities and subject us to other risks.

From time to time, we may evaluate various acquisition opportunities and strategic collaborations, including licensing or acquiring complementary products, intellectual property rights, technologies or businesses. Any potential acquisition or strategic collaboration may entail numerous risks, including:

- increased operating expenses and cash requirements;
- the assumption of additional indebtedness or contingent liabilities;
- the issuance of our equity securities;
- assimilation of operations, intellectual property and products of an acquired company, including difficulties associated with integrating new personnel;
- the diversion of our management's attention from our existing programs and initiatives in pursuing such a strategic merger or acquisition;
- retention of key employees, the loss of key personnel and uncertainties in our ability to maintain key business relationships;
- risks and uncertainties associated with the other party to such a transaction, including the prospects of that party and their existing products or product candidates and marketing approvals; and
- our inability to generate revenue from acquired technology and/or products sufficient to meet our objectives in undertaking the acquisition or even to offset the associated acquisition and maintenance costs.

In addition, if we undertake acquisitions or pursue collaborations in the future, we may issue dilutive securities, assume or incur debt obligations, incur large one-time expenses and acquire intangible assets that could result in significant future amortization expense. Moreover, we may not be able to locate suitable acquisition opportunities, and this inability could impair our ability to grow or obtain access to technology or products that may be important to the development of our business.

Risks Related to Our Employee Matters, Managing Our Growth and Other Risks Relating to Our Operations

The COVID-19 pandemic could adversely impact our business, including the timing or results of our preclinical studies and clinical trials.

Since December 2019, a novel strain of coronavirus, COVID-19, has spread to multiple countries, including the United States, Australia and New Zealand, where we have planned or ongoing preclinical studies and clinical trials. On March 11, 2020, the World Health Organization declared the outbreak of COVID-19 as a global pandemic. On March 23, 2020, the governor of Massachusetts ordered the closure of all non-essential businesses effective March 24, 2020, through April 7, 2020, which was subsequently extended through May 18, 2020. On May 29, 2021, the Commonwealth of Massachusetts permitted all industries to fully re-open and on June 15, 2021, the governor of Massachusetts signed an executive order that terminated the Commonwealth's State of Emergency. Because of the nature of our operations, we are currently considered to be an essential business so, to date, our operations have only been partially affected by these orders. The outbreak and government measures taken in response have also had a significant impact, both direct and indirect, on businesses and commerce, as worker shortages have occurred; supply chains have been disrupted; facilities and production have been suspended; and demand for certain goods and services, such as medical services and supplies, has spiked, while demand for other goods and services, such as travel, has fallen. In response to the spread of COVID-19, we have closed our principal executive office in March 2020, with our administrative employees continuing their work outside of our office, and limited the number of staff in any given research and development laboratory. In July 2021, we implemented a plan to reopen our office to allow employees to return to the office, which is based on a phased approach that is principles-based and local in design, with a focus on continuity of preclinical studies and clinical trial activities, employee safety and optimal work environment. If COVID-19 continues to spread in the United States, Australia, New Zealand and other countries, particularly in light of variant strains of the COVID-19 virus, we may experience disruptions that could severely impact our business, preclinical studies and clinical trials, including:

- delays in receiving approval from local regulatory authorities to initiate our planned clinical trials;
- delays or difficulties in enrolling patients in our clinical trials;
- delays or difficulties in clinical site initiation, including difficulties in recruiting clinical site investigators and clinical site staff;
- delays in clinical sites receiving the supplies and materials needed to conduct our clinical trials, including interruption in global shipping that may affect the transport of clinical trial materials;
- changes in local regulations as part of a response to COVID-19 which may require us to change the ways in which our clinical trials are conducted, which may result in unexpected costs, or to discontinue the clinical trials altogether;
- diversion of healthcare resources away from the conduct of clinical trials, including the diversion of hospitals serving as our clinical trial sites and hospital staff supporting the conduct of our clinical trials;
- interruption of key clinical trial activities, such as clinical trial site monitoring, due to limitations on travel imposed or recommended by federal or state governments, employers and others, or interruption of clinical trial subject visits and study procedures, the occurrence of which could affect the integrity of clinical trial data;
- risk that participants enrolled in our clinical trials will acquire COVID-19 while the clinical trial is ongoing, which could impact the results of the clinical trial, including by increasing the number of observed adverse events;
- interruptions in preclinical studies due to restricted or limited operations at our research and development laboratory facility or delays in receiving the supplies and materials needed to conduct our preclinical studies;
- delays in necessary interactions with local regulators, ethics committees and other important agencies and contractors due to limitations in employee resources or forced furlough of government employees;
- limitations in employee resources that would otherwise be focused on the conduct of our clinical trials, including because of sickness of employees or their families or the desire of employees to avoid contact with large groups of people;
- refusal of the FDA to accept data from clinical trials in these affected geographies; and
- interruption or delays to our sourced discovery and clinical activities.

The COVID-19 pandemic continues to rapidly evolve. The extent to which the outbreak impacts our business, preclinical studies and clinical trials will depend on future developments which are highly uncertain and cannot be predicted with confidence, such as the ultimate geographic spread of the disease, particularly in light of variant strains of the COVID-19 virus, the duration of the pandemic, travel restrictions and social distancing in the United States, Australia, New Zealand and other countries, business closures or business disruptions and the effectiveness of actions taken in the United States, Australia, New Zealand and other countries to contain and treat the disease. In addition, while the potential impact and duration of the COVID-19 pandemic on the global economy and our business in particular may be difficult to assess or predict, the pandemic has resulted in, and may continue to result in, significant disruption of global financial markets, reducing our ability to access capital, which could negatively affect our liquidity in the future. Moreover, to the extent the COVID-19 pandemic adversely affects our business, financial condition and results of operations, it may also have the effect of heightening many of the other risks described in this “Risk Factors” section.

We are highly dependent on our key personnel, including our Chief Executive Officer, Chief Scientific Officer and Chief Medical Officer. If we are not successful in attracting, motivating and retaining highly qualified personnel, we may not be able to successfully implement our business strategy.

Our ability to compete in the highly competitive biotechnology and pharmaceutical industries depends upon our ability to attract, motivate and retain highly qualified managerial, scientific and medical personnel. We are highly dependent on our management and particularly on the services of our scientific personnel including Jasbir Seehra, Ph.D., our Chief Executive Officer, Jennifer Lachey, Ph.D., our Chief Scientific Officer, and Simon Cooper, M.B.B.S., our Chief Medical Officer. We believe that their drug discovery and development experience and overall biopharmaceutical company management experience would be difficult to replace. Any of our executive officers could leave our employment at any time, as all of our employees are “at-will” employees. The loss of the services of our key personnel and any of our other executive officers, key employees, and scientific and medical advisors, and our inability to find suitable replacements, could result in delays in our research and development objectives and harm our business.

Recruiting and retaining qualified employees, consultants and advisors for our business, including scientific and technical personnel, also will 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 and academic institutions for skilled individuals. In addition, failure to succeed in preclinical studies, clinical trials or applications for marketing approval may make it more challenging to recruit and retain qualified personnel. The inability to recruit, or the loss of services of certain executives, key employees, consultants or advisors, may impede the progress of our research, development and commercialization objectives and have a material adverse effect on our business, financial condition, results of operations and prospects.

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

As of September 30, 2021, we had 45 full-time employees, including 33 employees engaged in research and development and 12 employees engaged in management or general and administrative activities. As our clinical development and commercialization plans and strategies develop, and as we transition into operating as a public company, we expect we will need additional managerial, operational, sales, marketing, financial, legal and other personnel. Future growth would impose significant added responsibilities on members of management, including:

- identifying, recruiting, integrating, maintaining and motivating additional employees;
- managing our development efforts effectively, including the clinical and FDA review process for KER-050, KER-047, KER-012 and any future product candidates, while complying with our contractual obligations to contractors and other third parties; and
- improving our operational, financial and management controls, reporting systems and procedures.

Our future financial performance and our ability to commercialize KER-050, KER-047, KER-012 and any other product candidates we develop will depend, in part, on our ability to effectively manage any future growth, and our management may also have to divert a disproportionate amount of its attention away from day-to-day activities in order to devote a substantial amount of time to managing these growth activities.

We currently rely, and for the foreseeable future will continue to rely, in substantial part on certain independent organizations, advisors and consultants to provide certain services. The services include substantially all aspects of clinical trial management and manufacturing. We cannot assure you that the services of independent organizations, advisors and consultants will continue to be available to us on a timely basis when needed, or that we can find qualified replacements. In addition, if we are unable to effectively manage our outsourced activities or if the quality or accuracy of the services provided by consultants is compromised for any reason, our clinical trials may be extended, delayed or terminated, and we may not be able to obtain marketing approval of KER-050, KER-047, KER-012 and our other product candidates or otherwise advance our business. We cannot assure you that we will be able to manage our existing consultants or find other competent outside contractors and consultants on economically reasonable terms, or at all.

If we are not able to effectively expand our organization by hiring qualified new employees and expanding our groups of consultants and contractors, we may not be able to successfully implement the tasks necessary to further develop and commercialize KER-050, KER-047, KER-012 and our other product candidates and, accordingly, may not achieve our research, development and commercialization goals.

Our internal computer systems, or those used by our contract research organizations, or other contractors or consultants, may fail or suffer security breaches, which could adversely affect our business.

We are increasingly dependent upon information technology systems, infrastructure and data to operate our business, particularly during the COVID-19 pandemic. Despite the implementation of security measures, our internal computer systems and those of our future CROs and other contractors and consultants are vulnerable to damage or unauthorized access or use resulting from computer viruses, malware, cyber-attacks or cyber-intrusions over the Internet, denial or degradation of service attacks, ransomware, hacking, phishing and other social engineering attacks, attachments to emails, actions of persons inside our organization or persons with access to the systems upon which we depend. The techniques used to sabotage or to obtain unauthorized access to information systems, and networks in which data is stored or through which data is transmitted change frequently, and we may be unable to implement adequate preventative measures. In addition to traditional computer "hackers", malicious code (such as viruses and worms), employee theft or misuse, denial-of-service attacks and sophisticated nation-state and nation-state supported actors now engage in attacks (including advanced persistent threat intrusions). We anticipate that these threats will continue to grow in scope and complexity over time. Despite significant efforts to create security barriers to such threats, it is virtually impossible for us to entirely mitigate these risks. Our ability to monitor future CROs and other contractors and consultants' data security is further limited. While we have not experienced any such material system failure or security breach to date, if such an event were to occur and cause interruptions in our operations, it could result in a material disruption of our development programs, our business operations, and the privacy or confidentiality of the information that we maintain. For example, the loss of preclinical or clinical data could result in delays in our regulatory approval efforts and significantly increase our costs to recover or reproduce the data. Our reputation could be damaged, our business may be harmed and we could incur significant liability, in particular if such security incident would lead to the exposure of personal data, sensitive data and confidential information to unauthorized persons. In addition, as a result of the COVID-19 pandemic, we may face increased cybersecurity risks due to our reliance on internet technology and the number of our employees that are working remotely, which may create additional opportunities for cybercriminals to exploit vulnerabilities.

The costs to respond to a security breach and/or to mitigate any security vulnerabilities that may be identified could be significant, our efforts to address these problems may not be successful, and these problems could result in unexpected interruptions, delays, cessation of service, negative publicity, and other harm to our business and our competitive position. Any security breach affecting us, our CROs, contractors, consultants or other partners or our industry, whether real or perceived, could harm our reputation, erode confidence in the effectiveness of our security measures and lead to regulatory scrutiny. Likewise, we may rely on third parties for the manufacture of our product candidates and to conduct clinical trials, and similar events relating to their computer systems could also have a material adverse effect on our business. To the extent that any disruption or security breach were to result in a loss of, or damage to, our data or applications, or inappropriate disclosure of confidential or proprietary information, we could face governmental reporting obligations, fines, incur liability and the further development and commercialization of our product candidates could be delayed.

We may have contractual and legal obligations to notify relevant stakeholders of security breaches. Most jurisdictions have enacted laws requiring companies to notify individuals, regulatory authorities, and others of security breaches involving certain types of data. In addition, our agreements with collaborators may require us to notify them in the event of a security breach. Such mandatory disclosures are costly, could lead to negative publicity, may cause our collaborators to lose confidence in the effectiveness of our security measures and require us to expend significant capital and other resources to respond to and/or alleviate problems caused by the actual or perceived security breach.

In addition, any actual or perceived security breach could result in legal claims or proceedings, regulatory investigations or actions, and other types of liability under laws that protect the privacy and security of personal information, including federal, state and foreign data protection and privacy regulations, violations of which could result in significant penalties and fines in the EU and United States. In addition, although we seek to detect and investigate all data security incidents, security breaches and other incidents of unauthorized access to our information technology systems and data can be difficult to detect and any delay in identifying such breaches or incidents may lead to increased harm and legal exposure of the type described above.

We may not have adequate insurance coverage for security incidents or breaches or information system failures. The successful assertion of one or more large claims against us that exceeds our available insurance coverage, or results in changes to our insurance policies (including premium increases or the imposition of large deductible or co-insurance requirements), could have an adverse effect on our business. In addition, we cannot be sure that our existing insurance

coverage and coverage for errors and omissions will continue to be available on acceptable terms or that our insurers will not deny coverage as to any future claim.

Failure to comply with existing and future data protection laws and regulations could lead to government enforcement actions, including administrative, civil or criminal fines or penalties, private litigation, other liabilities and adverse publicity and could negatively affect our operating results and business. Compliance or the failure to comply with such laws and regulations could increase the costs of our products, could limit their use or adoption, and could otherwise negatively affect our operating results and business.

We, our service providers and any potential collaborators are subject to or affected by federal, state, local and foreign data protection laws and regulations, such as laws and regulations that address privacy and data security. In the United States, numerous federal and state laws and regulations, including federal and state health information privacy laws, state data breach notification laws, and federal and state consumer protection laws, including Section 5 of the Federal Trade Commission Act, that govern the collection, use, disclosure and protection of health information and other personal information could apply to our operations or the operations of our collaborators. In addition, we may obtain health information from third parties, including research institutions from which we obtain clinical trial data, that are subject to privacy and security requirements under HIPAA, as amended by HITECH. Depending on the facts and circumstances, we could be subject to civil, criminal and administrative penalties and fines if we violate HIPAA.

In addition, certain state and foreign laws govern the privacy and security of health information in certain circumstances, some of which are more stringent than U.S. federal law and many of which differ from each other in significant ways and may not have the same effect, thus complicating compliance efforts. For instance, the California Consumer Privacy Act of 2018, or CCPA, which became effective on January 1, 2020, gives California residents expanded rights to access and require deletion of their personal information, opt out of the sale of personal information, and receive detailed information about how their personal information is used. The CCPA authorizes private lawsuits to recover statutory damages for certain data breaches. Although the CCPA exempts some data regulated by HIPAA and certain data regarding clinical trials, the CCPA, to the extent applicable to our business and operations, may increase our compliance costs and potential liability with respect to other personal information we maintain about California residents. Other privacy legislation has been proposed at the federal and state levels, which, if enacted, could adversely affect our business.

Our operations may also be subject to increased scrutiny or attention from foreign data protection authorities. Our clinical trial programs and research collaborations outside the United States may implicate foreign data protection laws, including in Europe, Australia, and New Zealand. Many countries have established, or are in the process of establishing, privacy and data security legal frameworks with which we, our collaborators, service providers, including our CROs, and contractors must comply. For example, European data protection laws, including, without limitation, the European Union's General Data Protection Regulation, or GDPR, which went into effect in May 2018, and the UK Data Protection Act introduced strict requirements regarding the processing of personal data , including clinical trial data, which may apply to the company to the extent it processes the personal data of data subjects within the European Economic Area, or EEA, and/or the United Kingdom.

Laws such as these give rise to an increasingly complex set of compliance obligations on us. These data protection rules continue to evolve and may result in ever-increasing regulatory and public scrutiny and escalating levels of enforcement and sanctions and increased costs of compliance. We strive to comply with these rules and obligations to the extent possible. Such compliance is a rigorous and time-consuming process.

The GDPR and UK Data Protection Act set out extensive compliance requirements, including providing detailed disclosures about how personal data is collected and processed, demonstrating that an appropriate legal basis is in place or otherwise exists to justify data processing activities; granting new rights for data subjects in regard to their personal data, as well as enhancing pre-existing rights (e.g., data subject access requests); introducing the obligation to notify data protection regulators or supervisory authorities (and in certain cases, affected individuals) of significant data breaches; imposing limitations on retention of personal data; maintaining a record of data processing; and complying with the principle of accountability and the obligation to demonstrate compliance through policies, procedures, training and audit. The processing of sensitive personal data, such as health information, impose heightened compliance burdens under the GDPR and the UK Data Protection Act and is a topic of active interest among foreign regulators. Moreover, the GDPR and the UK Data Protection Act increase our obligations with respect to clinical trials conducted in the EU by expanding the definition of

personal data to include coded data and requiring changes to informed consent practices and more detailed notices for clinical trial participants and investigators.

Recent legal developments in Europe have created complexity and uncertainty regarding transfers of personal data from the European Economic Area, or EEA, to the United States. On July 16, 2020, in a case known as Schrems II, the Court of Justice of the European Union, or CJEU, invalidated the EU-US Privacy Shield Framework under which personal data could be transferred from the EEA to U.S. entities who had self-certified under the Privacy Shield scheme. While the CJEU upheld the adequacy of the Standard Contractual Clauses (a standard form of contract approved by the European Commission as an adequate personal data transfer mechanism, and potential alternative to the Privacy Shield), it made clear that reliance on them alone may not necessarily be sufficient in all circumstances. Use of the standard contractual clauses must now be assessed on a case-by-case basis taking into account the legal regime applicable in the destination country, in particular applicable surveillance laws and rights of individuals and additional measures and/or contractual provisions may need to be put in place. Additionally, new Standard Contractual Clauses that will repeal the Standard Contractual Clauses adopted under the Data Protection Directive have recently been adopted. We will thus need to update all of our contracts entailing the transfer of personal data outside of the European Economic Area with this new Standard Contractual Clauses. As supervisory authorities issue further guidance on personal data export mechanisms, including on the new Standard Contractual Clauses, and/or start taking enforcement action, we could suffer additional costs, complaints and/or regulatory investigations or fines, and/or if we are otherwise unable to transfer personal data between and among countries and regions in which we conduct clinical trials, it could affect our business.

Relatedly, following the United Kingdom's withdrawal from the EEA and the EU, we also have to comply with the UK-specific requirements related to data protection, including with respect to transfer of personal data outside of the UK, which increases our regulatory compliance burden.

We maintain privacy policies and other documentation regarding our collection, processing, use and disclosure of personal information and/or other confidential information. Although we endeavor to comply with our policies and other documentation, we may at times fail to do so or may be perceived to have failed to do so.

Certain of our current or future data processing activities could be found by a government or regulatory authority to be noncompliant or become noncompliant in the future with one or more applicable data protection laws, even if we have implemented and maintained a strategy that we believe to be compliant.

Moreover, despite our efforts, we may not be successful in achieving compliance if our employees or vendors fail to comply with our policies and documentation. Such failures can subject us to potential foreign, local, state and federal action if they are found to be deceptive, unfair, or misrepresentative of our actual practices. Moreover, subjects about whom we or our collaborators obtain information, as well as the providers who share this information with us, may contractually limit our ability to use and disclose the information.

Any failure or perceived failure by us to comply with our legal obligations concerning privacy, data protection or information security could result in claims by data subjects, governmental investigations and enforcement action against us, including fines, enforcement orders, imprisonment of company officials and public censure, (individual and collective) claims for damages by affected individuals and damage to our reputation, any of which could have a material adverse effect on our business, financial condition, and operating results. Companies that must comply with the GDPR and UK Data Protection Act face increased compliance obligations and risk, including more robust regulatory enforcement of data protection requirements and potential fines for noncompliance of up to €20 million or 4% of the annual global revenues of the noncompliant company, whichever is greater, litigation, regulatory investigations, enforcement actions that require us to change the way we use personal data, and/or prohibitions on the use of personal data. Such penalties may be in addition to any civil litigation claims by data subjects. We may not be successful in avoiding potential liability or disruption of business resulting from the failure to comply with these laws and, even if we comply with laws, we may be subject to liability because of a security incident. Further, complying with the applicable notification requirements in the event of a security breach could result in significant costs. Furthermore, future interpretations of existing data protection laws or regulations could be inconsistent with our current interpretations, increase our compliance burden, make it more difficult to comply, and/or increase our risk of regulatory investigations and fines.

Additionally, if third parties we work with, such as CROs and other contractors and consultants, violate data privacy or data protection applicable laws or regulations or our policies, or are subject to security incidents, such violations or security

incidents may also put our clinical trial data at risk and could in turn materially and adversely affect our business, financial condition, results of operations and prospects.

Compliance with U.S. and foreign data protection laws and regulations could require us to take on more onerous obligations in our contracts, increase our costs of legal compliance, restrict our ability to collect, use and disclose data, or in some cases, impact our or our partners' or suppliers' ability to operate in certain jurisdictions. Failure to comply with these laws and regulations could result in government investigations and/or enforcement actions (which could include civil, criminal and administrative penalties), private litigation and/or adverse publicity and could negatively affect our operating results and business. Moreover, clinical trial subjects, employees and other individuals about whom we or our potential collaborators obtain personal information, as well as the providers who share this information with us, may limit our ability to collect, use and disclose the information. Claims that we have violated individuals' privacy rights, failed to comply with data protection laws, or breached our contractual obligations, even if we are not found liable, could be expensive and time-consuming to defend and could result in adverse publicity that could harm our business.

Our employees, independent contractors, vendors, principal investigators, CROs and consultants may engage in misconduct or other improper activities, including non-compliance with regulatory standards and requirements and insider trading.

We are exposed to the risk that our employees, independent contractors, vendors, principal investigators, CROs and consultants may engage in fraudulent conduct or other illegal activity. Misconduct by these parties could include intentional, reckless and/or negligent conduct or disclosure of unauthorized activities to us that violate the regulations of the FDA and comparable foreign regulatory authorities, including those laws requiring the reporting of true, complete and accurate information to such authorities; healthcare fraud and abuse laws and regulations in the United States and abroad; or laws that require the reporting of financial information or data accurately. In particular, sales, marketing and business arrangements in the healthcare industry are subject to extensive laws and regulations intended to prevent fraud, misconduct, kickbacks, self-dealing and other abusive practices. These laws and regulations may restrict or prohibit a wide range of pricing, discounting, marketing and promotion, sales commission, customer incentive programs and other business arrangements. Activities subject to these laws also involve the improper use of information obtained in the course of clinical trials or creating fraudulent data in our preclinical studies or clinical trials, which could result in regulatory sanctions and cause serious harm to our reputation. It is not always possible to identify and deter misconduct by employees and other third parties, and the precautions we take to detect and prevent this activity may not be effective in controlling unknown or unmanaged risks or losses or in protecting us from governmental investigations or other actions or lawsuits stemming from a failure to comply with these laws or regulations. Additionally, we are subject to the risk that a person could allege such fraud or other misconduct, even if none occurred. If any such actions are instituted against us, and we are not successful in defending ourselves or asserting our rights, those actions could have a significant impact on our business, including the imposition of significant civil, criminal and administrative penalties, damages, monetary fines, imprisonment, possible exclusion from participation in Medicare, Medicaid and other federal healthcare programs, additional reporting requirements and oversight if we become subject to a corporate integrity agreement or similar agreement to resolve allegations of non-compliance with these laws, contractual damages, reputational harm, diminished profits and future earnings, and curtailment of our operations, any of which could adversely affect our ability to operate our business, financial condition and results of operations.

A variety of risks are associated with operating our business internationally which could materially adversely affect our business.

We conduct certain research and development operations in Australia and New Zealand and may conduct certain future clinical trials outside of the United States. Additionally, while we have not taken any steps to enter into any non-U.S. markets, we may do so in the future. Accordingly, we are subject to risks related to operating in foreign countries, including:

- different standards of care in various countries that could complicate the evaluation of our product candidates;
- different United States and foreign drug import and export rules;
- reduced protection for intellectual property rights in certain countries;
- unexpected changes in tariffs, trade barriers and regulatory requirements;
- economic weakness, including inflation, or political instability in particular foreign economies and markets;
- compliance with tax, employment, immigration, and labor laws for employees living or traveling abroad;
- compliance with the FCPA and other anti-corruption and anti-bribery laws;
- foreign taxes, including withholding of payroll taxes;

- foreign currency fluctuations, which could result in increased operating expenses and reduced revenue, and other obligations incident to doing business in another country;
- workforce uncertainty in countries where labor unrest is more common than in the United States;
- production shortages resulting from any events affecting raw material supply or manufacturing capabilities abroad;
- different payor reimbursement regimes, governmental payors or patient self-pay systems and price controls;
- potential liability resulting from development work conducted by foreign partners;
- business interruptions resulting from natural disasters, outbreaks of contagious diseases, such as COVID-19, or geopolitical actions, including war and terrorism, or systems failure including cybersecurity breaches; and
- compliance with evolving and expansive foreign regulatory requirements, including data privacy laws (such as the GDPR).

We are subject to certain U.S. and foreign anti-corruption, anti-money laundering, export control, sanctions and other trade laws and regulations. We can face serious consequences for violations.

We are presently conducting clinical development solely in Australia and New Zealand and may choose to conduct additional international clinical trials in the future. The U.S. Foreign Corrupt Practices Act, or FCPA, prohibits companies and their employees and third-party intermediaries from paying, offering, promising or authorizing others to pay or offer anything of value, directly or indirectly, to any foreign official, political party or candidate for the purpose of influencing any act or decision of the foreign entity in order to assist the individual or business in obtaining or retaining business. The FCPA also obligates companies whose securities are listed in the United States to comply with certain accounting provisions requiring the company to maintain books and records that accurately and fairly reflect all transactions of the corporation, including international subsidiaries, and to devise and maintain an adequate system of internal accounting controls. The FCPA presents particular challenges in the pharmaceutical industry, because, in many countries, hospitals are owned and operated by the government, and doctors and other hospital employees are considered foreign officials. We can be held liable for the corrupt or other illegal activities of our employees, representatives, contractors, business partners and agents, even if we do not explicitly authorize or have actual knowledge of such activities. Noncompliance with the FCPA and anti-corruption laws could subject us to whistleblower complaints, investigations, sanctions, settlements, prosecution, other enforcement actions, disgorgement of profits, significant fines, damages, other civil and criminal penalties or injunctions, suspension and/or debarment from contracting with certain persons, the loss of export privileges, reputational harm, adverse media coverage and other collateral consequences. If any subpoenas or investigations are launched, or governmental or other sanctions are imposed, or if we do not prevail in any possible civil or criminal litigation, our business, results of operations and financial condition could be materially harmed.

In addition, our products may be subject to export controls, trade sanctions laws and regulations. Governmental regulation of the import or export of our products, or our failure to obtain any required import or export authorization for our products, when applicable, could harm our international sales and adversely affect our revenue. Compliance with applicable regulatory requirements regarding the export of our products may create delays in the introduction of our products in international markets or, in some cases, prevent the export of our products to some countries altogether. Furthermore, U.S. export control laws and economic sanctions prohibit the shipment of certain products and services to countries, governments, and persons targeted by U.S. sanctions. If we fail to comply with export and import regulations and such economic sanctions, penalties could be imposed, including fines and/or denial of certain export privileges. Moreover, any new export or import restrictions, new legislation or shifting approaches in the enforcement or scope of existing regulations, or in the countries, persons, or products targeted by such regulations, could result in decreased use of our products by, or in our decreased ability to export our products to, existing or potential customers with international operations. Any decreased use of our products or limitation on our ability to export or sell our products would likely adversely affect our business.

If we fail to comply with environmental, health and safety laws and regulations, we could become subject to fines or penalties or incur costs that could have a material adverse effect on the success of our business.

We are subject to numerous environmental, health and safety laws and regulations, including those governing laboratory procedures and the handling, use, storage, treatment and disposal of hazardous materials and wastes. Our research and development activities involve the use of biological and hazardous materials and produce hazardous waste products. We generally contract with third parties for the disposal of these materials and wastes. We cannot eliminate the risk of contamination or injury from these materials, which could cause an interruption of our commercialization efforts, research and development efforts and business operations, environmental damage resulting in costly clean-up and liabilities under applicable laws and regulations governing the use, storage, handling and disposal of these materials and specified waste products. Although we believe that the safety procedures utilized by our third-party manufacturers for handling and disposing

of these materials generally comply with the standards prescribed by these laws and regulations, we cannot guarantee that this is the case or eliminate the risk of accidental contamination or injury from these materials. In such an event, we may be held liable for any resulting damages and such liability could exceed our resources and state or federal or other applicable authorities may curtail our use of certain materials and/or interrupt our business operations. Furthermore, environmental laws and regulations are complex, change frequently and have tended to become more stringent. We cannot predict the impact of such changes and cannot be certain of our future compliance. In addition, we may incur substantial costs in order to comply with current or future environmental, health and safety laws and regulations. These current or future laws and regulations may impair our research, development or production efforts. Failure to comply with these laws and regulations also may result in substantial fines, penalties or other sanctions.

Although we maintain workers' compensation insurance to cover us for costs and expenses we may incur due to injuries to our employees resulting from the use of hazardous materials or other work-related injuries, this insurance may not provide adequate coverage against potential liabilities. We do not carry specific biological waste or hazardous waste insurance coverage, workers compensation or property and casualty and general liability insurance policies that include coverage for damages and fines arising from biological or hazardous waste exposure or contamination.

Changes in tax laws or regulations that are applied adversely to us may have a material adverse effect on our business, cash flow, financial condition or results of operations.

The Tax Act enacted many significant changes to the U.S. tax laws. Future guidance from the Internal Revenue Service and other tax authorities with respect to the Tax Act may affect us, and certain aspects of the Tax Act could be repealed or modified in future legislation. In addition, in response to the COVID-19 pandemic, the Coronavirus Aid, Relief, and Economic Security, or CARES, Act was signed into law in March 2020. The CARES Act modifies certain of the changes made by the Tax Act. Changes in corporate tax rates, the realization of net deferred tax assets relating to our U.S. operations, and the deductibility of expenses under the Tax Act, as amended by the CARES Act, or future tax reform legislation could have a material impact on the value of our deferred tax assets, could result in significant one-time charges in the current or future taxable years, and could increase our future U.S. tax expense. The foregoing items, as well as any other future changes in tax laws, could have a material adverse effect on our business, cash flow, financial condition or results of operations. For example, proposals have recently been made in Congress (which have not yet been enacted) to increase the federal income tax rate applicable to corporate income and make other tax law changes that could have a material adverse impact on us. In addition, it is uncertain if and to what extent various states will conform to the Tax Act, as amended by the CARES Act, or any newly enacted federal tax legislation.

Our ability to use our net operating loss carryforwards and certain tax credit carryforwards may be subject to limitation.

As of December 31, 2020, we had $37.7 million of U.S. federal, $25.9 million of state and $15.7 million of foreign NOL carryforwards. Under the Tax Act, as modified by the CARES Act, federal NOLs incurred in taxable years beginning after December 31, 2017 can be carried forward indefinitely, but the deductibility of federal NOLs in taxable years beginning after December 31, 2020, is limited. The CARES Act also provides for the ability for companies to carry back net operating losses arising in tax years beginning after 2017 and before 2021 for up to 5 years. We evaluated the provisions of the CARES Act and, as a result, we received approximately $0.2 million related to the carry back of our 2019 net operating loss to claim a refund for prior federal tax liabilities and, as a result, our net operating loss carryforwards will be reduced.

Our NOL carryforwards are subject to review and possible adjustment by the U.S. and state tax authorities. In addition, under Sections 382 and 383 of the Code and corresponding provisions of state law, if a corporation undergoes an "ownership change," which is generally defined as a greater than 50% change (by value) in its equity ownership over a three-year period, the corporation's ability to use its pre-change NOL carryforwards and R&D credits to offset its post-change income may be limited. This could limit the amount of NOLs or R&D credit carryforwards that we can utilize annually to offset future taxable income or tax liabilities. Subsequent ownership changes and changes to the U.S. tax rules in respect of the utilization of NOLs and R&D credits carried forward may further affect the limitation in future years. In addition, at the state level, there may be periods during which the use of NOLs is suspended or otherwise limited, which could accelerate or permanently increase state taxes owed.

In February 2021, we completed a study to assess whether an ownership change has occurred or whether there have been multiple ownership changes since our formation. The results of this study indicated that we experienced ownership changes as defined by Section 382 of the Code in 2016 and 2020. These ownership changes have subjected and will continue to

subject our net operating loss carryforwards to an annual limitation, which will significantly restrict our ability to use them to offset our taxable income in periods following an ownership change. Based on the results of the study, management has determined that these limitations may have a material impact on our ability to utilize our net operating losses and research and development credit carryforwards to offset future tax liabilities.

Risks Related to Our Common Stock

An active, liquid and orderly trading market may not develop for our common stock and as a result it may be difficult for you to sell your shares of our common stock.

Prior to our IPO in April 2020, there was no public market for shares of our common stock. Although our common stock is currently listed on the Nasdaq Global Market, we cannot assure you that an active trading market for our shares will develop or be sustained. In the absence of an active trading market for our common stock, investors may not be able to sell their shares of common stock without depressing the market price for the common stock, or may not be able to sell the shares at all. An inactive trading market may also impair our ability to raise capital to continue to fund operations by selling shares and may impair our ability to enter into collaborations or acquire other companies or technologies using our shares as consideration.

Our quarterly operating results may fluctuate significantly or may fall below the expectations of investors or securities analysts, each of which may cause our stock price to fluctuate or decline.

We expect our operating results to be subject to quarterly fluctuations. Our net loss and other operating results will be affected by numerous factors, including:

- variations in the level of expense related to the ongoing development of our product candidates and preclinical development programs;
- results of preclinical studies and future clinical trials, or the addition or termination of future clinical trials or funding support by us, or current or future collaborators or licensing partners;
- our execution of any collaboration, licensing or similar arrangements, and the timing of payments we may make or receive under existing or future arrangements or the termination or modification of any such existing or future arrangements;
- any intellectual property infringement lawsuit or opposition, interference or cancellation proceeding in which we may become involved;
- additions and departures of key personnel;
- strategic decisions by us, such as acquisitions, divestitures, spin-offs, joint ventures, strategic investments or changes in business strategy;
- if any of our product candidates receives regulatory approval, the terms of such approval and market acceptance and demand for such product candidates;
- regulatory developments affecting our product candidates; and
- general economic conditions, as well as economic conditions specifically affecting the biopharmaceutical industry, including those related to the ongoing COVID-19 pandemic.

If our quarterly operating results fall below the expectations of investors or securities analysts, the price of our common stock could decline substantially. Furthermore, any quarterly fluctuations in our operating results may, in turn, cause the price of our common stock to fluctuate substantially. We believe that quarterly comparisons of our financial results are not necessarily meaningful and should not be relied upon as an indication of our future performance.

The market price of our common stock has been and is likely to continue to be volatile and fluctuate substantially.

The market price of our common stock has been and is likely to continue to be highly volatile and may fluctuate substantially as a result of a variety of factors, some of which are related in complex ways. The market price for our common stock may fluctuate significantly in response to numerous factors, many of which are beyond our control, including the factors listed below and other factors described in this “Risk Factors” section:

- results of preclinical studies and clinical trials of KER-050, KER-047, KER-012 and any other product candidate we may develop or those of our competitors;

- actual or anticipated changes in estimates as to financial results, development timelines or recommendations by securities analysts;
- commencement or termination of collaboration, licensing or similar arrangements for our development programs;
- announcements by our competitors of significant acquisitions, strategic partnerships, joint ventures, collaborations or capital commitments;
- failure or discontinuation of any of our development programs;
- results of clinical trials of product candidates of our competitors;
- regulatory or legal developments in the United States and other countries;
- developments or disputes concerning patent applications, issued patents or other proprietary rights;
- the recruitment or departure of key personnel;
- the level of expenses related to the development of KER-050, KER-047, KER-012 and any other product candidate we may develop;
- variations in our financial results or those of companies that are perceived to be similar to us;
- announcements or expectations of additional financing efforts by us;
- sales of our common stock by us, our insiders or other stockholders;
- recommendations and changes in estimates or recommendations by securities analysts, if any, that cover our stock;
- changes in the structure of healthcare payment systems;
- market conditions in the pharmaceutical and biotechnology sectors;
- general economic, political, and market conditions and overall fluctuations in the financial markets in the United States and abroad; and
- investors' general perception of us and our business.

The stock market in general, and the markets for pharmaceutical, biopharmaceutical and biotechnology stocks in particular, have experienced extreme price and volume fluctuations that have been often unrelated or disproportionate to the operating performance of the issuer. In addition, the trading prices for common stock of other pharmaceutical, biopharmaceutical and biotechnology companies have been highly volatile as a result of the COVID-19 pandemic. The COVID-19 outbreak continues to rapidly evolve. The extent to which the outbreak may impact our business, preclinical studies and clinical trials will depend on future developments, which are highly uncertain and cannot be predicted with confidence.

These and other market and industry factors may cause the market price and demand for our common stock to fluctuate substantially, regardless of our actual operating performance, which may negatively affect the liquidity of our common stock.

We could be subject to securities class action litigation.

In the past, securities class action litigation has often been brought against public companies following declines in the market prices of their securities. This risk is especially relevant for biopharmaceutical companies, which have experienced significant stock price volatility in recent years. If we face such litigation, it could result in substantial costs and a diversion of management's attention and our resources, which could harm our business, operating results, financial condition and cash flows.

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

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 more than one transaction, investors may be materially diluted by subsequent sales. These sales may also result in material dilution to our existing stockholders, and new investors could gain rights superior to our existing stockholders.

Pursuant to our 2020 Equity Incentive Plan, or 2020 Plan, our management is authorized to grant stock options and other equity-based awards to our employees, directors and consultants. The number of shares of our common stock reserved for issuance under our 2020 Plan will automatically increase on January 1 of each year, for a period of ten years, from January 1, 2021 continuing through January 1, 2030, by 4.0% of the total number of shares of our common stock outstanding on December 31 of the preceding calendar year, or a lesser number of shares as may be determined by our board of directors. If

our board of directors elects to increase the number of shares available for future grant by the maximum amount each year, our stockholders may experience additional dilution, which could cause our stock price to fall.

We do not intend to pay dividends on our common stock so any returns will be limited to the value of our stock.

You should not rely on an investment in our common stock to provide dividend income. We currently anticipate that we will retain future earnings for the development, operation and expansion of our business and do not anticipate declaring or paying any cash dividends for the foreseeable future. Any return to stockholders will therefore be limited to the appreciation of their stock, which may never occur, as the only way to realize any return on their investment.

Our executive officers, directors and stockholders and their affiliates who beneficially own more than 5% of our common stock have the ability to exercise significant influence over our company, which will limit your ability to influence corporate matters and could delay or prevent a change in corporate control.

As of September 30, 2021, our executive officers, directors and stockholders and their affiliates who beneficially own more than 5% of our common stock beneficially held a significant percentage of our outstanding common stock. As a result, these stockholders, if they act together, will be able to exercise significant influence over our management and affairs and the outcome of matters submitted to our stockholders for approval, including the election of directors and any sale, merger, consolidation, or sale of all or substantially all of our assets. In addition, this concentration of ownership might adversely affect the market price of our common stock by:

- delaying, deferring or preventing a change of control of our company;
- impeding a merger, consolidation, takeover or other business combination involving our company; or
- discouraging a potential acquirer from making a tender offer or otherwise attempting to obtain control of our company.

Conflicts of interest may arise because some members of our board of directors are representatives of our principal stockholders.

Certain of our principal stockholders or their affiliates are venture capital funds or other investment vehicles that could invest in entities that directly or indirectly compete with us. As a result of these relationships, conflicts may arise between the interests of the principal stockholders or their affiliates and the interests of other stockholders, and members of our board of directors that are representatives of such principal stockholders may not be disinterested in such conflicts. Neither the principal stockholders nor the representatives of the principal stockholders on our board of directors, by the terms of our amended and restated certificate of incorporation, are required to offer us any transaction opportunity of which they become aware and could take any such opportunity for themselves or offer it their other affiliates, unless such opportunity is expressly offered to them solely in their capacity as members of our board of directors.

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

If our existing stockholders sell, or indicate an intention to sell, substantial amounts of our common stock in the public market, the market price of our common stock could decline. We are unable to predict the effect that such sales, particularly by our directors, executive officers and significant stockholders, may have on the prevailing market price of our common stock.

In May 2021, we filed a registration statement on Form S-3, which was automatically effective upon filing. Pursuant to this registration statement, we may issue up to $150.0 million in common stock in sales deemed to be an “at the market offering,” as defined by the Securities Act, and, so long as we qualify as a “well-known seasoned issuer” as defined in Rule 405 of the Securities Act, an unspecified amount of shares of our common stock, preferred stock, debt securities and warrants.

In addition, we have filed registration statements on Form S-8 registering the issuance of shares of common stock subject to options or other equity awards issued or reserved for future issuance under our equity incentive plans. Shares registered under these registration statements on Form S-8 are available for sale in the public market subject to vesting arrangements and exercise of options and the restrictions of Rule 144 under the Securities Act in the case of our affiliates. In addition, certain holders of shares of our common stock have rights, subject to some conditions, to require us to file registration statements covering their shares or to include their shares in registration statements that we may file for ourselves or other stockholders. If we were to register the resale of these shares, they could be freely sold in the public market. If these additional shares are sold, or if it is perceived that they will be sold, in the public market, the trading price of our common stock could decline.

If securities or industry analysts publish inaccurate or unfavorable research about our business, our stock price and trading volume could decline.

The trading market for our common stock will rely, in part, on the research and reports that industry or financial analysts publish about us or our business. We do not have any control over these analysts. If one or more of the analysts covering our business downgrade their evaluations of our stock or publish inaccurate or unfavorable research about our business, the price of our stock would likely decline. If one or more of these analysts cease to cover our stock or fail to publish reports on us regularly, we could lose visibility in the market for our stock, which, in turn, could cause our stock price and trading volume to decline.

We will incur significantly increased costs as a result of operating as a public company, and our management will be required to devote substantial time to new compliance initiatives and corporate governance practices.

As a public company, and particularly after we are no longer an emerging growth company, we will incur significant legal, accounting and other expenses that we did not incur as a private company. The Sarbanes-Oxley Act of 2002, as amended, or the Sarbanes-Oxley Act, the Dodd-Frank Wall Street Reform and Consumer Protection Act, the listing requirements of the Nasdaq Stock Market and other applicable securities rules and regulations impose various requirements on public companies, including establishment and maintenance of effective disclosure and financial controls and corporate governance practices. Our management and other personnel will need to devote a substantial amount of time to these compliance initiatives. Moreover, we expect these rules and regulations to substantially increase our legal and financial compliance costs and to make some activities more time consuming and costly. For example, we expect that these rules and regulations may make it more difficult and more expensive for us to obtain director and officer liability insurance and we may be required to incur substantial costs to maintain sufficient coverage. We are evaluating these rules and regulations, and cannot predict or estimate the amount or timing of additional costs we may incur or the timing of such costs. The impact of these requirements could also make it more difficult for us to attract and retain qualified persons to serve on our board of directors, our board committees or as executive officers. The increased costs may require us to reduce costs in other areas of our business or increase the prices of our services. Moreover, these rules and regulations are often subject to varying interpretations, in many cases due to their lack of specificity, and, as a result, their application in practice may evolve over time as new guidance is provided by regulatory and governing bodies. This could result in continuing uncertainty regarding compliance matters and higher costs necessitated by ongoing revisions to disclosure and governance practices.

We are an "emerging growth company" and a "smaller reporting company" and, as a result of the reduced disclosure and governance requirements applicable to emerging growth companies or smaller reporting companies, our common stock may be less attractive to investors.

We are an "emerging growth company" as defined in the Jumpstart Our Business Startups Act of 2012, or the JOBS Act. For as long as we continue to be an emerging growth company, we may take advantage of exemptions from various reporting requirements that are applicable to other public companies that are not emerging growth companies, including (i) not being required to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act, (ii) reduced disclosure obligations regarding executive compensation in our periodic reports and proxy statements and (iii) exemptions from the requirements of holding nonbinding advisory stockholder votes on executive compensation and stockholder approval of any golden parachute payments not approved previously. Under the JOBS Act, emerging growth companies can also delay adopting new or revised accounting standards until such time as those standards apply to private companies. We have elected to take advantage of the benefits of this extended transition period. Our financial statements may therefore not be comparable to those of companies that comply with such new or revised accounting standards. Until the date that we are no longer an "emerging growth company" or affirmatively and irrevocably opt out of the exemption provided by Section 7(a)(2)(B) of the Securities Act, upon issuance of a new or revised accounting standard that applies to our financial statements and that has a different effective date for public and private companies, we will disclose the date on which adoption is required for non-emerging growth companies and the date on which we will adopt the recently issued accounting standard.

We could be an emerging growth company until December 31, 2025, although circumstances could cause us to lose that status earlier, including if we are deemed to be a "large accelerated filer," which occurs when the market value of our common stock that is held by non-affiliates equals or exceeds $700.0 million as of the prior June 30, or if we have total annual gross revenue of $1.07 billion or more during any fiscal year before that time, in which cases we would no longer be an emerging growth company as of the following December 31, or if we issue more than $1.0 billion in non-convertible debt during any three-year period before that time, in which case we would no longer be an emerging growth company immediately. Even after

we no longer qualify as an emerging growth company, we may still qualify as a “smaller reporting company,” which would allow us to take advantage of many of the same exemptions from disclosure requirements, including not being required to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act and reduced disclosure obligations regarding executive compensation in our periodic reports and proxy statements.

We cannot predict if investors will find our common stock less attractive because we may rely on the exemptions and reduced disclosure obligations applicable to emerging growth companies and smaller reporting companies. If some investors find our common stock less attractive as a result, there may be a less active trading market for our common stock and our share price may be more volatile.

If we fail to maintain an effective system of internal control over financial reporting, we may not be able to accurately report our financial results or prevent fraud. As a result, stockholders could lose confidence in our financial and other public reporting, which would harm our business and the trading price of our common stock.

Pursuant to Section 404 of the Sarbanes-Oxley Act, our management will be required to report upon the effectiveness of our internal control over financial reporting beginning with the annual report for our fiscal year ending December 31, 2021. When we lose our status as an “emerging growth company” and a “smaller reporting company,” our independent registered public accounting firm will be required to attest to the effectiveness of our internal control over financial reporting. The rules governing the standards that must be met for management to assess our internal control over financial reporting are complex and require significant documentation, testing and possible remediation. To comply with the requirements of being a reporting company under the Securities Exchange Act of 1934, as amended, or the Exchange Act, we will need to implement additional financial and management controls, reporting systems and procedures and hire additional accounting and finance staff.

We cannot assure you that there will not be material weaknesses or significant deficiencies in our internal control over financial reporting in the future. Any failure to maintain internal control over financial reporting could severely inhibit our ability to accurately report our financial condition, results of operations or cash flows. If we are unable to conclude that our internal control over financial reporting is effective, or if our independent registered public accounting firm determines we have a material weakness or significant deficiency in our internal control over financial reporting, investors may lose confidence in the accuracy and completeness of our financial reports, the market price of our common stock could decline, and we could be subject to sanctions or investigations by the Nasdaq Stock Market, the SEC or other regulatory authorities. Failure to remedy any material weakness in our internal control over financial reporting, or to implement or maintain other effective control systems required of public companies, could also restrict our future access to the capital markets.

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

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

These inherent limitations include the realities that judgments in decision-making can be faulty, and that breakdowns can occur because of simple error or mistake. For example, our directors or executive officers could inadvertently fail to disclose a new relationship or arrangement causing us to fail to make a required related party transaction disclosure. Additionally, controls can be circumvented by the individual acts of some persons, by collusion of two or more people or by an unauthorized override of the controls. Accordingly, because of the inherent limitations in our control system, misstatements due to error or fraud may occur and not be detected.

Provisions in our corporate charter documents and under Delaware law could make an acquisition of us, which may be beneficial to our stockholders, more difficult and may prevent attempts by our stockholders to replace or remove our current management.

Provisions in our amended and restated certificate of incorporation and our amended and restated bylaws may discourage, delay or prevent a merger, acquisition or other change in control of us that stockholders may consider favorable, including transactions in which you might otherwise receive a premium for your shares. These provisions also could limit the price that investors might be willing to pay in the future for shares of our common stock, thereby depressing the market price of our

common stock. In addition, because our board of directors is responsible for appointing the members of our management team, these provisions may frustrate or prevent any attempts by our stockholders to replace or remove our current management by making it more difficult for stockholders to replace members of our board of directors. Among other things, these provisions:

- establish a classified board of directors such that not all members of the board are elected at one time;
- allow the authorized number of our directors to be changed only by resolution of our board of directors;
- limit the manner in which stockholders can remove directors from the board;
- establish advance notice requirements for stockholder proposals that can be acted on at stockholder meetings and nominations to our board of directors;
- require that stockholder actions must be effected at a duly called stockholder meeting and prohibit actions by our stockholders by written consent;
- prohibit our stockholders from calling a special meeting of our stockholders;
- authorize our board of directors to issue preferred stock without stockholder approval, which could be used to institute a stockholder rights plan, or so-called "poison pill," that would work to dilute the stock ownership of a potential hostile acquirer, effectively preventing acquisitions that have not been approved by our board of directors; and
- require the approval of the holders of at least 66 2/3% of the votes that all our stockholders would be entitled to cast to amend or repeal certain provisions of our charter or bylaws.

Moreover, because we are incorporated in Delaware, we are governed by the provisions of Section 203 of the Delaware General Corporation Law, which prohibits a person who owns 15% or more of our outstanding voting stock from merging or combining with us for a period of three years after the date of the transaction in which the person acquired 15% or more of our outstanding voting stock, unless the merger or combination is approved in a prescribed manner. These provisions could discourage potential acquisition proposals and could delay or prevent a change in control transaction. They could also have the effect of discouraging others from making tender offers for our common stock, including transactions that may be in your best interests. These provisions may also prevent changes in our management or limit the price that investors are willing to pay for our stock.

Our amended and restated certificate of incorporation designates the Court of Chancery of the State of Delaware as the exclusive forum for substantially all disputes between us and our stockholders, which could limit our stockholders' ability to obtain a favorable judicial forum for disputes with us or our directors, officers or employees.

Our amended and restated certificate of incorporation provides that the Court of Chancery of the State of Delaware (or, if and only if the Court of Chancery of the State of Delaware lacks subject matter jurisdiction, any state court located within the State of Delaware or, if and only if all such state courts lack subject matter jurisdiction, the federal district court for the District of Delaware) will be the exclusive forum for the following types of actions or proceedings under Delaware statutory or common law:

- any derivative action or proceeding brought on our behalf;
- any action or proceeding asserting a claim of breach of a fiduciary duty owed by any of our current or former directors, officers or other employees to us or our stockholders;
- any action or proceeding asserting a claim against us or any of our current or former directors, officers or other employees, arising out of or pursuant to any provision of the Delaware General Corporation Law, our certificate of incorporation or our bylaws;
- any action or proceeding to interpret, apply, enforce or determine the validity of our certificate of incorporation or our bylaws; and
- any action asserting a claim against us or any of our directors, officers or other employees governed by the internal affairs doctrine.

This provision would not apply to suits brought to enforce a duty or liability created by the Exchange Act or any other claim for which the U.S. federal courts have exclusive jurisdiction.

In addition, our amended and restated certificate of incorporation provides that the federal district courts of the United States will be the exclusive forum for resolving any complaint asserting a cause of action arising under the Securities Act, unless we consent in writing to the selection of an alternative forum.

These exclusive-forum provisions may limit a stockholder's ability to bring a claim in a judicial forum that it finds favorable for disputes with us or our directors, officers or other employees, which may discourage these types of lawsuits. Furthermore, the enforceability of similar choice of forum provisions in other companies' certificates of incorporation has been challenged in legal proceedings, and it is possible that a court could find these types of provisions to be inapplicable or unenforceable. For example, the Court of Chancery of the State of Delaware recently determined that a provision stating that U.S. federal district courts are the exclusive forum for resolving any complaint asserting a cause of action arising under the Securities Act is not enforceable. However, on March 18, 2020, this decision was ultimately overturned by the Delaware Supreme Court. If a court were to find the exclusive-forum provision contained in our amended and restated certificate of incorporation to be inapplicable or unenforceable in an action, we may incur additional costs associated with resolving such action in other jurisdictions, which could harm our business.

ITEM 2. UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS

(a) Recent Sales of Unregistered Securities

None.

(b) Use of Proceeds

Initial Public Offering

On April 13, 2020, we closed our initial public offering, or IPO, in which we issued and sold an aggregate of 6,900,000 shares of common stock at a public offering price of $16.00 per share. All of the shares of common stock issued and sold in our IPO were registered under the Securities Act pursuant to a registration statement on Form S-1 (Registration No. 333-237212), which was declared effective by the SEC on April 7, 2020. The offering commenced on April 7, 2020, and, following the sale of the shares upon the closing of the IPO, the offer terminated.

The aggregate net proceeds to us from the public offering were approximately $100.1 million, after deducting underwriting discounts and commissions and offering expenses payable by us of approximately $10.3 million. No offering expenses were paid directly or indirectly to any of our directors or officers (or their associates) or persons owning 10% or more of any class of our equity securities or to any other affiliates.

There has been no material change in the use of proceeds from our IPO from those disclosed in the Annual Report on Form 10-K for the year ended December 31, 2020, filed with the SEC on March 25, 2021.

November 2020 Public Offering of Common Stock

On November 17, 2020, we closed a public offering in which we issued and sold an aggregate of 2,990,000 shares of common stock at a public offering price of $50.00 per share. All of the shares of common stock issued and sold in this public offering were registered under the Securities Act pursuant to a registration statement on Form S-1 (Registration No. 333-250010), which was declared effective by the SEC on November 12, 2020. Jefferies LLC, SVB Leerink LLC and Piper Sandler & Co. acted as joint book-running managers for the offering. H.C. Wainwright & Co., LLC acted as co-manager for the offering. The offering commenced on November 12, 2020, and, following the sale of the shares upon the closing of the offering, the offer terminated.

The aggregate net proceeds to us from the public offering were approximately $140.1 million, after deducting underwriting discounts and commissions and offering expenses payable by us of approximately $9.4 million. No offering expenses were paid directly or indirectly to any of our directors or officers (or their associates) or persons owning 10% or more of any class of our equity securities or to any other affiliates.

There has been no material change in the use of proceeds from our public offering from those disclosed in the final prospectus for our public offering dated November 12, 2020 and filed with the SEC pursuant to Rule 424(b)(4) of the Securities Act on November 13, 2020.

(c) Issuer Purchases of Equity Securities

None.

ITEM 3. DEFAULTS UPON SENIOR SECURITIES

None.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

ITEM 5. OTHER INFORMATION

None.

ITEM 6. EXHIBITS

Exhibit Number	Description	Incorporated by Reference			
		Schedule Form	File Number	Exhibit	Filing Date
3.1	Amended and Restated Certificate of Incorporation of the Registrant.	8-K	001-39264	3.1	April 13, 2020
3.2	Amended and Restated Bylaws of the Registrant.	8-K	001-39264	3.2	April 13, 2020
10.1*	Indenture of Lease by and between the Registrant and Revolution Labs Owner, LLC, dated September 7, 2021.				
31.1*	Certification of Principal Executive Officer Pursuant to Rules 13a-14(a) and 15d-14(a) under the Securities Exchange Act of 1934, as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.				
31.2*	Certification of Principal Financial Officer Pursuant to Rules 13a-14(a) and 15d-14(a) under the Securities Exchange Act of 1934, as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.				
32.1+	Certification of Principal Executive Officer and Principal Financial Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.				
101.INS	Inline XBRL Instance Document - the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document				
101.SCH*	Inline XBRL Taxonomy Extension Schema Document				
101.CAL*	Inline XBRL Taxonomy Extension Calculation Linkbase Document				
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 - the cover page interactive data is embedded within the Inline XBRL document or included within the Exhibit 101 attachments				

* 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.

KEROS THERAPEUTICS, INC.

Date: November 4, 2021

By: /s/ Jasbir Seehra

Jasbir Seehra, Ph.D.

Chief Executive Officer

(*Principal Executive Officer*)

Date: November 4, 2021

By: /s/ Keith Regnante

Keith Regnante

Chief Financial Officer

(*Principal Financial Officer and Principal Accounting Officer*)

Exhibit 10.1

1050 WALTHAM STREET
LEXINGTON, MASSACHUSETTS

Lease to

KEROS THERAPEUTICS INC.

FROM THE OFFICE OF:

Goulston & Storrs PC
400 Atlantic Avenue
Boston, Massachusetts 02110-3333

INDEX TO LEASE

EXHIBITS

INDENTURE OF LEASE

1050 WALTHAM STREET

THIS INDENTURE OF LEASE (this "Lease") made as of the 7th day of September, 2021 (the "Effective Date"), by and between Revolution Labs Owner, LLC, a Delaware limited liability company, having a mailing address c/o Greatland Realty Partners, One Federal Street, 18th Floor, Boston, Massachusetts 02110 (hereinafter referred to as the "Landlord"), of the one part, and the tenant named in Section 1.1(a) below (hereinafter referred to as the "Tenant"), of the other part.

W I T N E S S E T H:

ARTICLE I

Basic Data

Section 1.1

The following sets forth basic data hereinafter referred to in this Lease, and, where appropriate, constitute definitions of the terms hereinafter listed.

(a) Tenant: Keros Therapeutics, Inc., a Delaware corporation

(b) Present Mailing Address of Tenant: 99 Hayden Avenue, Suite 120, Building E, Lexington, MA 02421

(c) Tenant's E-mail Address (for information regarding billings and statements, but not for purposes of official notice under this Lease): ap@kerostx.com

(d) Commencement Date. The date on which Landlord tenders possession of the Premises to Tenant with the Base Building Work and the Premises Work (each as defined in Exhibit C hereto) Substantially Completed (as defined in Exhibit C hereto). Landlord estimates that the Commencement Date will occur on before October 21, 2022, subject to the provisions of this Lease including, without limitation, Exhibit C hereto (the "Estimated Commencement Date").

(e) Term or Lease Term: Commencing on the Commencement Date and expiring on that date which is eight (8) years and four (4) months after the Lease Commencement Date, unless sooner terminated as provided herein (the "Expiration Date").

(f) Extension Options: One (1) period of five (5) years as provided in and on the terms set forth in Section 3.3 hereof.

(g) Lease Year: Commencing as of the Rent Commencement Date, or as of any anniversary of the Rent Commencement Date, the successive twelve (12) month

period in which any part of the Lease Term occurs; provided, that if the Rent Commencement Date does not occur on the first day of a calendar month, then (i) the first Lease Year shall further include the partial calendar month in which the first anniversary of the Rent Commencement Date occurs, and (ii) the remaining Lease Years shall be the successive twelve (12) month periods following the end of such first Lease Year.

(h) Rent Commencement Date: That date which is four (4) months following the Commencement Date.

(i) Annual Fixed Rent: During the Lease Term, Annual Fixed Rent with respect to the Premises shall be payable by Tenant as follows:

Lease Year	Annual Fixed Rent	Monthly Fixed Rent	Per Square Foot Rent
1	$2,425,016.00	$202,084.66	$68.00
2	$2,497,766.40	$208,147.20	$70.04
3	$2,572,656.60	$214,388.05	$72.14
4	$2,650,043.20	$220,836.93	$74.31
5	$2,729,212.80	$227,434.40	$76.53
6	$2,811,235.40	$234,269.61	$78.83
7	$2,895,754.40	$241,312.86	$81.20
8	$2,982,413.00	$248,534.41	$83.63

(j) Permitted Use: Subject to Legal Requirements (as defined in Section 11.7 of the Lease), general office uses and accessory uses to the same and research and development and laboratory uses and accessory uses to each the same (which shall include, without limitation, light biomanufacturing, small animal vivarium, tissue laboratory, and clean room uses). Notwithstanding the provisions of this Lease, under no circumstances shall Tenant use or occupy the Premises or any part thereof in a manner that includes activities that would qualify or be characterized or categorized as any laboratory biosafety level ("BSL") other than BSL1 or BSL2.

(k) Landlord's Contribution: $6,775,780.00 (i.e., One Hundred and Ninety Dollars ($190.00) per rentable square feet of the Premises), as more particularly set forth in Exhibit C attached hereto.

(l) Additional Allowance. An amount of up to $713,240.00 (i.e., Twenty Dollars ($20.00) per rentable square feet of the Premises), as more particularly set forth in Exhibit C attached hereto.

(m) Tenant's Proportionate Share: 19.85%.

(n) Security Deposit: $1,212,507.90 in the form of a Letter of Credit and subject to reduction as set forth in Section 20.29 hereof.

ARTICLE II

The Premises

Section 2.1– Demise.

(a) Landlord hereby leases to Tenant and Tenant hereby leases from Landlord, upon and subject to the terms and provisions of this Lease, approximately 35,662 rentable square feet which includes 34,860 rentable square feet on the third (3rd) floor of the Building (as defined below) as shown on Exhibit A attached hereto and made a part hereof and 802 rentable square feet on the penthouse level of the Building as shown on Exhibit F attached hereto and made a part hereof of (collectively, the "Premises"). The Premises is to be located in the three (3) story, approximately 179,694 rentable square foot building (the "Building") currently under construction by Landlord on the property located at 1050 Waltham Street, Lexington, Massachusetts and Waltham, Massachusetts (the "Property"). Landlord and Tenant stipulate and agree that the rentable square footage of the Building and the rentable square footage of the Premises are correct and shall not be remeasured. In addition to the Building, Landlord will construct an approximately 442 space parking garage serving the Building (the "Parking Garage"). The Property, the Building and the Parking Garage are shown on Exhibit B attached hereto and made a part hereof.

(b) Excepting and reserving to Landlord the roof and exterior walls of the Building; and further reserving to Landlord the right to place in the Premises (in such manner as to reduce to a minimum the interference with Tenant's use of the Premises, and provided that no usable portion of the Premises is reduced) structural supports, ducts, shafts, conduits, utility lines, pipes and the like which may or may not service the Premises, and to replace and maintain and repair such structural supports, ducts, shafts, conduits, utility lines, pipes and the like in, over and upon the Premises as may have been installed by Landlord in, on or under the Building.

ARTICLE III

Term of Lease

Section 3.1– Term.

TO HAVE AND TO HOLD the Premises unto Tenant for the term specified in Section 1.1(e) hereof unless sooner terminated as provided herein.

Section 3.2– Commencement Date.

(a) This Lease shall be effective as of the Effective Date. The Term of this Lease shall commence on the Commencement Date. The parties hereto agree, upon demand of the other, to execute a supplemental instrument expressing the Commencement Date, the Rent Commencement Date and the Expiration Date. The failure of the parties to execute said statement shall not be a default under this Lease or affect the validity of this Lease, nor shall it affect the determination of the Commencement Date, the Rent Commencement Date or the Expiration Date in accordance with the terms and conditions of this Lease.

(b) Neither this Lease nor the obligations of Tenant hereunder shall be affected by a postponement of the Commencement Date (except as set forth in Section 7.1(c) hereof) and, except as set forth in Section 7.1(c) hereof, Landlord shall not be subject to any liability for failure to make possession of the Premises available on the Estimated Commencement Date.

Section 3.3– Extension Option.

(a) On the conditions (which conditions Landlord may waive in its sole discretion by written notice to Tenant) that both at the time of exercise of the Extension Option and as of the commencement of the Extended Term (i) there exists no Event of Default (as defined in Section 19.1), (ii) this Lease is still in full force and effect and (iii) the Tenant then occupies seventy percent (70%) of the entirety of the initially demised Premises, then Tenant shall have the right (the "Extension Option") to extend the Term hereof upon all the same terms, conditions, covenants and agreements herein contained (except as expressly set forth in this Section 3.3 and Section 3.4) for one (1) period of five (5) years (the "Extended Term"). Notwithstanding any provision of this Lease to the contrary, except as expressly set forth in Section 3.4(e), Landlord has no obligation to make any additional payment to Tenant in respect of any construction allowance or the like or to perform any work to the Premises as a result of the exercise by Tenant of the Extension Option (provided that the failure of Landlord to do so shall be taken into account as a relevant factor in determining the Prevailing Market Rent).

(b) To exercise the Extension Option, Tenant shall give written notice (the "Extension Exercise Notice") to Landlord exercising the Extension Option, no later than twelve (12) months and no earlier than eighteen (18) months prior to the then expiration of the Lease Term. No later than eleven (11) months prior to the expiration of the Lease Term, Landlord shall give to Tenant a quotation of the proposed Annual Fixed Rent for the Extended Term ("Landlord's Rent Quotation"). If at the expiration of thirty (30) days after the date when Landlord provides such quotation to Tenant (the "Negotiation Period"), Landlord and Tenant have not reached agreement on a determination of an Annual Fixed Rent for the Extended Term and executed a written instrument extending the Term of this Lease pursuant to such agreement, or, if Landlord shall not have provided

Landlord's Rent Quotation within thirty (30) days after Tenant's delivery of the Extension Exercise Notice, Tenant may make a request to Landlord for a broker determination (the "Broker Determination") of the Prevailing Market Rent (as defined in Section 3.4) for such Extended Term, which Broker Determination shall be made in the manner set forth in Section 3.4. If Tenant timely shall have requested the Broker Determination (i.e., within thirty (30) days after the expiration of the Negotiation Period), then the Annual Fixed Rent for such Extended Term shall be the Prevailing Market Rent as determined by the Broker Determination. If Tenant does not timely request the Broker Determination, then the Annual Fixed Rent during the Extended Term shall be equal to Landlord's Rent Quotation.

(c) Upon the timely giving of the Extension Exercise Notice by Tenant to Landlord, then this Lease and the Lease Term hereof shall automatically be deemed extended for the Extended Term upon all of the agreements, terms, covenants and conditions of this Lease except as expressly set forth herein, without the necessity for the execution of any additional documents, except that Landlord and Tenant agree to enter into an instrument in writing setting forth the Annual Fixed Rent for the Extended Term as determined in the relevant manner set forth in this Section 3.3 and in Section 3.4; and in such event all references herein to the Lease Term or the Term of this Lease shall be construed as referring to the Lease Term, as so extended, unless the context clearly otherwise requires, and except that there shall be no further option to extend the Lease Term. If Tenant fails to give a timely Extension Exercise Notice, then Tenant shall have no further right to extend the Term of the Lease pursuant to this Section 3.3.

Section 3.4– Broker Determination of Prevailing Market Rent.

In the event a request for a Broker Determination of Prevailing Market Rent is made pursuant to the terms of Section 3.3, the following terms and conditions shall apply:

(a) Tenant's Request. Tenant shall send a notice to Landlord in accordance with Section 3.3, requesting a Broker Determination of the Prevailing Market Rent, which notice to be effective must (i) make explicit reference to the Lease, (ii) include the name of a broker selected by Tenant to act for Tenant, which broker must be a Qualified Broker (as hereinafter defined), and (iii) explicitly state that Landlord is required to notify Tenant within ten (10) business days of an additional broker selected by Landlord. A "Qualified Broker" means a commercial real estate broker associated with a major commercial real estate brokerage firm with at least ten (10) years full-time commercial real estate brokerage experience in the Lexington, Massachusetts and Waltham, Massachusetts market areas (the "Market Area").

(b) Landlord's Response. Within ten (10) business days after Landlord's receipt of Tenant's notice requesting the Broker Determination and stating the name of the broker selected by Tenant, Landlord shall give written notice to Tenant of

Landlord's selection of a Qualified Broker having at least the qualifications referred to above.

(c) Rental Value Determination. Within ten (10) days after selection of both brokers, the two (2) brokers so selected shall deliver to both Landlord and Tenant their respective written determinations of the Prevailing Market Rent (each, a "Final Determination"). If the two (2) brokers so appointed agree on the Prevailing Market Rent, the Prevailing Market Rent shall be the amount so determined. If the two (2) brokers so appointed do not agree on the Prevailing Market Rent, the two (2) brokers shall within ten (10) days thereafter jointly appoint a third (3rd) impartial broker (the "Neutral Broker") also being a Qualified Broker and having at least the qualifications referred to above. The Neutral Broker, within thirty (30) days after its appointment, shall make a determination of the Prevailing Market Rent by selecting either the amount in Landlord's Final Determination or the amount set forth in Tenant's Final Determination, whichever the Neutral Broker determines is the Prevailing Market Rent for the Premises. The Neutral Broker may not select any other amount as the Prevailing Market Rent. The determination made by the Neutral Broker hereunder shall be final and binding on both Landlord and Tenant.

(d) Prevailing Market Rent. The "Prevailing Market Rent" shall mean the fixed annual rent (which may provide for annual increases in rent during said Extended Term) that a willing lessee would pay and a willing lessor would accept in an arms' length negotiation for comparable space in comparable research and development buildings in the Market Area during the Extended Term, and shall take into account all relevant factors, including, without limitation, improvement allowances, brokerage commissions and all other applicable terms and conditions of the tenancy in question. Landlord shall have no obligation to make or pay for any improvements to the Premises or to pay any allowances or inducements of any kind, provided that any absence of such improvements, allowances or inducements shall be reflected in the determination of Prevailing Market Rent.

(e) Costs. Each party shall pay the costs and expenses of the broker selected by it and each shall pay one half (1/2) of the costs and expenses of the Neutral Broker, if applicable.

(f) Failure to Select Broker or Failure of Broker to Serve. If Tenant shall have requested a Broker Determination and Landlord shall not have designated a broker within the time period provided therefor above and such failure shall continue for more than ten (10) days after notice thereof, then Tenant's broker shall alone make the determination of the Prevailing Market Rent in writing to Landlord and Tenant within thirty (30) days after the expiration of Landlord's right to designate a broker hereunder. If Tenant and Landlord have both designated brokers but the two brokers so designated do not, within a period of fifteen (15) days after the appointment of the second broker, agree upon and

designate the Neutral Broker willing so to act, Tenant, Landlord or either broker previously designated may request the Greater Boston Real Estate Board (or such organization as may succeed to the Greater Boston Real Estate Board) to designate the Neutral Broker willing so to act and a broker so appointed shall, for all purposes, have the same standing and powers as though he had been reasonably appointed by the brokers first appointed. In case of the inability or refusal to serve of any person designated as a broker, or in case any broker for any reason ceases to be such, a broker to fill such vacancy shall be appointed by Tenant, Landlord, or the brokers first appointed or the Boston Bar Association (or such organization as may succeed to the Boston Bar Association), as the case may be, whichever made the original appointment, or if the person who made the original appointment fails to fill such vacancy, upon application of any broker who continues to act or by Landlord or Tenant such vacancy may be filled by the Boston Bar Association (or such organization as may succeed to the Boston Bar Association), and any broker so appointed to fill such vacancy shall have the same standing and powers as though originally appointed.

ARTICLE IV

Annual Fixed Rent

Section 4.1– Annual Fixed Rent.

(a) Tenant agrees to pay to Landlord, commencing on the Rent Commencement Date, and thereafter monthly, in advance, on the first day of each and every calendar month during the original Lease Term, a sum equal to one-twelfth (1/12th) of the Annual Fixed Rent specified in Section 1.1 hereof and on the first day of each and every calendar month during the Extended Term (if exercised), a sum equal to one-twelfth of the Annual Fixed Rent as determined pursuant to Section 3.3 and Section 3.4 for the Extended Term, all without offset or abatement except as otherwise expressly provided in this Lease. Until notice of some other designation is given, Annual Fixed Rent and all other charges for which provision is herein made shall be paid to Landlord at its office in Boston, Massachusetts set forth on page 1 of this Lease, or, at Tenant's election, made by electronic funds transfer to Landlord at the account designated by Landlord upon Tenant's election.

(b) Annual Fixed Rent for any partial month shall be paid by Tenant to Landlord at such rate on a pro rata basis, and, if the Rent Commencement Date shall be other than the first day of a calendar month, the first payment of Annual Fixed Rent which Tenant shall make to Landlord shall be a payment equal to a proportionate part of such monthly Annual Fixed Rent for the partial month from the Rent Commencement Date to the first day of the succeeding calendar month.

(c) Additional Rent (as defined in Section 20.8 hereof) payable by Tenant on a monthly basis as provided in this Lease, likewise shall be prorated for any partial month of the Lease Term.

(d) Notwithstanding that the payment of Annual Fixed Rent payable by Tenant to Landlord shall not commence until the Commencement Date, Tenant shall comply with, all other provisions of this Lease as and at the times provided in this Lease. Annual Fixed Rent, Additional Rent and all other charges payable under this Lease shall be paid by Tenant to Landlord in lawful money of the United States in immediately available funds and without notice or demand and with setoff, deduction or abatement, except as otherwise expressly set forth in this Lease.

Section 4.2– Late Payment.

If Landlord shall not have received any payment or installment of Annual Fixed Rent or Additional Rent (the "Outstanding Amount") on or before the date such amount is past due (the "Due Date"), the amount of such payment or installment shall incur a late charge equal to the sum of: (a) five percent (5%) of the Outstanding Amount ("Late Fee") and (b) interest on the Outstanding Amount from the Due Date through and including the date such payment or installment is received by Landlord, at the Default Rate (as defined in Section 20.20 hereof). Such Late Fee and interest shall be deemed Additional Rent and shall be paid by Tenant to Landlord upon demand. Notwithstanding the foregoing, with respect to the first two (2) late payments in any twelve (12) month period, Tenant shall not be charged a Late Fee or interest on the Outstanding Amount unless Tenant fails to pay the Outstanding Amount within five (5) days after Landlord notice of such default to Tenant.

ARTICLE V

Additional Rent – Taxes

Section 5.1– Definitions.

The term "Taxes" is hereby defined to mean all general and special taxes, including existing and future assessments for road, sewer, utility and other local improvements and other governmental charges which may be lawfully charged, assessed, or imposed upon or allocable to the Property. There shall be excluded from such taxes interest or penalties on late payment of real estate taxes, all income, estate, succession, gift, inheritance, corporate excise and transfer taxes; provided, however, that if at any time during the Lease Term the present system of ad valorem taxation of real property shall be changed so that in lieu of, or in addition to, the whole or any part of the ad valorem tax on real property, there shall be assessed on Landlord a capital levy or other tax on the gross rents received with respect to the Property, or a Federal, State, County, Municipal, or other local income, franchise, excise or similar tax, assessment, levy or charge (distinct from any now in effect in the jurisdiction in which the Property is located) measured by or based, in whole or in part, upon any such gross rents, then any and all of such taxes, assessments, levies or charges, to the extent so measured or based, shall be deemed to be included within the term

"Taxes". Landlord shall pay, or cause to be paid, before the same become delinquent, all Taxes, provided however, that if authorities having jurisdiction assess Taxes which Landlord deems excessive, Landlord may defer compliance therewith to the extent permitted by the laws of the State (as defined in Section 20.13) so long as the validity or amount thereof is contested by Landlord in good faith and so long as Tenant's occupancy of the Premises is not disturbed or threatened. Notwithstanding the foregoing, "Taxes" shall not include and Tenant shall not be required to pay any portion of any tax or assessment expense or any increase therein (a) levied on Landlord's rental income, unless such tax or assessment is imposed in lieu of or as a substitute, either in whole or in part, for Taxes as set forth above, or (b) in excess of the amount which would be payable if such tax or assessment expense were paid in installments over the longest permitted term.

Section 5.2– Personal Property Taxes.

Tenant shall pay all taxes which may be lawfully charged, assessed, or imposed upon all of Tenant's fixtures and equipment of every type and also upon all of Tenant's personal property in the Premises, and Tenant shall pay all license fees and other charges which may lawfully be imposed upon the business of Tenant conducted upon the Premises.

Section 5.3– Tenant's Proportionate Share of Taxes.

(a) From and after the Commencement Date, Tenant shall, on account of each tax year that occurs during the remainder of the Term of this Lease, pay to Landlord, as Additional Rent, Tenant's Proportionate Share of the Taxes for such tax year.

(b) Tenant's Proportionate Share of Taxes shall be equitably adjusted for and with respect to the first and last partial tax years (if any) of the term of this Lease. Where the applicable tax bills and computations are not available prior to the end of the term hereof, then a tentative computation shall be made on the basis of the previous year's Taxes payable by Tenant, with a final adjustment to be made between Landlord and Tenant promptly after all bills and computations are available for such period. Landlord shall provide to Tenant copies of all Tax bills upon request.

(c) Tenant's Proportionate Share of Taxes shall be due and payable within thirty (30) days after receipt by Tenant of Landlord's invoice. However, Tenant shall make monthly tax deposits with Landlord in an amount equal to one-twelfth (1/12th) of the annual Tenant's Proportionate Share of Taxes as reasonably estimated by Landlord (taking into account relevant factors including the prior year's Taxes), with a final adjustment to be made between the parties as soon as Tenant's Proportionate Share of Taxes has been determined. Accordingly, if the amounts paid by Tenant to Landlord on account of Tenant's Proportionate Share of Taxes exceeded the amounts to which Landlord was entitled hereunder, or that Tenant is entitled to a credit with respect to Tenant's Proportionate Share of Taxes, Landlord, at its option, shall refund to Tenant the amount of such excess or apply the amount of such credit, as the case may be, within thirty (30) days after notice

of such determination; provided, however, if the Lease Term has ended, Landlord shall promptly provide such refund to Tenant. Similarly, if the amounts paid by Tenant to Landlord on account of Tenant's Proportionate Share of Taxes were less than the amounts to which Landlord was entitled hereunder, then Tenant shall pay to Landlord, as Additional Rent, the amount of such deficiency within thirty (30) days after notice of such determination.

(d) In every case, Taxes shall be adjusted to take into account any abatement or refund thereof paid to Landlord by the appropriate authorities, less all of Landlord's reasonable out of pocket costs of securing such abatement or refund (Landlord having the sole right to contest Taxes, but Landlord agrees to contest Taxes upon the reasonable request of Tenant). If Landlord shall elect to negotiate or contest such Taxes, Landlord shall be entitled to bill Tenant for Tenant's Proportionate Share of the reasonable out of pocket costs and expenses thus incurred by Landlord as and when the same are incurred, and the same shall constitute part of such Taxes. To the extent that Landlord has so billed and received from Tenant payment of such costs and expenses, the same shall not be deducted as aforesaid from the abatement or refund, if any, ultimately received with respect thereto.

ARTICLE VI

Intentionally Omitted

ARTICLE VII

Condition of the Premises

Section 7.1– Landlord's Work.

(a) General. Subject to Force Majeure and any Tenant Delay (each as hereinafter defined), Landlord shall perform the Premises Work in accordance with the Premises Work Plans (as defined in Exhibit C attached hereto). In addition, and subject to Force Majeure and any Tenant Delay, Landlord shall perform the Base Building Work in accordance with Exhibit C attached hereto. Subject to Force Majeure and any Tenant Delay, Landlord shall cause the Premises Work to be commenced by April 1, 2022. In addition, and subject to Force Majeure and any Tenant Delay, in the event of any delay in the commencement of the Premises Work beyond July 1, 2022 or any delay in the Commencement Date beyond the Estimated Commencement Date, Tenant's sole remedies shall be as set forth in subsection (c) below and except as otherwise set forth therein, Tenant shall have no claim or rights against Landlord. Upon Tenant's request from time to time, Landlord shall consult with Tenant and its representatives about the status of the design and construction of Landlord's Work and any updates that Landlord may have with respect to the commencement of construction of the Premises Work and the Estimated Substantial Completion Date.

(b) Definitions.

(i) "Tenant Delay" shall mean any act or omission by Tenant and/or Tenant Parties (as defined below) which causes an actual delay in the performance of Landlord's Work. Notwithstanding the foregoing, except where a Tenant Delay arises from Tenant's failure timely to act within on or before a date or time period expressly set forth in the Lease (in which event no Tenant Delay Notice shall be required) (x) in no event shall any act or omission be deemed to be a Tenant Delay until and unless Landlord has given Tenant written notice (the "Tenant Delay Notice") advising Tenant (a) that a Tenant Delay is occurring, and (b) of the basis on which Landlord has determined that a Tenant Delay is occurring, and (y) no period of time prior to the time that that is two (2) days after Tenant receives a Tenant Delay Notice shall be included in the period of time charged to Tenant pursuant to such Tenant Delay Notice.

(ii) "Substantially Complete" or "Substantial Completion," when referring to the Premises Work shall mean that: (1) the Premises Work is completed, other than minor work which does not materially affect Tenant's use of, or access to, the Premises, (2) the Premises are in conformance with all applicable building codes, permits, laws and regulations, including without limitation, ADA, (3) all structural elements and subsystems of the Building, including but not limited to HVAC, mechanical, electrical, lighting, plumbing, and life safety systems, will be in good working condition and repair, (4) Landlord has delivered to Tenant a certificate of substantial completion from Landlord's architect stating that the Premises Work is substantially complete, and (5) such evidence (the "Town Approval") as is customarily provided by the Town of Lexington to evidence its acceptance of the Premises Work and Tenant's right to lawfully occupy the Premises (e.g., sign-offs on the Building permit by all applicable Town of Lexington departments or a certificate of occupancy, which may be a temporary certificate of occupancy) has been provided by the Town of Lexington. No costs incurred by Landlord in satisfying the definition of Substantial Completion shall be included in Operating Costs. Notwithstanding anything to the contrary herein contained, in the event that any portion of the Premises Work is delayed by reason of any Tenant Delay, then Landlord shall be deemed to have achieved Substantial Completion of the Premises Work on the date that Landlord would have achieved Substantial Completion of the Premises Work, but for such Tenant Delay. Landlord represents and warrants that the base building systems (i.e. HVAC, mechanical, electrical, lighting, plumbing and life safety) (collectively, the "Base Building Systems") will be, as of the Commencement Date and for a period of twelve (12) months thereafter, in good working order and that no Operating Costs relating to the same shall be subject to reimbursement by Tenant during (or with respect to) such twelve (12) month period.

(iii) Punchlist. Promptly following Substantial Completion of the Premises Work, Landlord and Tenant shall conduct a joint inspection of the Premises. Tenant shall provide Landlord with a punchlist prepared by Tenant's architect with respect to the Premises Work, and Landlord shall provide Tenant with a punchlist prepared by Landlord's architect with respect to the Base Building Work (collectively, the "Punchlist") incorporating those items jointly identified by Landlord and Tenant during their joint inspection of the Premises Work and the balance of Landlord's Work, of outstanding items (the "Punchlist Items"). Subject to Force Majeure and Tenant Delays, Landlord shall complete all Punchlist

Items as soon as reasonably practicable after such inspection, but in no event later than thirty (30) days of the date of the Punchlist (other than seasonal items, such as landscaping, requiring a longer period), provided that Tenant reasonably cooperates in connection with the completion of such Punchlist Items.

(c) Tenant's Remedies in the Event of Delays in Commencement Date. If the Commencement Date does not occur on or before that date which is sixty (60) days following the Estimated Commencement Date, as such date shall be extended day for day for any Tenant Delay and/or Force Majeure, Tenant's obligation to pay Annual Fixed Rent as of the Commencement Date shall abate one (1) day for each day thereafter until the earlier of (x) the date on which the Commencement Date shall occur, and (y) that date which is ninety (90) days following the Estimated Commencement Date, as the same may be extended by any Tenant Delay and/or Force Majeure. If the Commencement Date shall not have occurred on or before that date which is ninety (90) days following the Estimated Commencement Date, as such date shall be extended day for day for any Tenant Delay and/or Force Majeure, Tenant's obligation to pay Annual Fixed Rent as of the Commencement Date shall abate two (2) days for each day thereafter until the earlier of (i) the date on which the Commencement Date shall occur; and (ii) the Outside Delivery Date (as hereinafter defined). In the event that the Commencement Date does not occur on or before the Outside Delivery Date, then Tenant shall have the right to terminate the Lease, which shall be exercisable by a written thirty-(30)-day termination notice given on or after the Outside Delivery Date but before the date that the Commencement Date occurs. In such event, this Lease shall terminate and shall be of no further force or effect on the thirtieth (30th) day after Tenant's notice, and, except for provisions of the Lease, which are intended to survive termination of the Lease (e.g., indemnification provisions), Landlord shall promptly refund to Tenant any Security Deposit paid by Tenant to Landlord and neither party shall have any further obligation to the other party. In the event, however, that Tenant elects to terminate the Lease pursuant to the foregoing and if the Commencement Date occurs on or before the thirtieth (30th) day after Landlord receives such termination notice, Tenant's termination notice shall be deemed to be void and of no force or effect. For the purposes hereof, the "Outside Delivery Date" shall be defined as that date which is one hundred eighty (180) days following the Estimated Commencement Date, provided however, that the Estimated Commencement Date shall be extended by the length of any delays in the Premises Work arising from Force Majeure or any Tenant Delay.

(d) Tenant's Remedies in the Event of Delays in Commencement of Premises Work. In the event that the Premises Work does not commence on or before July 1, 2022, then Tenant shall have the right to terminate the Lease, which shall be exercisable by a written thirty-(30)-day termination notice given on or before August 1, 2022 but before the date that the commencement of the Premises Work occurs. In such event, this Lease shall terminate and shall be of no further force or

effect on the thirtieth (30th) day after Tenant's notice and Landlord shall refund to Tenant any Security Deposit paid by Tenant to Landlord on or before the thirtieth (30th) day after Landlord receives such termination notice in the time frame required above. In such event neither party shall have any further obligation to the other party except for provisions of the Lease which are intended to survive termination of the Lease (e.g., indemnification provisions). In the event, however, that Tenant elects to terminate the Lease pursuant to the foregoing and if the commencement of the Premises Work occurs on or before the thirtieth (30th) day after Landlord receives such termination notice in the time frame required above, Tenant's termination notice shall be deemed to be void and of no force or effect.

ARTICLE VIII

Assignment and Subletting

Section 8.1– Prohibition.

(a) Notwithstanding any other provision of this Lease, Tenant shall not, directly or indirectly, assign, mortgage, pledge or otherwise transfer, voluntarily or involuntarily, this Lease or any interest herein or sublet (which term without limitation, shall include granting of concessions, licenses, and the like) or allow any other person or entity to occupy the whole or any part of the Premises, without, in each instance, having complied with all of the applicable terms and conditions of this Article VIII. Any assignment, mortgage, pledge, transfer of this Lease or subletting of the whole or any part of the Premises by Tenant without compliance by Tenant with all of the applicable terms and conditions of this Article VIII shall be invalid, void and of no force or effect. Except for so long as Tenant's stock is publicly traded (including, without limitation, the initial and follow-on offerings of Tenant's stock) on a nationally recognized stock exchange and except as expressly permitted pursuant to Section 8.7 hereof, this prohibition includes any direct or indirect change in "control" of Tenant as a result of any assignment, subletting, or other transfer which would occur by operation of law, merger, consolidation, reorganization, acquisition, transfer, or other change of Tenant's corporate, ownership, and/or proprietary structure, including, without limitation, a change in the partners of any partnership, a change in the members and/or managers of any limited liability company, and/or the sale, pledge, or other transfer of any of the issued or outstanding capital stock of any corporate Tenant. For purposes hereof, "control" shall be deemed to be ownership of more than fifty percent (50%) of the stock or other voting interest of the controlled corporation or other business entity. Notwithstanding anything contained herein to the contrary, no change of control shall permit Landlord to exercise any right of recapture or profit-sharing under this Article VIII (so long as such change of control is for a legitimate independent business purpose and not solely for the purpose of transferring this Lease), and, to the extent that any such change of control is

subject to the consent of Landlord under this Article VIII, then such consent shall not be unreasonably withheld, delayed, or conditioned.

(b) In the case of any assignment or subletting, the Tenant originally named herein shall remain fully liable for all obligations of Tenant hereunder, including, without limitation, the obligation to pay the Rent and other amounts provided under this Lease and such liability shall not be affected in any way by any future amendment, modification, or extension of this Lease or any further assignment, other transfer, or subleasing and Tenant hereby irrevocably consents to any and all such transactions. It shall be a condition of the validity of any permitted assignment that the assignee agree in the actual assignment document to be bound by all obligations of Tenant hereunder from and after the date of such assignment, including, without limitation, the obligation to pay all Rent and other amounts provided for under this Lease and the covenant against further assignment or other transfer or subletting subject to, and in accordance with, the terms and conditions of this Article VIII.

Section 8.2– Further Assignment and Subletting

Landlord's consent to any assignment or subletting shall not relieve Tenant from the obligation to obtain Landlord's express consent to any further assignment or subletting subject to, and in accordance with, the terms and conditions of this Article VIII. In no event shall any permitted subtenant or assignee assign or encumber its sublease or further sublet any portion of the Premises, or otherwise suffer or permit any portion of the Premises to be used or occupied by others except subject to, and in accordance with, the terms and conditions of this Article VIII.

Section 8.3– Notice of Assignment or Sublease; Termination Rights.

(a) If Tenant desires to assign this Lease or sublet all or any portion of the Premises, then Tenant shall give notice thereof (the "Assignment/Sublease Notice") to Landlord, which Assignment/Sublease Notice shall be accompanied by (i) the date Tenant desires the assignment or sublease to be effective, (ii) the material business terms on which Tenant would assign or sublet such premises, (iii) a description of the portion of the Premises to be sublet, if applicable, (iv) a true and complete statement reasonably detailing the identity of the proposed assignee or subtenant, the nature of its business, and its proposed use of the Premises, (v) current financial information with respect to the proposed assignee, including, without limitation, its most recent financial statements (to the extent available), and (vi) such other information Landlord may reasonably request. Excepting only any assignment or subletting expressly permitted pursuant to Section 8.7 hereof, such notice shall be deemed an offer from Tenant to Landlord whereby Landlord (or Landlord's designee) shall be granted the right ("Landlord's Recapture Right"), at Landlord's option (x) with respect to a proposed assignment, to terminate this Lease, upon the terms and conditions hereinafter set forth; and (y) with respect to a sublease, to terminate this Lease with respect to the portion of the Premises proposed to be sublet, upon the terms and conditions hereinafter

set forth. If Landlord exercises its Landlord's Recapture Right (in whole or in part) pursuant to the foregoing provisions, then (a) this Lease (or that part of the Lease relating to the part of Premises proposed to be sublet, as applicable) shall end and expire on the date that such assignment or sublease was to commence (as if such date were the Expiration Date), (b) Rent shall be apportioned, paid or refunded as of such date, (c) Tenant, upon Landlord's request, shall enter into an agreement confirming such termination, and (d) Landlord shall be free to lease the recaptured Premises or applicable part thereof, to any person or persons, including, without limitation, to Tenant's prospective assignee or subtenant. If Landlord fails to respond to the Assignment/Sublease Notice, Tenant shall have the right to provide Landlord with a second written request for consent. Tenant's second request for consent must state in **BOLD** and ALL CAPITAL letters: **LANDLORD'S FAILURE TO RESPOND WITHIN FIVE (5) BUSINESS DAYS AFTER RECEIPT OF THIS NOTICE SHALL RESULT IN A DEEMED APPROVAL OF TENANT'S REQUEST TO AN ASSIGNMENT OR SUBLEASE OF THE PREMISES**. If Landlord's failure to respond continues for five (5) business days after Landlord's receipt of the second request for consent, then Landlord shall be deemed to have consented to such request.

Section 8.4– Consent to Assignment or Sublease.

Landlord shall either exercise Landlord's Recapture Right as aforesaid, if applicable, or grant or deny its consent to the proposed assignment or sublease by notice from Landlord to Tenant within ten (10) days after Landlord's receipt of Tenant's notice and the items listed in clauses (i) – (vi) of Section 8.3(a). If Landlord does not exercise Landlord's Recapture Right as aforesaid, if applicable, and provided that no Event of Default of Tenant has occurred hereunder, then Landlord's consent to the proposed assignment or subletting shall not be unreasonably withheld, conditioned or delayed. Tenant shall, upon demand, reimburse Landlord for all reasonable third party out-of-pocket expenses incurred by Landlord in connection with such assignment or sublease, including, without limitation, all reasonable out of pocket legal fees and expenses incurred by Landlord in connection with the granting of any requested consent (the "Landlord Consent Costs").

In no event shall Landlord be considered to have withheld its consent unreasonably to any proposed assignment or subletting if (it being understood that this is not an all-inclusive list):

(i) the proposed assignee or subtenant has insufficient financial wherewithal to meet its obligations under the Lease or sublease (as the case may be), and/or Landlord has not been furnished with reasonable proof thereof;

(ii) the proposed assignee or sublessee may, in Landlord's reasonable determination, use the Premises for a use which does not comply with the conditions and restrictions set forth in this Lease;

(iii) the proposed assignee or subtenant is then an occupant of the Building; provided, that Landlord then has comparably sized space available in the Building;

(iv) the proposed assignee or subtenant is a person or entity (or affiliate of a person or entity) with whom Landlord or Landlord's agent is then or has been within the prior six months negotiating in connection with the rental of space in the Building; provided, that Landlord then has comparably sized space available in the Building;

(v) the form of the proposed sublease or instrument of assignment is not reasonably satisfactory to Landlord;

(vi) the proposed subtenant or assignee shall be entitled, directly or indirectly, to diplomatic or sovereign immunity, regardless of whether the proposed assignee or subtenant agrees to waive such diplomatic or sovereign immunity, and/or shall not be subject to the service of process in, and the jurisdiction of the courts of, the Commonwealth of Massachusetts; or

(vii) any institutional mortgagee of the Building whose consent to such assignment or sublease is required fails to consent thereto (provided Landlord has used its diligent commercially reasonable efforts to obtain such consent).

If an Event of Default of Tenant shall occur after Landlord's consent hereunder and at any time prior to the effective date of such assignment or subletting, then Landlord's consent thereto, if previously granted, may be immediately deemed revoked upon notice to Tenant, and in such case, such consent shall be void and without force and effect.

Section 8.5– Subordination.

Each sublease shall be subject and subordinate to this Lease and to the matters that this Lease is or shall be subordinate, it being the intention of Landlord and Tenant that Tenant shall assume and be liable to Landlord for any and all acts and omissions of all subtenants and anyone claiming under or through any subtenants which, if performed or omitted by Tenant, would be a default under this Lease.

Section 8.6– Profits.

Except with respect to Permitted Transfers, if Tenant shall enter into any assignment or sublease permitted hereunder or consented to by Landlord, Tenant shall, within one hundred twenty (120) days after Landlord's consent to such assignment or sublease (or thirty (30) days after Tenant's incurring of same if later), deliver to Landlord a complete list of Tenant's Transaction Costs (as hereinafter defined) paid or to be paid in connection with such transaction. Tenant shall deliver to Landlord evidence of the payment of such fees promptly after the same are paid. In consideration of such assignment or subletting, Tenant shall pay to Landlord:

(a) in the case of an assignment of this Lease, within one hundred twenty (120) days after the effective date of the assignment, an amount equal to fifty percent (50%) of all sums and other consideration paid to Tenant by the assignee for or by reason of such assignment after first deducting-customary transaction costs actually incurred by Tenant (collectively "Transaction Costs"), including, without limitation, Tenant's reasonable out-of-pocket third-party brokerage fees, legal

fees and expenses, advertising costs, marketing downtime, free rent amounts, architectural fees, subtenant improvement costs, and Landlord Consent Costs in connection with such assignment; or

(b) in the case of a sublease, fifty percent (50%) of any consideration payable under the sublease to Tenant by the subtenant that exceeds on a per square foot basis the Annual Fixed Rent accruing during the term of the sublease in respect of the subleased space after first deducting Tenant's Transaction Costs in connection with such sublease. The sums payable under this clause shall be paid by Tenant to Landlord after recovery by Tenant of the foregoing costs, within thirty (30) days after rent is paid by the subtenant to Tenant.

Section 8.7– Permitted Transfers.

(a) The prohibition contained in Section 8.1 (and the provisions of Sections 8.3, 8.4, and 8.6 hereof shall not apply to (and Landlord shall have no right to consent to or prevent) the transfer of shares of stock of Tenant (including, without limitation, the initial and follow-on offerings of Tenant's stock) if and so long the voting stock of the then Tenant is publicly traded (or such transfer is an initial or follow-on offering of stock) on a nationally recognized stock exchange. Such exchange-based transfers ("Exchange-Based Transfers") shall not be deemed to be an assignment or subletting hereunder.

(b) The provisions of Sections 8.1, 8.3, 8.4, and 8.6 shall not apply to (and Landlord shall have no right to consent to or prevent) the following transfers (each a "Permitted Transfer"; and the applicable transferee being referred to hereunder as a "Permitted Transferee"):

(i) transactions with a business entity into or with which Tenant is merged, consolidated or reorganized or to which substantially all of Tenant's stock or assets are transferred so long as (x) such transfer was made for a legitimate independent business purpose and not solely for the purpose of transferring this Lease, (y) the successor to Tenant (or, if the identity of Tenant has not changed, then Tenant immediately after the applicable Permitted Transfer) meets the Net Worth Test, and (z) reasonable proof of such net worth is delivered to Landlord at least ten (10) days prior to the effective date of any such transaction (unless prior notification is prohibited by legal or confidentiality restrictions, in which case Tenant shall provide such proof as soon as legally permissible);

(ii) any change of control of Tenant so long as (x) such transfer was made for a legitimate independent business purpose and not solely for the purpose of transferring this Lease, (y) except with respect to Exchange-Based Transfers, Tenant (immediately after the applicable Permitted Transfer) meets the Net Worth Test, and (z) except with respect to Exchange-Based Transfers, reasonable proof of such net worth is delivered to Landlord at least ten (10) days prior to the effective date of any such transaction (unless prior notification is prohibited by legal or confidentiality restrictions, in which case Tenant shall provide such proof as soon as legally permissible); and

(iii) any sublet of all or part of the Premises or an assignment of this Lease for the Permitted Use to any corporation or other business entity which controls, is controlled by, or is under common control with the original Tenant named herein (a "Related Corporation"), for so long as such entity remains a Related Corporation. Such sublease shall not be deemed to vest in any such Related Corporation any right or interest in this Lease or Premises nor shall it relieve, release, impair or discharge any of Tenant's obligations hereunder. For the purposes hereof, "control" shall be deemed to mean ownership of not less than fifty percent (50%) of all of the voting stock of such corporation or not less than fifty percent (50%) of all of the legal and equitable interest in any other business entity if Tenant is not a corporation.

For purposes of this Section 8.7, the term "Net Worth Test" means that the successor to Tenant (or, Tenant, if, after the applicable transfer, Tenant remains the Tenant hereunder) has a net worth computed in accordance with generally accepted accounting principles at least equal to the net worth of Tenant as of the date immediately prior to the applicable transfer.

Section 8.8– No Waiver.

The acceptance by Landlord of the payment of Annual Fixed Rent, Additional Rent or other charges from an assignee or sublease shall not be considered to be a consent by Landlord to any such assignment, sublease, or other transfer, nor shall the same constitute a waiver of any right or remedy of Landlord. The listing of any name other than that of Tenant on the doors of Premises, the Building directory or elsewhere shall not vest any right or interest in this Lease or in Premises, nor be deemed to constitute Landlord's consent to any assignment or transfer of this Lease or to any sublease of Premises or to the use or occupancy thereof by others. Any such listing shall constitute a privilege revocable in Landlord's discretion by notice to Tenant.

Section 8.9– Tenant's Failure to Complete.

If Landlord does not exercise Landlord's Recapture Right and Tenant fails, within one hundred twenty (120) days after the delivery of Tenant's notice, to execute and deliver to Landlord such assignment or sublease then Tenant shall again comply with all of the provisions of this Article VIII before assigning this Lease or subletting all or part of the Premises. In addition, if Landlord consents to a proposed assignment or sublease and Tenant fails to execute and deliver to Landlord such assignment or sublease within one hundred twenty (120) days after the giving of such consent, then Tenant shall again comply with all of the provisions and conditions of this Article VIII before assigning this Lease or subletting all or part of the Premises.

ARTICLE IX

Tenant's Contribution

Section 9.1– Tenant's Proportionate Share of Operating Costs.

(a) Except as otherwise set forth herein, "Operating Costs" shall include all costs and expenses of every kind and nature paid or incurred by Landlord in cleaning, operating, managing, equipping, decorating, lighting, repairing, and maintaining

the Property including, without limitation, utilities, equipment and facilities relating thereto and/or required to be provided, maintained or improved (or whose provision, maintenance or improvement is required to be contributed to) by Landlord (including, without limitation, off-site utilities and facilities and improvements such as retention areas, drainage facilities, and all taxes, assessments, costs and other expenses related thereto), and all other common areas of the Property (including, but without limitation, the parking garage, all landscaping and gardening and outdoor seating areas, costs of snow plowing or removal and any amenities of the Building for the common use by Tenant and other tenants of the Building). Operating Costs pro rated under this Section 9.1 shall also include (but shall not be limited to) water and sewer and other utility system charges and assessments; costs of all roof, sky lights, and other maintenance and repairs performed by Landlord; costs of the installation, operation, maintenance, testing and repair of any utility and energy management system including, without limitation, any central HVAC system, central sprinkler system and smoke detection systems; costs of providing, operating and maintaining cellular services, wi-fi or data networks and the like for the Building; costs of building amenities including, without limitation, café, fitness center, collaboration space and bicycle storage areas; non-capital costs of applying and reporting for the Building or any part thereof to seek or maintain certification under the U.S. EPA's Energy Star® rating system, the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) rating system or a similar system or standard; costs of applying and reporting for the Project or any part thereof to seek or maintain certification under the WELL Health-Safety system or a similar system or standard; costs of the operation, maintenance and repair of any escalators and elevators; compensation, wages, fringe benefits and payroll taxes paid to, for or with respect to all persons for their services in the operating, maintaining, managing, or cleaning of the Property; costs of liability, property damage, fire, workers' compensation, and other insurance (including, without limitation, all insurance, hazard, rent and otherwise, from time to time carried by Landlord on any or all structures); wages and expenses relating thereto, unemployment taxes, social security taxes, and personal property taxes and assessments; fees for required licenses and permits and annual fees required to be paid by Landlord pursuant to the MOU (as defined in Section 20.30); supplies, costs of uniforms and the cleaning thereof; payments by Landlord relating to traffic safety, fire safety, and other governmental services and programs; a property management fee of no more than three percent (3%) of the gross revenues received by Landlord with respect to the Building; the fair market rental value of Landlord's on-site or off-site management office (provided, if the management office services one or more other buildings, the shared costs and expenses of such management office shall be equitably prorated and apportioned between the Building and the other buildings); costs of accounting and bookkeeping services and payments under service contracts with independent contractors for operating, repairing, maintaining or cleaning the of the Property. Operating Costs shall be calculated in accordance with generally accepted

accounting principles and practices in effect at the time thereof consistently applied ("GAAP").

(b) The following shall be excluded from Operating Costs:

(i) leasing commissions, fees and costs, advertising and promotional expenses and other costs incurred in procuring tenants or in selling the Property or any portion thereof;

(ii) legal fees or other expenses incurred in connection with enforcing leases with tenants in the Building;

(iii) costs of renovating or otherwise improving or decorating space solely for the benefit of any tenant or other occupant of the Building, including Tenant, or relocating any tenant;

(iv) financing costs on any mortgage or other instrument encumbering the Building including interest, charges, fees and principal amortization of debts and the costs of providing the same and rental on ground leases or other underlying leases and the costs of providing the same;

(v) any liabilities, costs or expenses associated with or incurred in connection with the remediation, removal, enclosure, encapsulation or other handling of hazardous materials and the cost of defending against claims and in regard to the existence, emission or release of hazardous materials at the Property (except to the extent of those costs for which Tenant is responsible pursuant to the express terms of the Lease);

(vi) costs of any items for which Landlord is paid or reimbursed by insurance;

(vii) increased insurance assessed specifically to any tenant of the Property for which Landlord is reimbursed by any other tenant or caused by the activities of another occupant of the Property;

(viii) charges for services not provided to Tenant under the lease or of a nature that are payable directly by Tenant under the lease and utilities (i.e. water and electricity), services or goods and applicable taxes for which Tenant or any other tenant, occupant, person or other party reimburses Landlord or pays to third parties;

(ix) all other items to the extent that another party compensates or pays so that Landlord shall not recover any item of cost more than once;

(x) the initial cost of installing any specialty service, such as a cafeteria, observatory, broadcasting facilities, child or daycare;

(xi) cost of correcting defects in the initial design, construction or equipment of, or latent defects in, the Premises or the Building (but not the costs of ordinary and

customary repair for normal wear and tear), underwriter's requirement or law applicable to the Premises, the Building or the Project on or prior to the Commencement Date;

(xii) payments for rental equipment (including, without limitation, equipment for which depreciation is properly charged as an expense or which is needed in connection with normal repairs and maintenance of permanent systems that would constitute a capital expenditure if the equipment were purchased);

(xiii) cost of the initial stock (and any replacement stock) of tools and equipment for operation, repair and maintenance of the Property;

(xiv) late fees or charges incurred by Landlord due to late payment of expenses, except to the extent attributable to Tenant's actions or inactions;

(xv) cost of acquiring, securing cleaning or maintaining sculptures, paintings and other works of art;

(xvi) Taxes;

(xvii) charitable or political contributions;

(xviii) reserve funds for future improvements, repairs, additions, and the like;

(xix) costs and expenses incurred in connection with any act, omission of or in contesting or settlement of any claimed violation by Landlord, any other occupant of the Property, or their respective agents, employees or contractors, of law or requirements of law;

(xx) costs of mitigation or impact fees or subsidies (however characterized), imposed by a governmental authority;

(xxi) costs occasioned by casualties or condemnation;

(xxii) any capital improvements or expenditures, other than depreciation for capital improvements made by Landlord during the Lease Term (x) to reduce Operating Costs if Landlord reasonably shall have determined based upon third party engineering estimates that the annual reduction in Operating Costs shall exceed depreciation therefor (but expressly excluding replacement of the roof and skin and structural components of the Building), but only to the actual extent of such savings in any applicable year, or (y) to comply with Legal Requirements first enacted following the Commencement Date (the capital expenditures described in subsections (x) and (y) being hereinafter referred to as "Permitted Capital Expenditures") plus, in the case of both (x) and (y), an interest factor, actually determined by Landlord, as being the interest rate then charged for long term mortgages by institutional lenders on like properties within the general locality in which the Building is located, and depreciation in the case of both (x) and (y) shall be determined by dividing the original cost of such capital expenditure by the number of years of useful life of the capital item acquired, which useful life

shall be determined reasonably by Landlord in accordance with GAAP in effect at the time of acquisition of the capital item;

(xxiii) costs for capital expenditures with respect to compliance with the Americans with Disabilities Act (and any similar law), as it exists as of the Commencement Date, and costs for capital expenditures required under any other law except to the extent the same is first enacted after the Commencement Date;

(xxiv) any costs with respect to buildings or structures at the Property other than the Building; provided, however, that the foregoing shall not be deemed to exclude or limit costs with respect to the common areas of the Property; and

(xxv) costs with respect to the Base Building Systems incurred during or with respect to any period prior to the date that is twelve (12) months after the Commencement Date.

(c) From and after the Commencement Date, Tenant shall, for the remainder of the Term of this Lease, pay to Landlord, as Additional Rent, Tenant's Proportionate Share of the Operating Costs incurred by Landlord with respect to the Property, including, without limitation, the costs and expenses set forth in this Section 9.1.

(d) Tenant's Proportionate Share of the Operating Costs shall be paid in monthly installments, in the amount estimated from time to time by Landlord, on the first day of each and every calendar month, in advance.

(e) In determining the amount of Operating Costs for any calendar year, if less than 100% of the rentable areas of the Project are occupied by tenants at any time during any such year, Operating Costs that vary based on occupancy such as cleaning costs shall be determined for such year to be an amount equal to the like expenses which would normally be expected to be incurred had such occupancy been 100% throughout such year.

Section 9.2– Tenant's Audit Right.

(a) Landlord will deliver the annual Operating Cost statement (the "Year End Statement") to Tenant within one hundred eighty (180) days after the expiration of the respective Lease Year (with reasonable detail and backup). Landlord's failure to render any Year End Statement on a timely basis with respect to any calendar year shall not prejudice Landlord's right to thereafter render a Year End Statement with respect to such calendar year or any subsequent calendar year, nor shall the rendering of a Year End Statement prejudice Landlord's right to thereafter render a corrected Year End Statement for that calendar year; provided, however, in no event shall Landlord have the right to render a Year End Statement (or a corrected Year End Statement) more than eighteen (18) months after the end of the calendar year in question (nor shall Tenant be obligated to make any

payment of additional rent hereunder for any amount that was not properly billed to Tenant within eighteen (18) months after the incurrence of the applicable cost).

(b) Subject to the provisions of this Section 9.2, Tenant shall have the right, at Tenant's sole cost and expense, to examine the correctness of the Year End Statement, provided by Landlord under the applicable provisions of this Lease, or any item contained therein:

(i) Any request for examination in respect of any calendar year may be made by notice from Tenant to Landlord no more than one hundred and eighty (180) days after the date (the "Operating Cost Statement Date") that Landlord provides a Year End Statement to Tenant in respect of such calendar year. Any examination under the preceding sentence must be completed and the results communicated to Landlord no more than one hundred eighty (180) days after Tenant has made such request, as provided herein.

(ii) Tenant hereby acknowledges and agrees that Tenant's sole right to contest any Year End Statement shall be as expressly set forth in this Section 9.2. Tenant hereby waives any and all other rights provided pursuant to applicable laws to inspect Landlord's books and records and/or to contest the Year End Statement (except with respect to manifest error or fraud). If Tenant shall fail to timely exercise Tenant's right to inspect Landlord's books and records as provided in this Section, or if Tenant shall fail to timely communicate to Landlord the results of Tenant's examination as provided in this Section, with respect to any calendar year, then the Year End Statement delivered by Landlord to Tenant shall be conclusive and binding on Tenant (except with respect to manifest error or fraud).

(iii) Such of Landlord's books and records pertaining to Tenant's Proportionate Share of the Operating Costs for the specific matters questioned by Tenant for the calendar year included in Landlord's Year End Statement shall be made available to Tenant within thirty (30) days after Landlord timely receives the notice from Tenant to make such examination pursuant to this Section, either electronically or during normal business hours, at the offices where Landlord keeps such books and records.

(iv) Tenant shall have no right to make such examination unless Tenant has paid the amount shown on the Year End Statement. Tenant shall have the right to make such examination no more than once in respect of any calendar year in which Landlord has given Tenant a Year End Statement.

(v) Such examination may be made only by the following (each, an "Authorized Auditor"): (x) a qualified employee of Tenant, (y) an independent nationally or regionally recognized certified public accounting firm or brokerage firm licensed to do business in the State, or (z) another audit firm licensed to do business in the State, subject to Landlord's approval, which shall not be unreasonably withheld, conditioned, or delayed. No examination shall be conducted by an Authorized Auditor who is to be compensated, in whole or in part, on a contingent fee basis. All costs and expenses of any such examination shall be paid by Tenant provided, however, that if such examination reveals that the amount that Landlord billed to Tenant and paid by Tenant to Landlord for the applicable calendar year in question exceeded by

more than five percent (5%) the amount that Tenant should have been billed during such calendar year, then Landlord shall pay the cost of such examination.

(vi) As a condition to performing any such examination, Tenant and its examiners shall be required to execute and deliver to Landlord an agreement, in form reasonably acceptable to Landlord, agreeing to keep confidential any information which it discovers about Landlord or the Building in connection with such examination.

(vii) No subtenant shall have any right to conduct any such examination and no assignee (other than a Permitted Assignee) may conduct any such examination with respect to any period during which the assignee was not in possession of the Premises.

(viii) If as a result of such examination Landlord and Tenant agree (or it is finally determined) that the amounts paid by Tenant to Landlord on account of Tenant's Proportionate Share of Operating Costs exceeded the amounts to which Landlord was entitled hereunder, or that Tenant is entitled to a credit with respect to Tenant's Proportionate Share of Operating Costs, Landlord, at its option, shall refund to Tenant the amount of such excess or apply the amount of such credit, as the case may be, within thirty (30) days after the date of such agreement (unless the term has ended, in which case Landlord shall promptly refund to Tenant the amount of such excess). Similarly, if Landlord and Tenant agree (or it is finally determined) that the amounts paid by Tenant to Landlord on account of Tenant's Proportionate Share of Operating Costs were less than the amounts to which Landlord was entitled hereunder, then Tenant shall pay to Landlord, as Additional Rent, the amount of such deficiency within thirty (30) days after the date of such agreement. Except as provided in this Section, Tenant shall have no right whatsoever to dispute by judicial proceeding or otherwise the accuracy of any Year End Statement.

ARTICLE X

Landlord Services

Section 10.1–Utilities.

The Premises will be on the Commencement Date, as part of the Premises Work, separately metered or submetered for electricity, heating, ventilation and air conditioning, and water and natural gas. Tenant, at its expense, shall pay all costs of the charges for all utilities and services used in or at the Premises, including, without limitation, water, sewer, gas, telephone, internet, heating, ventilation and air conditioning, cable and electric utility services, and all related systems and meters (collectively, "Utilities"). Tenant agrees to indemnify and hold the Landlord and the Landlord Parties (as hereinafter defined) harmless from and against any and all third-party claims against Landlord arising from all costs and charges for Utilities consumed on or by the Premises. Tenant shall pay all charges and other amounts for separately metered Utilities directly to the applicable utility providers. Tenant's failure to timely pay Utilities shall (subject to applicable notice and grace periods) be a default by Tenant hereunder. All utilities and services (including Utilities) supplied to the Premises and not paid by Tenant directly to the utility provider shall be deemed Operating Costs. If Tenant's requirements for Utilities are, in

Landlord's judgment, in excess of normal requirements for the Premises, Landlord reserves the right to require the Tenant to procure such excess requirements at the Tenant's expense by arrangement with an appropriate local utility provider, which arrangements, other than the cost and expense therefor, shall be subject to the approval of Landlord.

Section 10.2– Life Safety System.

Landlord shall operate, maintain and repair, in good working condition and in accordance with all Legal Requirements, a base building sprinkler and life safety/fire alarm system for the Building. Tenant shall be permitted, as part of the Premises Work, to tie into such life safety/fire alarm system in accordance with Landlord's reasonable rules and regulations relating thereto.

Section 10.3– Other Services to be Furnished by Landlord to Tenant.

Landlord shall provide, the cost of which shall be included in Operating Costs to the extent permitted under Article IX of this Lease, except as otherwise provided and subject to Legal Requirements, the following services: (a) heating, ventilation and air conditioning service to the common areas of the Building during normal business hours, (b) electrical service of 12 watts per rentable square foot of the Premises (which may be allocated by Tenant at its discretion throughout the Premises) furnished by the electric utility company serving the Building, (c) water and sewer service to the Premises, (d) gas service to the Building and the Premises, (e) snow and ice removal for the outside areas of the Building; (f) pest removal with respect to the Building, and (f) janitorial service in and about the common areas of the Building. The janitorial specifications for the Building will be comparable to that of other similar quality laboratory, research and development buildings and/or projects in the Market Areas. As used herein, the term "holidays" means New Year's Day, Memorial Day, Fourth of July, Labor Day, Thanksgiving, Christmas and other days recognized by the United States of America as official holidays but "holidays" shall not include, for purposes of determining the janitorial service obligations, Patriot's Day, Veterans Day, Columbus Day, President's Day or Martin Luther King Day. Normal business hours for the Building are weekdays from 8:00 a.m. to 6:00 p.m. and on Saturdays from 9:00 a.m. to 1:00 p.m. At Tenant's request, Landlord shall provide after-hours HVAC service to the Premises at Landlord's then-prevailing rates reflecting Landlord's actual costs.

Landlord and Tenant hereby agree that as part of the Building, Landlord is currently constructing an operational amenity center at the Project which is currently anticipated to be completed on or before December 31, 2022 (the "Amenity Center"). Notwithstanding anything to the contrary contained herein, during the Term, as the same may be extended hereby, Landlord shall use commercially reasonable efforts to operate the Amenity Center. In the event that after the initial opening of the Amenity Center, such Amenity Center ceases to operate, Landlord shall use commercially reasonable efforts to thereafter cause such Amenity Center to operate as initially intended.

Landlord may at any time close temporarily the common areas of the Property or any portion thereof to make repairs or changes to prevent the acquisition of public rights therein, and may do such other acts in and to the common areas as in its judgment may be desirable to improve the

convenience thereof; provided, however, Landlord shall use its commercially reasonable efforts to minimize interference with Tenant's operations in the Premises in connection therewith.

Section 10.4– pH System.

The pH neutralization system for the Building is intended to be located on the first (1st) floor of the Building in a room that contains the pH systems of other tenants and will contain approximately 5,000 gallons of capacity, which will be shared proportionately with all other tenants in the Building. Landlord shall obtain a wastewater treatment operator permit (a "MWRA pH Permit") from the Massachusetts Water Resources Authority ("MWRA") for its use of the pH neutralization system. As part of the Premises Work, the Premises shall be connected to, and thereafter to use, the pH neutralization system, subject to the following conditions:

(1) Tenant's use of the pH neutralization system shall be at Tenant's sole risk to the extent permitted pursuant to applicable laws (Landlord making no representation or warranty regarding the sufficiency of the pH neutralization system for Tenant's use).

(2) Tenant's use of the pH neutralization system shall be undertaken by Tenant in compliance with all applicable laws, but Landlord shall obtain any and all permits, including, but not limited to the MWRA pH Permit, required in connection with such use by Tenant.

(3) The pH neutralization system may be relocated by Landlord to another area in the Building, provided that such relocated pH neutralization system shall provide comparable functionality and utility to the pH neutralization system in its existing location.

(4) The use of the pH neutralization system shall be subject to the rules and regulations for the Building.

Tenant shall not introduce any substances or materials into the pH neutralization system which (x) are in violation of the terms of the MWRA pH Permit or any other MWRA permit, (y) are in violation of applicable laws, or (z) would interfere with the proper functioning of the pH neutralization system.

Section 10.5- No Damages.

When necessary by reason of accident or emergency, or for repairs, alterations, replacements or improvements which in the reasonable judgment of Landlord are desirable or necessary to be made, Landlord reserves the right, upon as much prior notice to Tenant as is practicable under the circumstances and no less than twenty-four (24) hours' notice except in the event of an emergency, to interrupt, curtail, or stop the furnishing of utilities supplied by Landlord to Tenant hereunder. Landlord shall exercise reasonable diligence to eliminate the cause of any such interruption, curtailment, stoppage or suspension, but, except as set forth below, there shall be no

diminution or abatement of Rent or other compensation due from Landlord to Tenant hereunder, nor shall this Lease be affected or any of Tenant's obligations hereunder reduced, and Landlord shall have no responsibility or liability for any such interruption, curtailment, stoppage, or suspension of services or systems. In addition, failure by Landlord to any extent to furnish or cause to be furnished the utilities or services described this Lease, or any cessation or interruption thereof, resulting from causes beyond Landlord's reasonable control shall not render Landlord liable in any respect for damages, provided, however, that Landlord shall use all reasonable efforts to restore such utilities or service by work commenced and prosecuted diligently and continuously to completion. If any such interruption which is within Landlord's control to correct renders all or a portion of the Premises unusable for the Permitted Use for in excess of five (5) consecutive days, and Tenant ceases to use the affected portion of the Premises by reason of such untenantability, Tenant shall be entitled to an equitable abatement of rent from the date such interruption commenced until the date the Premises (or applicable portion thereof) are again usable for the Permitted Use. The foregoing provisions shall not apply in the event of untenantability caused by (x) any fire or casualty as set forth in Article XVI, (y) eminent domain as set forth in Article XVII, or (z) any act or omission of Tenant or any Tenant Parties.

Section 10.6- Generator.

Tenant shall have the right to install an emergency generator ("Generator") on the roof of the Building in the location shown on Exhibit F attached hereto ("Generator Area"). Said demise of the Generator Area shall be upon all of the same terms and conditions of the Lease, except as set forth in this Section. Tenant shall not install or operate the Generator until Tenant has obtained and submitted to Landlord copies of all required governmental permits, licenses, and authorizations necessary for the installation and operation of the Generator. In addition, Tenant shall comply with all reasonable construction rules and regulations promulgated by Landlord in the installation, maintenance and operation of the Generator. Tenant shall be permitted to use the Generator Area solely for the maintenance and operation of the Generator, and the Generator and Generator Area are solely for the benefit of Tenant. All electricity generated by the Generator may only be consumed by Tenant in the Premises. In addition to the foregoing:

(a) Tenant shall, at Tenant's cost, screen, as directed by Landlord, the area around the Generator Area.

(b) Landlord shall have no obligation to provide any services including, without limitation, electric current, to the Generator Area.

(c) Tenant may remove the Generator at any time during the term of the Lease upon prior written notice to Landlord, provided that Tenant restores the Generator Area to the same condition as the area surrounding the Generator at the time of such removal.

(d) In addition to and without limiting Tenant's obligations under the Lease, Tenant shall comply with all applicable environmental and fire prevention laws, ordinances and regulations in Tenant's use of the Generator Area. Without

limitation of the foregoing, in no event shall Tenant be permitted to utilize diesel or other liquid fuel in connection with the Generator.

(e) In addition to and without limiting Tenant's obligations under the Lease, Tenant covenants and agrees that the installation and use of the Generator shall not adversely affect the insurance coverage for the Building. If for any reason, the installation or use of the Generator shall result in an increase in the amount of the premiums for such coverage, then Tenant shall be liable for the full amount of any such increase.

(f) Tenant shall, at Tenant's sole cost and expense, repair and maintain the Generator and the Generator Area.

(g) Landlord may require Tenant, at Landlord's cost, to relocate the Generator within the Property to a mutually agreeable location with comparable functionality (such agreement not to be unreasonably withheld, conditioned or delayed), which relocation shall be performed by Tenant within a reasonable period following such request (taking into account any reasonable time necessary to obtain permits and approvals for such work, Tenant hereby agreeing to use diligent good faith efforts to obtain the same and to promptly commence and prosecute to completion such relocation thereafter).

ARTICLE XI

Other Tenant Covenants

Section 11.1– Use.

(a) It is understood, and Tenant so agrees, that the Premises during the Term of this Lease shall be used and occupied by Tenant only for the purposes specified as the use thereof in Section 1.1(i) of this Lease, and for no other purpose or purposes. Further, Tenant's operation for business in the Premises shall comply with all laws, rules and regulations applicable thereto. Tenant shall have access to the Premises 24 hours per day, 7 days per week. Tenant and Tenant's employees and invitees shall have the right to use the common areas of the Property at all times during the Term, as it may be extended, subject to reasonable rules and regulations enacted by Landlord from time to time of which Tenant has received notice.

(b) Notwithstanding any other provision of this Lease, Tenant shall not use the Premises or the Building, or any part thereof, or suffer or permit the use or occupancy of the Premises or the Building or any part thereof (i) in a manner which would violate any of the covenants, agreements, terms, provisions and conditions of this Lease; (ii) for any unlawful purposes or in any unlawful manner; (iii) which, in the reasonable judgment of Landlord (taking into account the use of the Building as a research and development building and the increased

service requirements for research and development space) shall (a) impair, interfere with or otherwise diminish the quality of any of the Building services or the proper and economic heating, cleaning, ventilating, air conditioning or other servicing of the Building or Premises, or the use or occupancy of any of the common areas; (b) occasion impairment, interference or injury in any material respect (and Tenant shall not install or use any electrical or other equipment of any kind (including, without limitation, Tenant's Rooftop Equipment), which, in the reasonable judgment of Landlord, will cause any such impairment, interference, or injury), or cause any injury or damage to any occupants of the Premises or other tenants or occupants of the Building or their property; or (c) cause harmful air emissions, laboratory odors, vibration or noises or any unusual or other objectionable odors, vibrations, noises or emissions to emanate from the Premises or otherwise unreasonably disturb other tenants; or (iv) in a manner which is materially inconsistent with the operation and/or maintenance of the Building as a first-class research and development building. Notwithstanding the foregoing, Landlord agrees that Tenant's use of the Premises for the Permitted Use (which shall include the use of Generator as approved by Landlord), as opposed to the particular manner of Tenant's use of the Premises, shall not, in and of itself, be deemed to breach the provisions of this Section 11.1.

(c) Tenant may conduct animal research within the Premises using (i) any animal tissue, (ii) any small dead animal, and (iii) any live small animals such as zebra fish, laboratory mice, laboratory rats, or such other live animals as may be approved in writing by Landlord in advance (which approval may be withheld in the sole and absolute discretion of Landlord with respect to large live animals, and may not be unreasonably withheld, delayed, or conditioned with respect to small live animals) (collectively, the "Permitted Animals"). Tenant shall be responsible, at its sole expense, for the operations of its vivarium in accordance with all Legal Requirements and with good industry practices and subject to the following: (i) all testing and research shall be conducted in strict compliance with all applicable Legal Requirements and with good scientific and medical practice; (ii) all dead animals, any part thereof or any waste products related thereto, shall be disposed of, at the sole cost and expense of Tenant, in strict compliance with all applicable Legal Requirements and with good scientific and medical practice; and (iii) no odors, noises or any similar nuisance above background levels shall be permitted to emanate from any vivarium. Tenant shall procure and deliver to Landlord copies of all permits and approvals necessary for the use and operation of its vivarium, and shall maintain such permits and approvals in full force and effect at all times during the Term. Tenant shall indemnify, save harmless and defend Landlord from and against all liability, claim, damage, loss or cost (including reasonable attorneys' fees) arising out of or relating to the use and operation of any vivarium within the Premises. No animals, animal waste, food or supplies relating to the Permitted Animals maintained from time to time in the Premises shall be transported within the Building except as herein provided. Deliveries of animals or animal food or supplies to Tenant at the Building or by Tenant within

the Building may be made at any time, except that at all times that animals are transported within the Common Areas, they shall be transported in an appropriate cage or other container, and, provided that Landlord provides a reasonable alternate pathway to the Premises through the Building and provides access to the freight elevator therefor, at no time shall any animals, animal waste, food or supplies relating to the animals be brought into, transported through, or delivered to the lobby of the Building or be transported within the Building in elevators other than the freight elevator.

Section 11.2– Signage.

(a) Tenant shall have the right to install Building standard signage identifying Tenant's business at the entrance to the Premises, which signage shall be subject to Landlord's prior written approval (which approval shall not be unreasonably withheld, conditioned or delayed). Except as expressly set forth in this Section 11.2, Tenant shall not inscribe, paint, affix, or otherwise display any sign, advertisement or notice on any part of the outside or inside of, or upon, the Property or the Building to the extent the same is visible from outside of the Premises without Landlord's consent. If any other signs, advertisements or notices are painted, affixed, or otherwise displayed without the prior approval of Landlord or otherwise in accordance with this Section 11.2, Landlord shall have the right to remove the same, and Tenant shall be liable for any and all costs and expenses incurred by Landlord in such removal.

(b) Landlord shall provide, at its sole cost and expense, signage consisting of the name and/or logo of Tenant on the monument sign for the Building, as more particularly shown on Exhibit B attached hereto ("Tenant's Monument Signage"). The maintenance and removal of Tenant's Monument Signage (including, without limitation, the repair and cleaning of the existing monument façade upon removal of Tenant's Monument Signage) shall be performed at Landlord's sole cost and expense, except that Tenant shall be responsible for the cost of any change in Tenant's Monument Signage during the Term of the lease.

(c) Landlord shall list Tenant within the directory in the Building lobby. The initial listing shall be at Landlord's cost and expense, and any changes to such directory listing shall be at Tenant's cost and expense (provided that there will be no charge for any changes to any electronic directory, and Landlord shall not charge for any cost with respect to changing the directory other than Landlord's reasonable out-of-pocket costs with respect to such applicable change).

Section 11.3– Rules and Regulations. Tenant shall, and shall cause all Tenant Parties to, comply with all reasonable rules and regulations hereafter implemented by Landlord, of which Tenant has been given at least five (5) business days' advance notice, for the care and use of the Building and the Property, but Landlord shall not be liable to Tenant for the failure of other occupants of the Property to conform to such rules and regulations. Landlord shall not enforce the rules and regulations in a discriminatory manner. If and to the extent there is any conflict

between the provisions of this Lease and any rules and regulations for the Building, the provisions of this Lease shall control (and, without limitation, no such rule or regulation shall be enacted by Landlord which diminishes Tenant's Permitted Uses hereunder).

Section 11.4– Floor Load. Tenant shall not place a load upon any floor in the Premises exceeding 100 pounds (including partitions) per square foot of floor area; and shall not move any safe, vault or other heavy equipment in, about or out of the Premises except in such manner and at such time as Landlord shall in each instance approve (which approval shall not be unreasonably withheld, conditioned, or delayed). Tenant's equipment shall be placed and maintained by Tenant at Tenant's expense in settings sufficient to absorb and prevent vibration or noise that may be transmitted to the Building structure or to any other space in the Building.

Section 11.5– Attorney's Fees. Tenant shall pay, as Additional Rent, all reasonable out of pocket costs, counsel and other fees incurred by Landlord in connection with the successful enforcement by Landlord of any obligations of Tenant under this Lease or in connection with any bankruptcy case involving Tenant. In the event of any litigation between the parties, Tenant shall not be obligated to make any payment to Landlord of any attorneys' fees incurred by Landlord unless judgment is entered (final, and beyond any appeal timely taken) in favor of Landlord in the lawsuit relating to such fees. Landlord shall pay, within thirty (30) days of demand by Tenant, all reasonable costs and attorneys' fees and other fees incurred by Tenant in connection with any litigation between Landlord and Tenant where judgment is entered (final, and beyond appeal) in favor of Tenant.

Section 11.6– Tenant's Vendors. Any vendors engaged by Tenant to perform services in or to the Premises including, without limitation, janitorial contractors and moving contractors shall be coordinated with any work being performed by or for Landlord and in such manner as to maintain harmonious labor relations and not to damage the Building or Property or interfere with Building construction or operation and shall be performed by vendors first approved by Landlord, which approval shall not be unreasonably withheld, conditioned or delayed. In addition, Tenant shall cause each vendor to carry insurance in accordance with Section 14.4 hereof and to deliver to Landlord certificates of all such insurance.

Section 11.7– Legal Requirements. Tenant shall, and shall cause all Tenant Parties to, comply with all applicable laws, ordinances, rules, regulations, statutes, by-laws, court decisions, and orders and requirements of all public authorities ("Legal Requirements") now or hereafter in force which shall impose a duty on Landlord or Tenant relating to Tenant's use and occupancy of the Premises, including without limitation, which obligation shall include ensuring that all contractors that Tenant utilizes to perform work in the Premises comply with all Legal Requirements. Tenant shall promptly pay all fines, penalties and damages that may arise out of or be imposed because of its failure to comply with the provisions of this Section 11.7.

Section 11.8– Premises Cleaning. Tenant shall be responsible, at its sole cost and expense, for janitorial and removing trash from the Premises to the common dumpster designated by Landlord and for providing biohazard disposal services for the Premises, including the laboratory areas thereof. Such services shall be performed by licensed (where required by Legal Requirements), insured and qualified contractors approved in advance, in writing, by Landlord

(which approval shall not be unreasonably withheld, delayed or conditioned) and on a sufficient basis to ensure that the Premises are at all times kept neat and clean. Landlord will provide Tenant with a list of pre-qualified cleaning vendors for consideration by Tenant. Landlord shall provide a dumpster and/or compactor at the Building loading dock for Tenant's disposal of non-hazardous and non-controlled substances.

Section 11.9– Pest Control. Tenant, at Tenant's sole cost and expense, shall cause the Premises to be inspected on a reasonably regular basis (but no more than once per month) or as needed, and shall cause all portions of the Premises used for the storage, preparation, service or consumption of food or beverages to be cleaned daily in a reasonable manner, and to be treated against infestation by insects, rodents and other vermin and pests whenever there is evidence of any infestation. Tenant shall not permit any person to enter the Premises for the purpose of providing such inspection and/or extermination services, unless such persons have been approved by Landlord, which approval shall not be unreasonably withheld, delayed, or conditioned. If requested by Landlord, Tenant shall, at Tenant's sole cost and expense, store any refuse generated in the Premises by the consumption of food or beverages in a cold box or similar facility.

Section 11.10--Energy Conservation. Landlord may institute upon written notice to Tenant such policies, programs and measures as may be necessary, required, or expedient for the conservation and/or preservation of energy or energy services (collectively, the "Conservation Program"), provided however, that the Conservation Program does not, by reason of such policies, programs and measures, reduce the level of energy or energy services being provided to the Premises below the level of energy or energy services (i) then being provided in comparable combination laboratory, research and development and office buildings in the vicinity of the Premises, provided the same shall not come at a material cost to Tenant, or materially adversely affect Tenant's use of the Premises for any of the Permitted Uses, or (ii) as may be necessary or required to comply with Legal Requirements or standards or the other provisions of this Lease. Upon receipt of such notice, Tenant shall comply with the Conservation Program.

Section 11.11--Recycling. Upon written notice, Landlord may establish policies, programs and measures for the recycling of paper, products, plastic, tin and other materials (a "Recycling Program"). Upon receipt of such notice, Tenant will comply with the Recycling Program at Tenant's sole cost and expense.

ARTICLE XII

Alterations

Section 12.1– Landlord's Approval.

(a) Landlord's Approval Required. Except for those Alterations described in Section 12.1(b), Tenant shall not make alterations, additions, installations or improvements to the Premises (collectively "Alterations"), whether before or during the Lease Term, without Landlord's prior written approval, which approval

shall not be unreasonably withheld, conditioned, or delayed. Notwithstanding anything to the contrary contained herein, Tenant shall not make Alterations to the Premises which: (i) affect any structural or exterior element of the Building, any area or element outside of the Premises or any facility or base building mechanical system serving any area of the Building outside of the Premises, (ii) involve or affect the exterior design, size, height or other exterior dimensions of the Building, (iii) enlarge the rentable square footage of the Premises, or (iv) will increase the cost of insurance or taxes on the Building or of the services required for the Building (unless Tenant first gives assurance acceptable to Landlord for payment of such increased cost and that such readaptation will be made prior to such termination without expense to Landlord), in each case without Landlord's prior written approval, which may be granted or withheld in Landlord's sole discretion. Landlord agrees to notify Tenant whether it will be required to remove any such fixtures, equipment, improvements and appurtenances at the end of the term (to the extent the same constitute Specialty Improvements) at the time that Landlord approved Tenant's plans for same if Tenant requests in writing that Landlord make such election at the time that Tenant requests Landlord's approval thereof.

(b) Alterations Permitted without Landlord's Approval. Notwithstanding the terms of Section 12.1(a), Tenant shall have the right, without obtaining the prior approval of Landlord, but upon written notice to Landlord given at least twenty (20) days prior to the commencement of any work (which notice shall specify the nature of the work in reasonable detail), to make Alterations to the Premises which: (i) are solely within the interior of the Premises, and do not affect the exterior of the Premises and/or the Building (including signs on windows); (ii) do not affect the roof, any structural element of the Building, the mechanical, electrical, plumbing, heating, ventilating, air-conditioning and fire protection systems of the Building (other than location of electric outlets, switches, and similar items); (iii) in each instance (and in the aggregate for any twelve (12) month period) cost less than One Hundred Thousand Dollars ($100,000.00); and (iv) in all respects, comply with Legal Requirements.

(c) Specialty Improvements. At the time Landlord approves any of Tenant's Alterations, Landlord shall notify Tenant which of the subject Alterations, if any, constitute Specialty Improvements and whether Tenant will be required to remove such Specialty Improvements at the end of the Term, provided that Tenant shall include the following legend in capitalized and bold type displayed prominently on the top of the first page of Tenant's notice delivered concurrently with such plans and specifications: **"IF LANDLORD FAILS TO NOTIFY TENANT AT THE TIME LANDLORD APPROVES THESE PLANS AND SPECIFICATIONS THAT ANY ALTERATIONS SHOWN THEREON ARE SPECIALTY IMPROVEMENTS (AS DEFINED IN THE LEASE), LANDLORD MAY NOT REQUIRE TENANT TO REMOVE SUCH SPECIALTY IMPROVEMENTS AT THE END OF THE TERM OF THE**

LEASE.” “Specialty Improvements” shall mean any structural modifications, gyms or fitness centers, full kitchens, interior or interconnecting stairs and any other Alterations which are above standard office Alterations which in Landlord’s commercially reasonable judgment adversely affect the general utility of the Premises for use by prospective future tenants thereof and/or require unusual expense to readapt the Premises to normal use as research and laboratory space.

Section 12.2– Plans; Conformity of Work.

Prior to making any Alterations, Tenant, at its cost and expense, shall submit to Landlord for its approval in accordance with Section 12.1 above, detailed plans and specifications for such proposed Alteration. Landlord’s review and approval of any plans and specifications for Alterations and consent to perform work shall not be deemed an agreement by Landlord that such plans, specifications and work conform with Legal Requirements and requirements of insurers of the Building and the other requirements of the Lease with respect to Tenant’s insurance obligations (herein called “Insurance Requirements”) nor deemed a waiver of Tenant’s obligations under this Lease with respect to Legal Requirements and Insurance Requirements nor impose any liability or obligation upon Landlord with respect to the completeness, design sufficiency or compliance of such plans, specifications and work with Legal Requirements and Insurance Requirements. Further, Tenant acknowledges that Tenant is acting for its own benefit and account, and that Tenant shall not be acting as Landlord’s agent in performing any work in the Premises, accordingly, no contractor, subcontractor or supplier shall have a right to lien Landlord’s interest in the Property in connection with any such work. Tenant covenants and agrees that any Alterations made by it to or upon the Premises shall be done in a good and workmanlike manner and in compliance with all Legal Requirements and Insurance Requirements now or hereafter in force, that materials of first and otherwise good quality shall be employed therein, that the structure of the Building shall not be endangered or impaired thereby and that the Premises shall not be diminished in value thereby. If Landlord fails to respond to Tenant for approval of any proposed Alteration, Tenant shall have the right to provide Landlord with a second written request for approval. Tenant's second request for consent must state in **BOLD** and ALL CAPITAL letters: **LANDLORD'S FAILURE TO RESPOND WITHIN FIVE (5) BUSINESS DAYS AFTER RECEIPT OF THIS NOTICE SHALL RESULT IN A DEEMED APPROVAL OF TENANT’S REQUEST FOR SUCH PROPOSED ALTERATION**. If Landlord's failure to respond continues for five (5) business days after Landlord's receipt of the second request for approval, then Landlord shall be deemed to have consented to such request.

Section 12.3– Performance of Work, Governmental Permits and Insurance.

All of Tenant’s Alterations shall be coordinated with any work being performed by or for Landlord and in such manner as to maintain harmonious labor relations and not to damage the Building or Property or interfere with the construction on or operation of the Property and, except for installation of furnishings, shall be performed by contractors first approved by Landlord which approval shall not be unreasonably withheld, conditioned or delayed. Tenant shall procure all necessary governmental permits before making any repairs, alterations, other

improvements or installations. Tenant agrees to indemnify, defend, and hold harmless Landlord from any and all injury, loss, claims or damage to any person or property occasioned by or arising out of the Tenant's doing of any such work whether the same be performed prior to or during the Term of this Lease. In addition, Tenant shall cause each contractor to carry insurance in accordance with Section 14.4 hereof and to deliver to Landlord certificates of all such insurance. Tenant shall also prepare and submit to Landlord a set of as-built plans, in both print and electronic forms, showing such work performed by Tenant to the Premises promptly after any such Alterations are substantially complete and promptly after any wiring or cabling for Tenant's computer, telephone and other communications systems is installed by Tenant or Tenant's contractor. Without limiting any of Tenant's obligations hereunder, Tenant shall be responsible, as Additional Rent, for the costs of any Alterations in or to the Building that are required in order to comply with Legal Requirements as a result of any Alterations performed by Tenant. Landlord shall have the right to provide reasonable rules and regulations (which shall be applied in a non-discriminatory manner) relative to the performance of any Alterations by Tenant hereunder and Tenant shall abide by all such reasonable rules and regulations and shall cause all of its contractors to so abide including, without limitation, payment for the reasonable Building-standard costs of using Building services (to the extent that the same constitute additional services that Tenant is not already paying for hereunder). Tenant acknowledges and agrees that Landlord shall be the owner of any additions, alterations and improvements in the Premises or the Building to the extent paid for by Landlord.

Section 12.4– Liens.

Tenant covenants and agrees to pay promptly when due the entire cost of any work done in the Premises by Tenant, its agents, employees or contractors, and not to cause or permit any liens for labor or materials performed or furnished in connection therewith to attach to the Premises or the Building or the Property and promptly (but in no event exceeding thirty (30) days after Tenant's notice of the filing of same) to discharge any such liens which may so attach.

Section 12.5– Nature of Alterations.

All work, construction, repairs or Alterations made to or upon the Premises, shall become part of the Premises and shall become the property of Landlord and remain upon and be surrendered with the Premises as a part thereof upon the expiration or earlier termination of the Lease Term, except as follows:

(a) All furniture, equipment, trade fixtures and other personal property of Tenant (including, without limitation, any satellite or microwave dish or any communications equipment and any telephone switch gear, and any security or monitoring equipment installed by Tenant) whether by law deemed to be a part of the realty or not, installed at any time by Tenant or any person claiming under Tenant shall remain the property of Tenant or persons claiming under Tenant and may be removed by Tenant or any person claiming under Tenant at any time or times during the Lease Term or any occupancy by Tenant thereafter and shall be removed by Tenant at the expiration or earlier termination of the Lease Term if so requested by Landlord. Tenant shall repair any damage to the Premises

occasioned by the removal by Tenant or any person claiming under Tenant of any such property from the Premises. Notwithstanding the foregoing, Tenant shall not be permitted to remove from the Premises any Non-Removable Alterations (as hereinafter defined). "Non-Removable Alterations" shall mean the following whether performed by or on behalf of Tenant, whether or not included in the Premises Work: (i) infrastructure typically supporting or required for laboratory, research and development spaces and (ii) any supplementary HVAC infrastructure

(b) At the expiration or earlier termination of the Lease Term, Tenant shall remove any Specialty Improvements made with Landlord's consent during the Lease Term for which such removal was made a condition of such consent under Section 12.1(c). Upon such removal Tenant shall repair any damage occasioned by such removal and restoration.

(c) If Tenant shall make any Alterations to the Premises for which Landlord's approval is required under Section 12.1 without obtaining such approval, then at Landlord's request at any time during the Lease Term, and at any event at the expiration or earlier termination of the Lease Term, Tenant shall remove such Alterations and restore the Premises to their condition prior to same and repair any damage occasioned by such removal and restoration. Nothing herein shall be deemed to be a consent to Tenant to make any such Alterations, the provisions of Section 12.1 being applicable to any such work.

Section 12.6– Costs and Expenses.

Within thirty (30) days after receipt of an invoice from Landlord, Tenant shall pay to Landlord, as Additional Rent, all reasonable out of pocket costs and expenses incurred by Landlord to review plans or work for Tenant's Alterations to the extent that the same involve a structural Alteration or a material Alteration to the mechanical, electrical, and plumbing systems of the Premises, and an outside engineer is needed for such review.

Section 12.7– Increase in Taxes.

Tenant shall pay, as Additional Rent, one hundred percent (100%) of any increase in real estate taxes on the Building which shall, at any time after the Commencement Date, result from Alterations to the Premises made by Tenant if the taxing authority specifically determines such increase results from such Alterations made by Tenant (and reasonable evidence of such taxing authority's determination is provided in writing).

ARTICLE XIII

Maintenance of Building, Etc.

Section 13.1– Landlord Repairs.

Landlord agrees to keep, or cause to be kept, in good order, condition and repair and in compliance with all Legal Requirements (i) the roofs, foundations, exterior walls (including, without limitation, any glass and windows), and structural portions of the Premises, (ii) any mechanical, electrical, plumbing and life safety Building systems serving the Premises (the "Building Systems"), and (iii) all other common areas of the Property (which shall include, without limitation, the removal of snow and ice from all exterior areas of the Building (including, without limitation, the loading docks, sidewalks, and parking lots serving the Building), and pest removal and control services with respect to the Building's common areas). Notwithstanding the foregoing, Landlord shall in no event be responsible to Tenant for (x) any damage to the Premises or the Building caused by any act or negligence of Tenant, its employees, agents, licensees, or contractors, or (y) the maintenance and repair of any systems servicing the Premises that are installed by or on behalf of Tenant.

Section 13.2– Tenant Repairs.

Except as specifically set forth herein, Tenant agrees that from and after the Commencement Date, and thereafter until the end of the term hereof, it shall keep reasonably neat and clean and reasonably free of vermin and other pests (other than Permitted Animals used in connection with the Permitted Uses) and in reasonably good repair, order and condition (reasonable wear and tear and damage by casualty excepted): the Premises, including without limitation the entire interior of the Premises, all electronic, phone and data cabling and related equipment (other than building service equipment) that is installed by or for the exclusive benefit of the Tenant (whether located in the Premises or other portions of the Building), all fixtures, equipment and specialty lighting therein, any supplemental HVAC and humidification equipment exclusively serving the Premises, electrical equipment wiring, doors, non-structural walls, windows and floor coverings, and all laboratory specific systems and equipment that exclusively serve the Premises and were installed and are operated by Tenant, including, without limitation, equipment critical to laboratory operations. Tenant shall not permit or commit any waste.

ARTICLE XIV

Indemnity and Commercial/General Liability Insurance

Section 14.1– Tenant's Indemnity

(a) Indemnity. To the fullest extent permitted by law, and subject to Section 14.14 hereof, but excluding to the extent caused by the negligence or intentional misconduct of any Landlord Parties, Tenant agrees to indemnify and save harmless Landlord Parties (as hereinafter defined) from and against all claims of whatever nature arising from or claimed to have arisen from (i) any willful

misconduct or negligence of Tenant Parties (as hereinafter defined); (ii) any accident, injury or damage whatsoever caused to any person, or to the property of any person, occurring in the Premises from the earlier of (A) the date on which any Tenant Party first enters the Premises for any reason or (B) the Commencement Date, and thereafter throughout and until the end of the lease term, and after the end of the lease term for so long after the end of the lease term as Tenant or anyone acting by, through or under Tenant is in occupancy of the Premises or any portion thereof; (iii) any accident, injury or damage whatsoever occurring outside the Premises but within the Building, or on common areas or the Property, where such accident, injury or damage results, or is claimed to have resulted, from any willful misconduct or negligence on the part of any of Tenant Parties; or (iv) any breach of this Lease by Tenant. Tenant shall pay such indemnified amounts as they are incurred by Landlord Parties. This indemnification shall not be construed to deny or reduce any other rights or obligations of indemnity that any of Landlord Parties may have under this Lease or the common law.

(b) Breach. In the event that Tenant breaches any of its indemnity obligations hereunder or under any other contractual or common law indemnity: (i) Tenant shall pay to Landlord Parties all liabilities, loss, cost, or expense (including attorney's fees) incurred as a result of said breach; and (ii) Landlord Parties may deduct and offset from any amounts due to Tenant under this Lease any amounts owed by Tenant pursuant to this Section 14.1(b).

(c) No limitation. The indemnification obligations under this Section 14.1 shall not be limited in any way by any limitation on the amount or type of damages, compensation or benefits payable by or for Tenant or any subtenant or other occupant of the Premises under workers' compensation acts, disability benefit acts, or other employee benefit acts. Tenant waives any immunity from or limitation on its indemnity or contribution liability to Landlord Parties based upon such acts. Notwithstanding the foregoing or anything to the contrary contained in this Lease (except as set forth in Section 20.19 hereof with respect to a holdover by Tenant), in no event shall Tenant ever be liable to Landlord or any Landlord Parties for any indirect or consequential damages or loss of profits or the like.

(d) Subtenants and other occupants. Tenant shall require its subtenants and other occupants of the Premises to provide similar indemnities (within the applicable sublease or licensing document) to Landlord Parties in a form reasonably acceptable to Landlord.

(e) Survival. The terms of this Section 14.1 shall survive any termination or expiration of this Lease.

(f) Costs. The foregoing indemnity and hold harmless agreement shall include indemnity for all costs, expenses and liabilities (including, without limitation, reasonable attorneys' fees and disbursements) incurred by Landlord Parties in

connection with any such claim or any action or proceeding brought thereon, and the defense thereof. In addition, in the event that any action or proceeding shall be brought against one or more Landlord Parties by reason of any such claim, Tenant, upon request from Landlord Party, shall resist and defend such action or proceeding on behalf of Landlord Party by counsel appointed by Tenant's insurer (if such claim is covered by insurance without reservation) or otherwise by counsel reasonably satisfactory to Landlord Party. Landlord Parties shall not be bound by any compromise or settlement of any such claim, action or proceeding without the prior written consent of such Landlord Parties.

Section 14.2– Tenant's Risk.

Tenant agrees to use and occupy the Premises, and to use such other portions of the Building and the Property as Tenant is given the right to use by this Lease at Tenant's own risk. Landlord Parties shall not be liable to Tenant Parties for any damage, injury, loss, compensation, or claim (including, but not limited to, claims for the interruption of or loss to a Tenant Party's business) based on, arising out of or resulting from any cause whatsoever, including, but not limited to, repairs to any portion of the Premises or the Building or the Property, any fire, robbery, theft, mysterious disappearance, or any other crime or casualty, the actions of any other tenants or occupants of the Building or of any other person or persons, or any leakage in any part or portion of the Premises or the Building or the Property, or from water, rain or snow that may leak into, or flow from any part of the Premises or the Building or the Property, or from drains, pipes or plumbing fixtures in the Building or the Property, except if due to the intentional misconduct or negligence of any Landlord Party and so long as Landlord complies with its obligations under this Lease. Any leasehold improvements, property or personal effects stored or placed in or about the Premises shall be at the sole risk of Tenant Party, and neither Landlord Parties nor their insurers shall in any manner be held responsible therefor except if due to the intentional misconduct or negligence of any Landlord Party. Landlord Parties shall not be responsible or liable to a Tenant Party, or to those claiming by, through or under a Tenant Party, for any loss or damage that may be occasioned by or through the acts or omissions of persons occupying adjoining premises or any part of the premises adjacent to or connecting with the Premises or any part of the Building or otherwise except if due to the intentional misconduct or negligence of any Landlord Party. The provisions of this Section shall be applicable to the fullest extent permitted by law, and until the expiration or earlier termination of the lease term, and during such further period as Tenant may use or be in occupancy of any part of the Premises or of the Building. The foregoing, however, shall not relieve Landlord of any of its obligations hereunder, including, without limitation, Landlord's maintenance, repair, and replacement obligations hereunder.

Section 14.3– Tenant's Commercial General Liability Insurance.

(a) Tenant agrees to maintain in full force on or before the earlier of (i) the date on which any Tenant Party first enters the Premises for any reason or (ii) the Commencement Date, and thereafter throughout and until the end of the Term, and after the end of the Term for so long as Tenant or anyone acting by, through or under Tenant is in occupancy of the Premises or any portion thereafter, a policy

of commercial general liability insurance, insuring Tenant on an occurrence basis against all claims and demands for personal injury liability (including, without limitation, bodily injury, sickness, disease, and death) or damage to property which may be claimed to have occurred from and after the time any of the Tenant Parties shall first enter the Premises, issued on a form at least as broad as Insurance Services Office ("ISO") Commercial General Liability Coverage "occurrence" form CG 00 01 10 01 or another Commercial General Liability "occurrence" form providing equivalent coverage. The minimum limits of liability of such insurance shall be not less than One Million Dollars ($1,000,000) per occurrence and Two Million Dollars ($2,000,000) in the aggregate annually. Tenant shall also carry umbrella and/or excess liability coverage in an amount of no less than Five Million Dollars ($5,000,000) including terrorism coverage. Such policy shall also include contractual liability coverage covering Tenant's liability under this Lease, including without limitation Tenant's indemnification obligations. Such insurance policy(ies) shall name Landlord, Landlord's managing agent and persons claiming by, through or under them, if any, as additional insureds Such limits may be achieved by a combination of CGL and umbrella/excess liability policies provided umbrella/excess policies are written on a follow form basis.

(b) Tenant shall take out and maintain a policy of business interruption insurance throughout the Term sufficient to cover at least twelve (12) months of Rent due hereunder and Tenant's business losses during such 12-month period.

(c) In the event Tenant hosts a function in the Premises, Tenant agrees to obtain, and cause any persons or parties providing services for such function to obtain, the commercially reasonable insurance coverages as reasonably determined by Landlord (including liquor liability coverage, if applicable) and provide Landlord with evidence of the same. The liability coverage will include at least those coverages generally designated Premises/Operations, Products/Completed Operations, and contain no exclusions or endorsements removing or limiting coverage for insured contracts.

(d) Tenant shall procure and maintain during the Term and for no fewer than three (3) years thereafter, pollution legal liability insurance covering Tenant's operations for claims relating to clean up, bodily injury, and property damage with limits of not less than Two Million Dollars ($2,000,000) per occurrence and in the aggregate, with a deductible not more than $25,000 with respect to environmental contamination and pollution caused by Tenant. Such coverage shall have no exclusions expected to be handled and/or generated by Tenant in the course of Tenant's operations and occupancy and shall include terrorism coverage.

Section 14.4– Tenant's Property Insurance.

Tenant shall maintain at all times during the term of this Lease, and during such earlier time as Tenant may be performing work in or to the Premises or have property, fixtures, furniture,

equipment, machinery, supplies, or wares on the Premises, and continuing thereafter so long as Tenant is in occupancy of any part of the Premises, business interruption insurance and insurance against loss or damage covered by the so-called ISO Special Cause of Loss form policy (or its equivalent) including terrorism coverage with respect to Tenant's property, fixtures, furniture, equipment, machinery, supplies, and wares, and all alterations, improvements and other modifications made by or on behalf of Tenant in the Premises, and other property of Tenant located at the Premises including without limitation Tenant's Rooftop Equipment and all of Tenant's animals (collectively "Tenant's Property"). The ISO Special Cause of Loss form policy (or its equivalent) insurance required by this Section shall be in an amount at least equal to the full replacement cost of Tenant's Property. Landlord and such additional persons or entities as Landlord may reasonably request shall be named as loss payees, as their interests may appear, on the policy or policies required by this Lease. In the event of loss or damage covered by the ISO Special Cause of Loss form policy (or its equivalent) insurance required by this Lease, the responsibilities for repairing or restoring the loss or damage shall be determined in accordance with Article XVI. To the extent that Landlord is obligated to pay for the repair or restoration of the loss or damage covered by the policy, Landlord shall be paid the proceeds of the ISO Special Cause of Loss form policy (or its equivalent) insurance covering the loss or damage. To the extent Tenant is obligated to pay for the repair or restoration of the loss or damage, covered by the policy, Tenant shall be paid the proceeds of the ISO Special Cause of Loss form policy (or its equivalent) insurance covering the loss or damage. If both Landlord and Tenant are obligated to pay for the repair or restoration of the loss or damage covered by the policy, the insurance proceeds shall be paid to each of them in the pro rata proportion of their obligations to repair or restore the loss or damage. If the loss or damage is not repaired or restored (for example, if the lease is terminated pursuant to Article XVI), the insurance proceeds shall be paid to Landlord and Tenant in the pro rata proportion of their relative contributions to the cost of the leasehold improvements covered by the policy.

For any tenant work in the Premises, Tenant shall obtain or have its contractors and subcontractors obtain (and during the performance of such work keep in force) insurance that meets the Landlord's insurance requirements for construction projects.

Section 14.5– Tenant's Other Insurance.

Tenant agrees to maintain in full force on or before the earlier of (i) the date on which any Tenant Party first enters the Premises for any reason or (ii) the Commencement Date, and thereafter throughout the end of the Term, and after the end of the Term for so long after the end of the Term as Tenant or anyone acting by, through or under Tenant is in occupancy of the Premises or any portion thereafter, (1) comprehensive automobile liability insurance (covering any automobiles owned or operated by Tenant) issued on a form at least as broad as ISO Business Auto Coverage form CA 00 01 07 97 or other form providing equivalent coverage; (2) worker's compensation insurance; and (3) employer's liability insurance. Such automobile liability insurance shall be in an amount not less than One Million Dollars ($1,000,000) for each accident. Such worker's compensation insurance shall carry minimum limits as defined by the law of the jurisdiction in which the Premises are located (as the same may be amended from time to time). Such employer's liability insurance shall be in an amount not less than One Million

Dollars ($1,000,000) for each accident, One Million Dollars ($1,000,000) disease-policy limit, and One Million Dollars ($1,000,000) disease-each employee.

Section 14.6– Requirements for Tenant's Insurance.

All insurance required to be maintained by Tenant pursuant to this Lease shall be maintained with responsible companies that are admitted to do business, and are in good standing in the Commonwealth of Massachusetts and that have a rating of at least "A-" and are within a financial size category of not less than "Class VIII" in the most current Best's Key Rating Guide or such similar rating as may be reasonably selected by Landlord. All such insurance shall: (1) be reasonably acceptable in form and content to Landlord; (2) be primary and noncontributory; and (3) if commercially available, contain an endorsement prohibiting cancellation, failure to renew, reduction of amount of insurance, or change in coverage without the insurer first giving Landlord thirty (30) days' prior written notice (by certified or registered mail, return receipt requested, or by fax or email) of such proposed action. No such policy shall be provided through self-insurance without written approval of the Landlord. Such deductibles and self-insured retentions shall be deemed to be "insurance" for purposes of the waiver in Section 14.13 below. Landlord reserves the right from time to time to require Tenant to obtain reasonable higher minimum amounts of insurance, provided such higher limits are then customarily carried on first-class mixed-use developments. The minimum amounts of insurance required by this Lease shall not be reduced by the payment of claims or for any other reason. In the event Tenant shall fail to obtain or maintain any insurance meeting the requirements of this Article XIV, or to deliver such policies or certificates as required by this Article XIV, Landlord may, at its option, on five (5) days' notice to Tenant, procure such policies for the account of Tenant, and the reasonable cost thereof shall be paid to Landlord within five (5) days after delivery to Tenant of bills therefor.

Tenant shall also carry insurance against such other hazards and in such amounts as may be customarily carried by tenants, owners and operations of similar properties as Landlord may reasonably require for its protection from time to time.

Section 14.7– Additional Insureds.

To the fullest extent permitted by law, the commercial general liability excess/umbrella liability and auto insurance carried by Tenant pursuant to this Lease, and any additional liability insurance carried by Tenant pursuant to Section 14.3 of this Lease, shall name Landlord, Landlord's managing agent, and such other persons as Landlord may reasonably request from time to time (provided such names are provided to Tenant in writing) as additional insureds (collectively, "Additional Insureds"). These Additional Insureds shall be endorsed onto the relevant policies. Such insurance shall provide primary coverage without contribution from any other insurance carried by or for the benefit of Landlord, Landlord's managing agent, or other Additional Insureds. Such insurance shall also waive any right of subrogation against each Additional Insured.

Section 14.8– Certificates of Insurance.

On or before the earlier of (i) the date on which any Tenant Party first enters the Premises for any reason or (ii) the Commencement Date, Tenant shall furnish Landlord with certificates evidencing the insurance coverage required by this Lease, and renewal certificates and copies of applicable endorsements shall be furnished to Landlord at least annually thereafter, and at least ten (10) days prior to the expiration date of each policy for which a certificate was furnished. Failure by Tenant to provide the certificates or letters required by this Section 14.8 shall not be deemed to be a waiver of the requirements in this Section 14.8.

Section 14.9– Subtenants and Other Occupants.

Tenant shall require its subtenants and other occupants of the Premises to provide written documentation evidencing the obligation of such subtenant or other occupant to indemnify Landlord Parties to the same extent that Tenant is required to indemnify Landlord Parties pursuant to Section 14.1 above, and to maintain insurance that meets the requirements of this Article XIV, and otherwise to comply with the requirements of this Article XIV. Tenant shall require all such subtenants and occupants to supply certificates of insurance and applicable endorsements evidencing that the insurance requirements of this Article XIV have been met and shall forward such certificates and applicable endorsements to Landlord on or before the earlier of (i) the date on which the subtenant or other occupant or any of their respective direct or indirect partners, officers, shareholders, directors, members, trustees, beneficiaries, servants, employees, principals, contractors, licensees, agents, invitees or representatives first enters the Premises or (ii) the commencement of the sublease. Tenant shall be responsible for identifying and remedying any deficiencies in such certificates or applicable endorsements or policy provisions.

Section 14.10– No Violation of Building Policies

Tenant shall not commit or knowingly permit any violation of the policies of fire, boiler, sprinkler, water damage or other insurance covering the Property and/or the fixtures, equipment and property therein carried by Landlord, or do or knowingly permit anything to be done, or keep or permit anything to be kept, in the Premises, which in case of any of the foregoing (i) would result in termination of any such policies, (ii) would adversely affect Landlord’s right of recovery under any of such policies, or (iii) would result in reputable and independent insurance companies refusing to insure the Property or the property of Landlord in amounts reasonably satisfactory to Landlord.

Section 14.11– Tenant to Pay Premium Increases

If, because of anything done, directly caused or knowingly permitted to be done, or intentionally omitted by Tenant (or its subtenant or other occupants of the Premises), the rates for liability, fire, boiler, sprinkler, water damage or other insurance on the Building or the Property and equipment of Landlord or any other tenant or subtenant or occupant in the Building or the Property shall be higher than they otherwise would be (Landlord acknowledging that Tenant’s use of the Premises solely for the Permitted Use shall not do so), Tenant shall reimburse

Landlord for the additional insurance premiums thereafter paid by Landlord which shall have been charged because of the aforesaid reasons, such reimbursement to be made from time to time within ten (10) days after Landlord's demand.

Section 14.12– Landlord's Insurance.

(a) Required insurance. Landlord shall maintain (i) commercially reasonable Commercial General Liability insurance and (ii) insurance against loss or damage with respect to the Property on a Special Cause of Loss form policy or equivalent type insurance form, with customary exceptions, subject to such commercially insurable reasonable deductibles as Landlord may determine, in an amount equal to at least the insurable replacement value of the Property. Such insurance shall be maintained with an insurance company selected by Landlord. Payment for losses thereunder shall be made solely to Landlord.

(b) Optional insurance. Landlord may maintain such additional insurance with respect to the Property, including, without limitation, earthquake insurance, terrorism insurance, flood insurance, liability insurance and/or rent insurance, as Landlord may in its sole discretion elect. Landlord may also maintain such other insurance as may from time to time be required by the holder of any mortgage on the Property.

(c) Blanket and self-insurance. Any or all of Landlord's insurance may be provided by blanket coverage maintained by Landlord or any affiliate of Landlord under its insurance program for its portfolio of properties, or by Landlord or any affiliate of Landlord under a program of self-insurance, and in such event the amounts payable by Tenant under Section 9.2 of this Lease shall include the portion of the reasonable cost of blanket insurance or self-insurance that is allocated to the Property.

(d) No obligation. Landlord shall not be obligated to insure, and shall not assume any liability of risk of loss for, Tenant's Property, including any such property or work of Tenant's subtenants or occupants. Landlord will also have no obligation to carry insurance against, nor be responsible for, any loss suffered by Tenant, subtenants or other occupants due to interruption of Tenant's or any subtenant's or occupant's business.

Section 14.13– Waiver of Subrogation.

To the fullest extent permitted by law, the parties hereto waive and release any and all rights of recovery against the other, and agree not to seek to recover from the other or to make any claim against the other, and in the case of Landlord, against all Tenant Parties, and in the case of Tenant, against all Landlord Parties, for any loss or damage incurred by the waiving/releasing party to the extent such loss or damage is insured under any insurance policy required by this Lease or which would have been so insured had the party carried the insurance it was required to carry hereunder. Tenant shall obtain from its subtenants and other occupants of the Premises a

similar waiver and release of claims against any or all of Tenant or Landlord. In addition, the parties hereto (and in the case of Tenant, its subtenants and other occupants of the Premises) shall procure an appropriate clause in, or endorsement on, any insurance policy required by this Lease pursuant to which the insurance company waives subrogation. The insurance policies required by this Lease shall contain no provision that would invalidate or restrict the parties' waiver and release of the rights of recovery in this Section. The parties hereto covenant that no insurer shall hold any right of subrogation against the parties hereto by virtue of such insurance policy.

For the purposes of this Lease, the term "Landlord Party" or "Landlord Parties" shall mean Landlord, any affiliate of Landlord, Landlord's managing agent(s) for the Property, each mortgagee (if any), each ground lessor (if any), and each of their respective direct or indirect partners, officers, shareholders, directors, members, trustees, beneficiaries, servants, employees and principals. For the purposes of this Lease, the term "Tenant Party" or "Tenant Parties" shall mean Tenant, any affiliate of Tenant, any permitted subtenant or any other permitted occupant of the Premises, any vendor of Tenant, and each of their respective direct or indirect partners, officers, shareholders, directors, members, trustees, beneficiaries, servants, employees and principals.

Section 14.14– C. 186 §15.

The foregoing provisions of this Article XIV (as well as any other provisions in this Lease dealing with indemnity and the like by Tenant of Landlord) shall be deemed to be modified in each case by the insertion in the appropriate place of the language: "except as otherwise provided in Mass. G.L. Ter. Ed., C. 186, §15".

Section 14.15– Landlord Indemnity.

To the fullest extent permitted by law, but excluding to the extent caused by the intentional misconduct or negligence of Tenant, Landlord agrees to indemnify and save harmless Tenant Parties from and against all third party claims of whatever nature arising from or claimed to have arisen from (i) any willful misconduct or negligence of Landlord Parties or (ii) any breach of this Lease by Landlord. Landlord shall pay such indemnified amounts as they are incurred by Tenant Parties. This indemnification shall not be construed to deny or reduce any other rights or obligations of indemnity that any of Tenant Parties may have under this Lease or the common law. The foregoing indemnity and hold harmless agreement shall include indemnity for all costs, expenses and liabilities (including, without limitation, reasonable attorneys' fees and disbursements) incurred by Tenant Parties in connection with any such claim or any action or proceeding brought thereon, and the defense thereof. In addition, in the event that any action or proceeding shall be brought against one or more Tenant Parties by reason of any such claim, Landlord, upon request from Tenant Party, shall resist and defend such action or proceeding on behalf of Tenant Party by counsel appointed by Landlord's insurer (if such claim is covered by insurance without reservation) or otherwise by counsel reasonably satisfactory to Tenant Party. Tenant Parties shall not be bound by any compromise or settlement of any such claim, action or proceeding without the prior written consent of such Tenant Parties.

ARTICLE XV

Landlord’s Access to the Premises

Section 15.1– Landlord Access.

Landlord and its designees shall have the right upon reasonable prior notice (and Landlord agrees

to provide such notice at least two (2) business days in advance if reasonably possible) and except in the event of an emergency (in which case no prior notice shall be required unless reasonably possible) to enter upon the Premises during business hours except in the event of an emergency) for the purpose of inspecting or surveying the same, making repairs, improvements or alterations to the same or exhibiting the same to prospective tenants, purchasers and lenders. Landlord shall use its commercially reasonable efforts to minimize disruption to Tenant’s normal business operations in the Premises in connection with any such entry and at Tenant’s election, permit Tenant to have a representative present at such time. If repairs are required to be made by Tenant pursuant to the terms hereof or if Tenant is required to perform any other obligation under this Lease, Landlord may demand that Tenant make such repairs or perform such obligation forthwith, and if Tenant refuses or neglects to commence such repairs or performance within thirty (30) days of such demand and diligently complete the same as soon as reasonably practicable thereafter, Landlord may (but shall not be required so to) make or cause such repairs or performance to be done and shall not be responsible to Tenant for any loss or damage that may accrue to its stock or business by reason thereof. If Landlord makes or causes such repairs or performance to be done, or endeavors so to do, Tenant agrees that it will forthwith, within thirty (30) days after demand, pay to Landlord the reasonable out of pocket cost thus incurred, and if Tenant shall default in such payment, Landlord shall have the remedies provided in Article XIX hereof. In exercising any right which it has to enter the Premises, except in the event of an emergency, Landlord shall in no event enter any laboratory space within the Premises without being accompanied by a representative of Tenant and any such access to the research and development space within the Premises shall be subject to Tenant’s reasonable security and safety measures and requirements (and, provided further, that such access, if by any third party, shall be subject to such third party executing Tenant’s form of non-disclosure/confidentiality agreement). Notwithstanding anything to the contrary contained herein, except in the event of an emergency, neither Landlord nor any of its designees shall have any right to access the vivarium rooms within the Premises (and, in the event of an emergency, Landlord shall use commercially reasonable efforts to (i) avoid interference with the animals in the vivarium rooms and (ii) promptly contact Tenant so that Tenant can provide a representative to be present during the course of such access).

ARTICLE XVI

Damage Clause

Section 16.1– Partial Damage.

In case during the term hereof the Premises shall be partially damaged (as distinguished from “substantially damaged”, as that term is hereinafter defined) by fire or casualty, Landlord shall

forthwith proceed to repair such damage and restore the Premises (excluding Tenant's Property) to substantially their condition at the time of such damage, but Landlord shall not be responsible for any delay which may result from any cause beyond Landlord's reasonable control.

Section 16.2– Substantial Damage.

In case during the term hereof the Premises shall be substantially damaged or destroyed by fire or casualty, the risk of which is covered by Landlord's insurance, this Lease shall, except as hereinafter provided, remain in full force and effect, and Landlord shall promptly after such damage and the determination of the net amount of insurance proceeds available to Landlord, expend so much as may be necessary of such net amount to restore (consistent, however, with zoning laws and building codes then in existence to the extent applicable to such reconstruction), the Premises (excluding Tenant's Property) to substantially the condition in which the Premises was in at the time of such damage, except as hereinafter provided, but Landlord shall not be responsible for delay which may result from force majeure, as defined in Section 20.22 hereinbelow. Should the net amount of insurance proceeds available to Landlord be insufficient to cover the cost of restoring the Premises, in the reasonable estimate of Landlord, Landlord may, but shall have no obligation to, supply the amount of such insufficiency and restore the Premises with all reasonable diligence or Landlord may terminate this Lease by giving notice to Tenant not later than a reasonable time (not to exceed thirty (30) days) after Landlord has determined the estimated net amount of insurance proceeds available to Landlord and the estimated cost of such restoration. In case of substantial damage or destruction, as a result of a risk which is not covered by Landlord's insurance, Landlord shall likewise be obligated to rebuild the Premises, all as aforesaid, unless Landlord, within a reasonable time (not to exceed thirty (30) days) after the occurrence of such event, gives written notice to Tenant of Landlord's election to terminate this Lease. If Landlord shall elect to terminate this Lease, as aforesaid, this Lease and the term hereof shall cease and come to an end as of the date of said damage or destruction. In addition to the foregoing, in the event that the Premises shall be substantially damaged, either Landlord or Tenant may terminate this Lease by notice to the other given within thirty (30) days of such damage or destruction.

Section 16.3– Damage During Last Year.

However, if the Premises shall be substantially damaged or destroyed by fire, windstorm, or otherwise within the last year of the term of this Lease, either party shall have the right to terminate this Lease, provided that notice thereof (the "Damage Termination Notice") is given to the other party not later than sixty (60) days after such damage or destruction. If said right of termination is exercised, this Lease and the term hereof shall cease and come to an end thirty (30) days after receipt of the Damage Termination Notice.

Section 16.4– Tenant Restoration.

Unless this Lease is terminated as provided in Section 16.2, Section 16.3 or Section 16.6, if the Premises shall be damaged or destroyed by fire or other casualty, then Tenant shall, as soon thereafter as practicable following the completion of Landlord's required restoration: (i) repair and restore Tenant's Property, to substantially the condition which such Tenant's Property were

in at the time of such casualty and (ii) equip the Premises with trade fixtures and all personal property necessary or proper for the operation of Tenant's business.

Section 16.5– Rent Abatement.

In the event that the provisions of Section 16.1 or Section 16.2 shall become applicable, the Annual Fixed Rent and Additional Rent shall be abated or reduced proportionately during any period in which, by reason of such damage or destruction, there is substantial interference with the operation of the business of Tenant in the Premises (or a portion thereof), having regard to the extent to which Tenant may be required to discontinue its use of the Premises (or a portion thereof) for the Permitted Use, and such abatement or reduction shall continue for the period commencing with such destruction or damage and ending upon the earlier to occur of: (i) the completion by Landlord of such work of repair and/or reconstruction as Landlord is obligated to do, or (ii) the date that Tenant first reoccupies the Premises for the ordinary conduct of its business therein.

Section 16.6– Definitions.

The terms "substantially damaged" and "substantial damage", as used in this Article XVI, shall have reference to damage of such a character as cannot reasonably be expected to be repaired or the premises restored within one hundred and eighty (180) days from the time that such repair or restoration work would be commenced.

ARTICLE XVII

Eminent Domain

Section 17.1– Eminent Domain.

If the Premises, or such portion thereof as to render the balance (when reconstructed) unsuitable for the purposes of Tenant, shall be taken by condemnation or right of eminent domain, either party, upon written notice to the other, shall be entitled to terminate this Lease, provided that such notice is given not later than thirty (30) days after Tenant has been deprived of possession. For the purposes of this Article XVII, any deed or any transfer of title in lieu of any such taking shall be treated as such a taking. Moreover, for the purposes of this Article XVII, such a taking of Tenant's entire leasehold interest hereunder in the Premises (or assignment or termination in lieu thereof) shall be treated as a taking of the entire Premises, and in such event Tenant shall be treated as having been deprived of possession on the effective date thereof. Should any part of the Premises be so taken or condemned, and should this Lease not be terminated in accordance with the foregoing provision, Landlord covenants and agrees within a reasonable time after such taking or condemnation, and the determination of Landlord's award therein, to expend so much as may be necessary of the net amount which may be awarded to Landlord in such condemnation proceedings in restoring the Premises to an architectural unit as nearly like their condition prior to such taking as shall be practicable (excluding Tenant's Property). Should the net amount so awarded to Landlord be insufficient to cover the cost of restoring the Premises, as estimated by Landlord's architect, Landlord may, but shall not be obligated to, supply the amount of such

insufficiency and restore said premises as above provided, with all reasonable diligence, or terminate this Lease. Where Tenant has not already exercised any right of termination accorded to it under the foregoing portion of this paragraph, Landlord shall notify Tenant of Landlord's election not later than ninety (90) days after the final determination of the amount of the award. Further, if so much of the Building shall be so taken that continued operation of the Premises would be prohibited by zoning or other applicable law, Landlord or Tenant shall have the right to terminate this Lease by giving notice to the other of its desire so to do not later than thirty (30) days after the effective date of such taking.

Section 17.2– Taking Award.

Out of any award for any taking of the Premises (including, without limitation, any taking of Tenant's leasehold interest as aforesaid), in condemnation proceedings or by right of eminent domain, Landlord shall be entitled to receive and retain the amounts awarded for such Premises and for Landlord's business loss. Tenant shall be entitled to receive and retain only such amounts as may be specifically awarded to it in any such condemnation proceedings, because of moving expenses and/or the taking of its fixtures or furniture and its leasehold improvements to the extent Landlord's award is not thereby reduced and Tenant is not otherwise reimbursed for the same by Landlord.

Section 17.3– Rent Abatement.

In the event of any such taking of the Premises, the Annual Fixed Rent and Additional Rent, or a fair and just proportion thereof, according to the nature and extent of the damage sustained, shall be suspended or abated.

ARTICLE XVIII

Bankruptcy or Insolvency

Section 18.1– Bankruptcy.

If Tenant shall become a debtor under the United States Bankruptcy Code, 11 U.S.C. §§101 et seq. (the "Bankruptcy Code") then, to the extent that the Bankruptcy Code may be applicable or affect the provisions of this Lease, the following provisions shall also be applicable. If the trustee or debtor-in-possession shall fail to elect to assume this Lease within sixty (60) days after the commencement of a case under the Bankruptcy Code, this Lease shall be deemed to have been rejected; and Landlord shall be thereafter immediately entitled to possession of the Premises and this Lease shall be terminated subject to and in accordance with the provisions of this Lease and of law (including such provisions for damages). No election to assume (and, if applicable to assign) this Lease by the trustee or debtor-in-possession shall be permitted or effective unless: (i) all defaults shall have been cured and Landlord shall have been provided with adequate assurances reasonably satisfactory to Landlord, including any reasonably required guaranties and/or security deposits; and (ii) neither such assumption nor the operation of the Premises subsequent thereto shall, in Landlord's reasonable judgment, cause or result in any breach or other violation of any provision of this or any applicable lease, mortgage or other

contract; and (iii) the assumption and, if applicable, the assignment of this Lease satisfies in full the provisions of the Bankruptcy Code, including, without limitation, Sections 365(b)(1) and (3) and (f)(2); and (iv) the assumption has been ratified and approved by order of such court or courts as have final jurisdiction over the Bankruptcy Code and the case. No assignment of this Lease by the trustee or debtor-in-possession shall be permitted or effective unless the proposed assignee likewise shall have satisfied (i), (ii), (iii) and (iv) of the preceding sentence regarding such assignment and any such assignment, shall, without limitation, be subject to the provisions of Section 10.3 hereof. When pursuant to the Bankruptcy Code the trustee or debtor-in-possession is obligated to pay reasonable use and occupancy charges, such charges shall not be less than the Annual Fixed Rent and other charges specified herein to be payable by Tenant. Neither Tenant's interest or estate in the Premises herein or created hereby nor any lesser interest or estate of Tenant shall pass to anyone under any law of any state or jurisdiction without the prior written consent of Landlord. In no event shall this Lease, if the term hereof has expired or has been terminated in accordance with the provisions of this Lease, be revived, and no stay or other proceedings shall nullify, postpone or otherwise affect the expiration or earlier termination of the term of this Lease pursuant to the provisions of this Article XVIII or prevent Landlord from regaining possession of the Premises thereupon.

ARTICLE XIX

Landlord's Remedies

Section 19.1– Event of Default.

Any one of the following shall be deemed to be an "Event of Default":

A. Failure on the part of Tenant to make any payment of Rent or any other payment required hereunder, as and when due, and such failure shall continue for a period of five (5) business days after notice thereof from Landlord to Tenant; provided, however, an Event of Default shall occur hereunder without any obligation of Landlord to give any notice if (i) Tenant fails to make any payment within five (5) days after the due date therefor, and (ii) Landlord has given Tenant written notice under this Section 19.1(A) on more than two (2) occasions during the twelve (12) month interval preceding such failure by Tenant.

B. Tenant shall fail to perform or observe any other requirement, term, covenant or condition of this Lease on the part of Tenant to be performed or observed and such failure shall continue for thirty (30) days after written notice thereof from Landlord to Tenant, or if said default shall reasonably require longer than thirty (30) days to cure, if Tenant shall fail to commence to cure said default within thirty (30) days after written notice thereof and/or fail to diligently prosecute the curing of the same to completion with due diligence, provided in all events the same is completed within one hundred eighty (180) days; or

C. The commencement of any of the following proceedings, with such proceeding not being dismissed within ninety (90) days after it has begun: (i) the estate

hereby created being taken on execution or by other process of law; (ii) Tenant being judicially declared bankrupt or insolvent according to law; (iii) an assignment being made of the property of Tenant for the benefit of creditors; (iv) a receiver, guardian, conservator, trustee in involuntary bankruptcy or other similar officer being appointed to take charge of all or any substantial part of Tenant's property by a court of competent jurisdiction; or (v) a petition being filed for the reorganization of Tenant under any provisions of the Bankruptcy Code or any federal or state law now or hereafter enacted.

D. Tenant filing a petition for reorganization or for rearrangement under, or otherwise availing itself of any provisions of, the Bankruptcy Code or any federal or state law now or hereafter enacted providing a plan or other means for a debtor to settle, satisfy or extend the time for the payment of debts.

E. Tenant shall fail to maintain the insurance coverages required in this Lease or violates Tenant's covenants under Article XIV of this Lease, and such failure continues for five (5) business days after written notice from Landlord to Tenant thereof.

F. Tenant shall assign its interest in this Lease or sublet any portion of the Premises in violation of the requirements of Article VIII of this Lease.

Section 19.2– Termination.

Should any Event of Default occur and be continuing then, notwithstanding any license of any former breach of covenant or waiver of the benefit hereof or consent in a former instance, Landlord lawfully may, in addition to any remedies available to Landlord under applicable statutes or case law, or otherwise, immediately or at any time thereafter, and, to the maximum extent permitted by law, without demand or notice (and Tenant hereby expressly waives any notice to quit possession of the Premises) as may be required by law, enter into and upon the Premises or any part thereof in the name of the whole and repossess the same as of Landlord's former estate, and expel Tenant and those claiming through or under it and remove its or their effects without being deemed guilty of any manner of trespass, and without prejudice to any remedies which might otherwise be used for arrears of Rent or preceding breach of covenant and/or Landlord may send written notice to Tenant terminating the term of this Lease; and upon the first to occur of: (i) entry as aforesaid; or (ii) the fifth (5th) day following the sending of such notice of termination, the term of this Lease shall terminate.

Section 19.3– Remedies.

Tenant covenants and agrees, notwithstanding any termination of this Lease as aforesaid or any entry or re-entry by Landlord, whether by summary proceedings, termination, or otherwise, to pay and be liable for on the days originally fixed herein for the payment thereof, amounts equal to the several installments of Rent and other charges reserved as they would, under the terms of this Lease, become due if this Lease had not been terminated or if Landlord had not entered or re-entered, as aforesaid, and whether the Premises be relet or remain vacant, in whole or in part,

or for a period less than the remainder of the term, and for the whole thereof; but in the event the Premises be relet by Landlord, Tenant shall be entitled to a credit in the net amount of rent received by Landlord in reletting, after deduction of all expenses incurred in reletting the Premises (including, without limitation, remodeling costs, brokerage fees, and the like), and in collecting the rent in connection therewith. Landlord agrees to use reasonable efforts to relet the Premises after Tenant vacates the same in the event this Lease is terminated based upon an Event of Default by Tenant hereunder. The marketing of the Premises in a manner similar to the manner in which Landlord markets other premises within Landlord's control within the Property, shall be deemed to have satisfied Landlord's obligation to use "reasonable efforts" hereunder. In no event shall Landlord be required to (i) solicit or entertain negotiations with any other prospective tenant for the Premises until Landlord obtains full and complete possession of the Premises (including, without limitation, the final and unappealable legal right to relet the Premises free of any claim of Tenant), (ii) relet the Premises before leasing other vacant space in the Building, or (iii) lease the Premises for a rental less than the current fair market rent then prevailing for similar space in the Building. As an alternative, at the election of Landlord, Tenant will upon such termination pay to Landlord, as damages, such a sum as at the time of such termination represents the discounted present value (discounted at the Prime Rate) of the amount of the excess, if any, of the then value of the total Rent and other benefits which would have accrued to Landlord under this Lease for the remainder of the lease term if the lease terms had been fully complied with by Tenant over and above the then cash rental value in advance (i.e., the fair market value) of the Premises for the balance of the term. To induce Landlord to enter into this Lease, (i) Tenant confirms and agrees that this transaction is a commercial and not a consumer transaction, (ii) Tenant hereby waives any right to trial by jury in any action, proceeding or counterclaim brought by Landlord or Tenant on any matters whatsoever arising out of or in any way connected with this Lease, the relationship of Landlord and Tenant, Tenant's use or occupancy of the Premises, and/or any claim of injury or damage, including, but not limited to, any summary process eviction action and (iii) Tenant agrees not to interpose any counterclaim of whatever nature or description (other than mandatory counterclaims) in any proceeding commenced by Landlord for nonpayment of Rent, or any other amount due hereunder, provided the foregoing shall not be construed as a waiver of the right of Tenant to assert such claims in any separate action brought by Tenant. In addition, Tenant shall pay to Landlord all costs of enforcing the terms of this Article XIX, including, without limitation, reasonable attorneys' fees and costs.

ARTICLE XX

Miscellaneous Provisions

Section 20.1– Waiver.

Failure on the part of Landlord or Tenant to complain of any action or non-action on the part of the other party, no matter how long the same may continue, shall never be deemed to be a waiver by Landlord or Tenant of any of its rights hereunder. Further, it is covenanted and agreed that no waiver at any time of any of the provisions hereof by Landlord or Tenant shall be construed as a waiver of any of the other provisions hereof, and that a waiver at any time of any of the

provisions hereof shall not be construed as a waiver at any subsequent time of the same provisions. The consent or approval of Landlord to or of any action by Tenant requiring Landlord's consent or approval shall not be deemed to waive or render unnecessary Landlord's consent or approval to or of any subsequent similar act by Tenant. Any consent required of Landlord in any provision of this Lease shall not be unreasonably withheld, conditioned or delayed. Wherever in this Lease provision is made that Landlord shall not unreasonably withhold consent or approval or where any such standard is required as a matter of applicable law which cannot be waived by Tenant (and Tenant waives its rights under any such law to the extent permitted), Tenant's sole remedies for Landlord's breach of such agreement shall be limited to an action for injunction or declaratory judgment, and in no event shall Landlord be liable for any damages to Tenant.

No payment by Tenant, or acceptance by Landlord, of a lesser amount than shall be due from Tenant to Landlord shall be treated otherwise than as a payment on account. The acceptance by Landlord of a check for a lesser amount with an endorsement or statement thereon, or upon any letter accompanying such check, that such lesser amount is payment in full, shall be given no effect, and Landlord may accept such check without prejudice to any other rights or remedies which Landlord may have against Tenant.

Section 20.2– Covenant of Quiet Enjoyment.

This Lease is subject and subordinate to all matters of record. Tenant, subject to the terms and provisions of this Lease on payment of the Rent and observing, keeping and performing all of the terms and provisions of this Lease on its part to be observed, kept and performed prior to the expiration of any applicable notice and/or cure periods, shall lawfully, peaceably and quietly have, hold, occupy and enjoy the Premises during the term hereof (exclusive of any period during which Tenant is holding over after the expiration or termination of this Lease without the consent of Landlord) without hindrance or ejection by any persons lawfully claiming under Landlord; but it is understood and agreed that this covenant and any and all other covenants of Landlord contained in this Lease shall be binding upon Landlord and Landlord's successors only with respect to breaches occurring during Landlord's and Landlord's successors' respective ownership of Landlord's interest hereunder. Tenant shall neither assert nor seek to enforce any claim for breach of this Lease against any of Landlord's assets other than Landlord's interest in the Building, and Tenant agrees to look solely to such interest for the satisfaction of any liability of Landlord under this Lease, it being specifically agreed that neither Landlord, nor any successor holder of Landlord's interest hereunder, nor any beneficiary of any Trust of which any person from time to time holding Landlord's interest is Trustee, nor any such Trustee, nor any member, manager, partner, director or stockholder nor Landlord's managing agent shall ever be personally liable for any such liability. This paragraph shall not limit any right that Tenant might otherwise have to obtain injunctive relief against Landlord or Landlord's successors-in-interest, or to take any other action which shall not involve the personal liability of Landlord, or of any successor holder of Landlord's interest hereunder, or of any beneficiary of any trust of which any person from time to time holding Landlord's interest is Trustee, or of any such Trustee, or of any manager, member, partner, director or stockholder of Landlord or of Landlord's managing agent, to respond in monetary damages from Landlord's assets other than Landlord's interest in the

Building, as aforesaid. Except as otherwise provided in this Lease, in no event shall Tenant have the right to terminate or cancel this Lease or to withhold Rent or to set-off any claim or damages against Rent as a result of any default by Landlord or breach by Landlord of its covenants or any warranties or promises hereunder, except in the case of a wrongful eviction of Tenant from the Premises (constructive or actual) by Landlord continuing after notice to Landlord thereof and a reasonable opportunity for Landlord to cure the same. Further, (i) in no event shall Landlord or Landlord's managing agent ever be liable to Tenant for any indirect or consequential damages or loss of profits or the like and (ii) in no event shall Tenant ever be held liable to the Landlord Parties for any indirect or consequential damages or loss of profits or the like.

Section 20.3– Status Report.

Recognizing that both parties may find it necessary to establish to third parties, such as accountants, banks, mortgagees, or the like, the then current status of performance hereunder, either party, on the written request of the other made from time to time, will promptly furnish a written statement of the status of any matter pertaining to this Lease.

Section 20.4– Notice to Mortgagee and Ground Lessor.

After receiving notice from any person, firm or other entity that it holds a mortgage which includes the Premises as part of the mortgaged premises, or that it is the ground lessor under a lease with Landlord as ground lessee, which includes the Premises as a part of the leased premises, no notice from Tenant to Landlord shall be effective unless and until a copy of the same is given to such holder or ground lessor at the address as specified in said notice (as it may from time to time be changed), and the curing of any of Landlord's defaults by such holder or ground lessor within a reasonable time after such notice (including a reasonable time to obtain possession of the Premises if the mortgagee or ground lessor elects to do so) shall be treated as performance by Landlord. For the purposes of this Section, the term "mortgage" includes a mortgage on a leasehold interest of Landlord (but not one on Tenant's leasehold interest).

Section 20.5– Assignment of Rents.

With reference to any assignment by Landlord of Landlord's interest in this Lease, or the rents payable hereunder, conditional in nature or otherwise, which assignment is made to the holder of a mortgage or ground lease on property which includes the Premises, Tenant agrees:

(a) That the execution thereof by Landlord, and the acceptance thereof by the holder of such mortgage, or the ground lessor, shall never be treated as an assumption by such holder or ground lessor of any of the obligations of Landlord hereunder, unless such holder, or ground lessor, shall, by notice sent to Tenant, specifically otherwise elect; and

(b) That, except as aforesaid, such holder or ground lessor shall be treated as having assumed Landlord's obligations hereunder only upon foreclosure of such holder's mortgage and the taking of possession of the Premises, or, in the case of a ground lessor, the assumption of Landlord's position hereunder by such ground lessor. In

no event shall the acquisition of title to the Property by a purchaser which, simultaneously therewith, leases the entire Property back to the seller thereof be treated as an assumption, by operation of law or otherwise, of Landlord's obligations hereunder, but Tenant shall look solely to such seller-lessee, and its successors from time to time in title, for performance of Landlord's obligations hereunder. In any such event, this Lease shall be subject and subordinate to the lease to such purchaser provided that such purchaser-lessor agrees to recognize the right of Tenant to use and occupy the Premises upon the payment of Rent and all other charges payable by Tenant under this Lease and the performance by Tenant of Tenant's obligations under this Lease prior to the expiration of any applicable notice and/or cure periods. For all purposes, such seller-lessee, and its successors in title, shall be the landlord hereunder unless and until Landlord's position shall have been assumed by such purchaser-lessor. Tenant acknowledges that it has been informed by Landlord that Landlord has entered into certain agreements with its lenders ("Lenders") which require it to include in this Lease (and requires Tenant to include in any sublease which may be permitted hereunder) the following provisions: (i) no Rent payable under this Lease or under any such sublease may be based in whole or in part on the income or profits derived from the Premises or any subleased premises; (ii) if Lenders succeed to Landlord's interests under this Lease and are advised by Lenders' counsel that all or any portion of the Rent payable under this Lease is or may be deemed to be unrelated business income within the meaning of the Internal Revenue Code of the 1986, as amended, or the regulations issued thereunder, Lenders may elect to amend unilaterally the calculation of rents under this Lease so that none of the rents payable to Lenders under this Lease will constitute unrelated business income, provided that such amendment will not increase Tenant's payment obligations or other liability under this Lease or reduce Landlord's obligations under this Lease; and (iii) if Lenders request, Tenant will be obligated to execute any document Lenders may deem necessary to effect the amendment of this Lease in accordance with the foregoing subsection (ii). Further, no Rent may be paid by Tenant more than thirty (30) days in advance except with Lenders' prior written consent, and any such payment without such consent shall not be binding on Lenders.

Section 20.6– Mechanics' Liens.

Tenant agrees within fifteen (15) days after notice of the filing thereof to discharge of record (either by payment or by filing of the necessary bond, or otherwise) any mechanics', materialmen's, or other lien or like filing including, without limitation, any notice of contract against the Premises and/or Landlord's interest therein, which liens may arise out of any payment due for, or purported to be due for, any labor, services, materials, supplies, or equipment alleged to have been furnished to or for Tenant in, upon or about the Premises and to indemnify, defend with counsel reasonably acceptable to Landlord and save harmless Landlord from any claims or actions relating to compensation or payment for Tenant Work (as hereinafter defined).

The parties herby acknowledge that, in performing any Alterations, additions or other work (collectively "Tenant Work"), Tenant is acting for its own benefit and account, and the parties expressly agree that Tenant will not be acting as Landlord's agent in performing any Tenant Work. The fact that Tenant is required to obtain Landlord's consent prior to commencing any Tenant Work is solely for the benefit of Landlord in determining whether such Tenant Work will adversely affect the building in which the Premises is located and the granting of Landlord's consent to any Tenant Work shall not be construed to give rights to any other parties. Tenant shall require any contractor who performs Tenant Work to expressly acknowledge and agree to the provisions of this paragraph.

Section 20.7– No Brokerage.

Tenant warrants and represents that it has dealt with no broker or other agent other than CBRE in connection with the consummation of this Lease, and in the event of any brokerage claims against Landlord predicated upon prior dealings with Tenant named herein, Tenant agrees to defend the same and indemnify Landlord against any such claim. Landlord warrants and represents that it has dealt with no broker or other agent other than JLL in connection with the consummation of this Lease, and in the event of any brokerage claims against Tenant predicated upon prior dealings with Landlord named herein, Landlord agrees to defend the same and indemnify Tenant against any such claim. Landlord shall be responsible for any commissions or fees owed to the foregoing brokers in connection with this transaction in accordance with a separate agreement between such brokers and Landlord.

Section 20.8– Definition of Rent and Additional Rent.

Without limiting any other provision of this Lease, it is expressly understood and agreed that Tenant's participation in Taxes, Operating Costs, utility charges and all other charges which Tenant is required to pay hereunder, including, without limitation, if applicable, any fees and expenses under Section 20.9 hereof, together with all interest and penalties that may accrue thereon, shall be deemed to be "Additional Rent", and in the event of non-payment thereof by Tenant, Landlord shall have all of the rights and remedies with respect thereto as would accrue to Landlord for non-payment of Annual Fixed Rent. Where the term "Rent" is used herein the same shall mean all Annual Fixed Rent and other charges hereunder, including, without limitation, all Additional Rent. Subject to Section 9.3 hereof, Tenant covenants and agrees to pay, without offset except as otherwise provided in this Lease, said Additional Rent in accordance with the provisions of this Lease. Tenant's failure to object to any statement, invoice or billing rendered by Landlord within a period of one hundred eighty (180) days after Tenant's receipt thereof shall constitute Tenant's acquiescence with respect thereto and shall render such statement, invoice or billing an account between Landlord and Tenant.

Section 20.9– Landlord's Fees and Expenses.

Unless prohibited by applicable law, Tenant agrees to pay to Landlord the amount of all reasonable out of pocket legal fees and expenses incurred by Landlord arising out of or resulting from any Event of Default or from any bankruptcy case involving Tenant, including without limitation, the filing by or against Tenant of any petition for relief under any applicable

bankruptcy law (any bankruptcy matter referred to herein being subject to the provisions of Article XVIII hereof). Notwithstanding the foregoing, in the case of litigation or other legal proceeding between Landlord and Tenant relating to the provisions of this Lease or Tenant's occupancy of the Premises, the losing party shall, upon demand, reimburse the prevailing party for its reasonable costs of prosecuting and/or defending such proceeding (including, without limitation, reasonable attorneys' fees).

Further, if Tenant shall request Landlord's consent or joinder in any instrument pertaining to this Lease, Tenant agrees promptly to reimburse Landlord for the reasonable out of pocket legal fees incurred by Landlord in processing such request, whether or not Landlord complies therewith; and if Tenant shall fail promptly so to reimburse Landlord, same shall be deemed to be a default in Tenant's monetary obligations under this Lease.

Whenever Tenant shall request approval by Landlord of plans, drawings, specifications, or otherwise with respect to Alterations of the Premises after the Commencement Date, installation of signs including subsequent changes thereof, or the like, Tenant specifically agrees promptly to pay to Landlord all reasonable out of pocket charges involved in the review (and re-review, if necessary) and approval or disapproval thereof whether or not approval shall ultimately be given (provided that Landlord's third party architects or engineers are reasonably required to review the same).

Section 20.10– Invalidity of Particular Provisions.

If any term or provision of this Lease, including but not limited to any waiver of contribution or claims, indemnity, obligation, or limitation of liability or of damages, or the application thereof to any person or circumstance shall, to any extent, be invalid or unenforceable, the remainder of this Lease, or the application of such term or provision to persons or circumstances other than those as to which it is held invalid or unenforceable, shall not be affected thereby, and each term and provision of this Lease shall be valid and be enforced to the fullest extent permitted by law.

Section 20.11– Provisions Binding, Etc.

Except as herein otherwise expressly provided, the terms hereof shall be binding upon and shall inure to the benefit of the successors and assigns, respectively, of Landlord and Tenant. Each term and each provision of this Lease to be performed by Tenant shall be construed to be both a covenant and a condition. The reference contained to successors and assigns of Tenant is not intended to constitute a consent to assignment by Tenant, but has reference only to those instances in which Landlord may later give written consent to a particular assignment as required by the provisions of Article VIII hereof. Wherever reference in this Lease is made to the managing agent, the same shall mean the managing agent that has been authorized by Landlord to act on its behalf in the management of the Property. Nothing herein shall impose any liability on the managing agent.

The parties acknowledge and agree that, notwithstanding any law or presumption to the contrary, an electronic or telefaxed signature of either party, whether upon this Lease or any related

document, shall be deemed valid and binding and admissible by either party against the other as if same were an original ink signature.

Section 20.12– Other Agreements.

Tenant hereby warrants and represents that neither this Lease nor the operation of the Premises hereunder violates the provisions of any instrument heretofore executed by Tenant or any affiliate of Tenant, including, without limitation, any so-called radius restriction contained in any such instrument.

Section 20.13– Governing Law.

This Lease shall be governed exclusively by the provisions hereof and by the laws of the State as the same may from time to time exist. As used herein, “State” shall mean the Commonwealth of Massachusetts.

Section 20.14– Recording; Confidentiality.

Tenant agrees not to record the within lease, but each party hereto agrees, on request of the other, to execute a Notice of Lease in recordable form and complying with applicable laws of the State, and reasonably satisfactory to Landlord’s and Tenant’s attorneys. In no event shall such document set forth the rental or other charges payable by Tenant under this Lease; and any such document shall expressly state that it is executed pursuant to the provisions contained in this Lease, and is not intended to vary the terms and conditions of this Lease. Further, each party hereto agrees upon the expiration or earlier termination of this Lease, on request of the other, to execute a Termination of Notice of Lease in recordable form and complying with applicable law and reasonably satisfactory to Landlord’s and Tenant’s attorney.

Landlord and Tenant each agrees that this Lease, the terms contained herein and any information provided about the other party (including, without limitation and if applicable, any intellectual property of Tenant or information regarding work performed in the Leased Premises by Tenant) will be treated by Landlord as strictly confidential and except as required by law (or except with the written consent of Tenant) will be treated as strictly confidential and except as required by law (or except with the written consent of the other party) such party shall not disclose the same to any third party except for such party’s partners, lenders, brokers, accountants and attorneys who have been advised of the confidentiality provisions contained herein and agree to be bound by the same. In the event such party is required by law to provide this Lease or disclose any of its terms or any information about the other party, such party shall give the other party prompt notice of such requirement prior to making disclosure so that the other party may seek an appropriate protective order. If failing the entry of a protective order such party is compelled to make disclosure, such party shall only disclose portions of the lease or such information which such party is required to disclose and will exercise reasonable efforts to obtain assurance that confidential treatment will be accorded to the information so disclosed. Landlord acknowledges and agrees that, notwithstanding the foregoing and without any right of Landlord to contest or any consent from Landlord, Tenant may make the entire Lease (or any portion thereof) public in

connection with any securities filings, offerings, or listings in connection with Tenant being a public company.

Section 20.15– Notices.

Whenever, by the terms of this Lease, notice, demand, or other communication shall or may be given either to Landlord or to Tenant, such notices shall be in writing and shall be sent by hand, registered or certified mail, or overnight or other commercial courier, postage or delivery charges, as the case may be, prepaid as follows:

If intended for Landlord, addressed to Landlord at the address set forth on the first page of this Lease, and a copy in like fashion to the following (or to such other address or addresses as may from time to time hereafter be designated by Landlord by like notice):

c/o Greatland Realty Partners
One Federal Street, 18th Floor, Suite 1801
Boston, MA 02110
Attn: Phillip Dorman and Kevin Sheehan

c/o Goulston & Storrs PC
400 Atlantic Avenue
Boston, Massachusetts 02110-3333
Attn: Greatland/1050 Waltham Street

If intended for Tenant, addressed to Tenant at the address set forth on the first page of this Lease (Attn: Esther Cho, VP and Head of Legal) and a copy in like fashion to Tenant c/o Cooley LLP, 55 Hudson Yards, New York, New York 10001, Attn: Daniel A. Goldberger, Esq. and Cooley LLP, 500 Boylston Street, Boston, Massachusetts 02116, Attn: Daniel A. Goldberger, Esq. (or to such other address or addresses as may from time to time hereafter be designated by Tenant by like notice).

Except as otherwise provided herein, all such notices shall be effective when received; provided, that (i) if receipt is refused, notice shall be effective upon the first occasion that such receipt is refused, (ii) if the notice is unable to be delivered due to a change of address of which no notice was given, notice shall be effective upon the date such delivery was attempted or (iii) if the notice address is a post office box number, notice shall be effective the day after such notice is sent as provided hereinabove.

Where provision is made for the attention of an individual or department, the notice shall be effective only if the wrapper in which such notice is sent is addressed to the attention of such individual or department.

Any notice given by an attorney on behalf of Landlord or by Landlord’s managing agent shall be considered as given by Landlord and shall be fully effective. Any notice given by an attorney on behalf of Tenant be considered as given by Tenant and shall be fully effective.

Time is of the essence with respect to any and all notices and time periods for giving of notice or taking any action thereto under this Lease.

Section 20.16– When Lease Becomes Binding.

The submission of this document for examination and negotiation does not constitute an offer to lease, or a reservation of, or option for, the Premises, and this document shall become effective and binding only upon the execution and delivery hereof by both Landlord and Tenant.

All negotiations, considerations, representations, and understandings between Landlord and Tenant are incorporated herein and may be modified or altered only by agreement in writing between Landlord and Tenant, and no act or omission of any employee or agent of Landlord shall alter, change, or modify any of the provisions hereof. Tenant specifically confirms and acknowledges that: (i) before entering into this Lease, Tenant has made its own observations, studies, determinations and projections with respect to Tenant's lease of the Premises and all other factors relevant to Tenant's decision to enter into this Lease; and (ii) neither Tenant nor any representative of Tenant has relied upon any representation by (or any "conversation" with) Landlord or any representative of Landlord with respect to the foregoing not contained in this Lease.

Each of Landlord and Tenant hereby represents and warrants to the other that all necessary action has been taken to enter into this Lease and that the person signing this Lease on its behalf has been duly authorized to do so.

Section 20.17– Paragraph Headings.

The paragraph headings throughout this instrument are for convenience and reference only, and the words contained therein shall in no way be held to explain, modify, amplify, or aid in the interpretation, construction, or meaning of the provisions of this Lease.

Section 20.18– Lease Superior or Subordinate to Mortgage.

This Lease shall be subject and subordinate to any mortgage now or hereafter on the Building, or any part thereof, and to all renewals, modifications, consolidations, replacements and extensions thereof and all substitutions therefor provided that Landlord shall obtain a commercially reasonable form of Subordination, Non-Disturbance and Attornment Agreement (an "SNDA") for the benefit of Tenant from the holder of any such mortgage or the lessor of any superior lease, and Tenant shall pay any costs which such holder may impose therefor. Simultaneously with the execution and delivery of this Lease, Landlord shall, as a condition to Tenant's subordination of this Lease, obtain an SNDA in the form of Exhibit E attached hereto. In the event that any mortgagee or its respective successor in title shall succeed to the interest of Landlord, then this Lease shall nevertheless continue in full force and effect and Tenant shall and does hereby agree to attorn to such mortgagee or successor and to recognize such mortgagee or successor as its landlord.

Section 20.19– Holding-Over.

Any holding-over by Tenant after the expiration of the term of this Lease shall be treated as a tenancy at sufferance only. Any such occupancy after such expiration or termination shall be subject to all the terms and provisions of this Lease, except that (a) Tenant shall pay Annual Fixed Rent at the greater of (i) the then market rent in the Market Area, as determined by Landlord in its reasonable discretion; and (ii) Annual Fixed Rent applicable immediately prior to such expiration or termination of this Lease, at the Holdover Percentage (as hereinafter defined), (b) Tenant shall continue to pay Landlord all Additional Rent, and (c) in the event such hold-over continues for more than thirty (30) days after the end of the Term, Tenant shall be liable for all damages, including, without limitation, lost business and consequential damages, incurred by Landlord as a result of such holding-over; Tenant hereby acknowledging that Landlord may need the Premises after the end of the Term for other tenants and that the damages which Landlord may suffer as the result of Tenant's holding over cannot be determined as of the Execution Date. Nothing contained herein shall grant Tenant the right to holdover after the expiration or earlier termination of the Term. The "Holdover Percentage" shall be 150% for the first thirty (30) days of such holdover, and 200% for any period of hold over after the first thirty (30) days.

Section 20.20– Interest.

All payments becoming due under this Lease and not paid within five (5) days after due and payable under this Lease shall bear interest from the applicable due date until received by Landlord at the lesser rate (the "Default Rate") of: (i) four percent (4%) per annum above the prime rate published from time to time in the Wall Street Journal (or if such newspaper ceases to publish the same, the prime rate so-called announced from time to time by a banking institution designated by Landlord (the "Prime Rate"); or (ii) the highest lawful rate of interest permitted at the time in the State.

Section 20.21– Tenant Financials.

If Tenants is not a company whose capital stock is traded on a recognized public exchange, within fifteen (15) days after Landlord's demand therefor in connection with a sale or financing of the Building, which may be made no more often than once per year or during a monetary Event of Default, Tenant shall furnish to Landlord, at Tenant's sole cost and expense, then current financial statements of Tenant, audited, if audited statements have been recently prepared on behalf of Tenant, or otherwise certified as being true and correct in all material respects by the chief financial officer of Tenant, or by Tenant if the same is an individual.

Section 20.22– Force Majeure.

Neither Landlord nor Tenant shall be liable for failure to perform any obligation under this Lease, except for the payment of money, in the event it is prevented from so performing by strike, lockout, breakdown, accident, pandemic, epidemic or other health emergency, order or regulation of or by any governmental authority or failure to supply or inability by the exercise of reasonable diligence to obtain supplies, parts or employees necessary to furnish such services or because of war or other emergency or for any other similar or dissimilar cause beyond its

reasonable control, but financial inability shall never be deemed to be a cause beyond a party's reasonable control, and in no event shall either party be excused or delayed in the payment of any money due under this Lease by reason of any of the foregoing. It is further understood and agreed that Landlord shall in no event be liable for failure to perform any obligation under this Lease in the event Landlord is prevented from so performing for any cause due to any act or neglect of Tenant or its servants, agents, employees, licensees, or any person claiming by, through or under Tenant.

Section 20.23– Certain Rights Reserved to Landlord.

(a) Landlord reserves the right, at any time and from time to time, to make such changes, alterations, additions, improvements, repairs or replacements in or to the Project, as well as in or to the street entrances and/or the common areas, as it may deem necessary or desirable, provided, however, that there be no material obstruction of permanent access to, or material interference with the use and enjoyment of, the Premises by Tenant. Subject to the foregoing, Landlord expressly reserves the right to temporarily close all, or any portion, of the common areas for the purpose of making repairs or changes thereto.

(b) Landlord may at any time or from time to time (i) construct additional building(s) and improvements and related site improvements (collectively, "Future Development") in all or any part of the Project and/or (ii) change the location or arrangement of any improvement outside the Building or on the Project or all or any part of the common areas, or add or deduct any land to or from the Property; provided that there shall be no material increase in Tenant's obligations or material interference with Tenant's rights under this Lease in connection with the exercise of the foregoing reserved rights.

(c) In case any excavation shall be made for building or improvements or for any other purpose upon the land adjacent to or near the Premises, Tenant will afford without charge to Landlord, or the person or persons, firms or corporations causing or making such excavation, license to enter upon the Premises for the purpose of doing such work as Landlord or such person or persons, firms or corporation shall deem to be necessary to preserve the walls or structures of the Building from injury, and to protect the Building by proper securing of foundations.

(d) If Landlord shall proceed as aforesaid in clause (a) or (b) above, then Landlord shall elect either of the following procedures:

(i) To exclude all taxes and assessments on the land and buildings of said expansion area as well as all common area maintenance charges with respect to said expansion area from Taxes and the common area maintenance charges in which Tenant is required to participate, in which case the square footage of floor area of the buildings in the expansion area shall be excluded from the denominator in computing Tenant's share of Taxes and common area maintenance charges hereunder; or

(ii) To include all such taxes, assessments and common area maintenance charges for the expansion area in the charges to be pro rated pursuant to the terms of this Lease, in which case the expansion area shall be deemed to be included within the Building for the purposes of computing Tenant's Proportionate Share of Taxes and common area maintenance charges.

Section 20.24– Hazardous Materials

Tenant shall not, without the prior written consent of Landlord, bring or permit to be brought or kept in or on the Premises or elsewhere in the Building or the Property (i) any inflammable, combustible or explosive fluid, material, chemical or substance (except for standard office supplies stored in proper containers); and (ii) any Hazardous Material (hereinafter defined), other than the types and quantities of Hazardous Materials which are listed on Exhibit D attached hereto ("Tenant's Hazardous Materials"), provided that the same shall at all times be brought upon, kept or used in so-called 'control areas' (the number and size of which shall be reasonably determined by Landlord and provided that Tenant shall have the right to its Proportionate Share of the allowable quantity of Hazardous Materials pursuant to applicable laws) and in accordance with all applicable Environmental Laws (hereinafter defined) and prudent environmental practice and (with respect to medical waste and so-called "biohazard" materials) good scientific and medical practice. Tenant shall be responsible for assuring that all laboratory uses are adequately and properly vented. On or before each anniversary of the Rent Commencement Date, and on any earlier date during the 12-month period on which Tenant intends to add a new Hazardous Material or materially increase the quantity of any Hazardous Material to the list of Tenant's Hazardous Materials, Tenant shall submit to Landlord an updated list of Tenant's Hazardous Materials for Landlord's review and approval, which approval shall not be unreasonably withheld, conditioned or delayed. Landlord shall have the right, from time to time, to inspect the Premises for compliance with the terms of this Section 20.24. Notwithstanding the foregoing, with respect to any of Tenant's Hazardous Materials which Tenant does not properly handle, store or dispose of in compliance with all applicable Environmental Laws, prudent environmental practice and (with respect to medical waste and so-called "biohazard materials") good scientific and medical practice, Tenant shall, upon written notice from Landlord, no longer have the right to bring such material into the Building or the Property until Tenant has demonstrated, to Landlord's reasonable satisfaction, that Tenant has implemented programs to thereafter properly handle, store or dispose of such material. In order to induce Landlord to waive its otherwise applicable requirement that Tenant maintain insurance in favor of Landlord against liability arising from the presence of radioactive materials in the Premises, and without limiting the foregoing, Tenant hereby represents and warrants to Landlord that at no time during the Term will Tenant bring upon, or permit to be brought upon, the Premises any radioactive materials whatsoever (except for those contained, in accordance with Legal Requirements, in Tenant's equipment, such as its imaging devices).

(a) Environmental Laws Defined. For purposes hereof, "Environmental Laws" shall mean all laws, statutes, ordinances, rules and regulations of any local, state or federal governmental authority having jurisdiction concerning environmental, health and safety matters, including but not limited to any discharge by any of the

Tenant Parties of any Hazardous Material (hereinafter defined) into the air, surface water, sewers, soil or groundwater whether within or outside the Premises, including, without limitation (a) the Federal Water Pollution Control Act, 33 U.S.C. Section 1251 et seq., (b) the Federal Resource Conservation and Recovery Act, 42 U.S.C. Section 6901 et seq., (c) the Comprehensive Environmental Response, Compensation and Liability Act, 42 U.S.C. Section 9601 et seq., (d) the Toxic Substances Control Act of 1976, 15 U.S.C. Section 2601 et seq., and (e) Chapter 21E of the General Laws of Massachusetts. Tenant, at its sole cost and expense, shall comply with (i) Environmental Laws, and (ii) any rules, requirements and safety procedures of the Massachusetts Department of Environmental Protection, the Town of Lexington and any insurer of the Building or the Premises with respect to Tenant's use, storage and disposal of any Hazardous Materials.

(b) Hazardous Material Defined. As used herein, the term "Hazardous Material" means asbestos, oil or any hazardous, radioactive or toxic substance, material or waste or petroleum derivative which is or becomes regulated by any Environmental Law, including without limitation live organisms, viruses and fungi, medical waste and any so-called "biohazard" materials. The term "Hazardous Material" includes, without limitation, oil and/or any material or substance which is (i) designated as a "hazardous substance," "hazardous material," "oil," "hazardous waste" or toxic substance under any Environmental Law.

(c) Chemical Safety Program. Tenant shall establish and maintain a chemical safety program administered by a licensed, qualified individual in accordance with the requirements of any applicable governmental authority. Tenant shall be solely responsible for all costs incurred in connection with such chemical safety program, and Tenant shall provide Landlord with such documentation as Landlord may reasonably require evidencing Tenant's compliance with the requirements of (a) any applicable governmental authority with respect to such chemical safety program and (b) this Section. Tenant shall obtain and maintain during the Term any permit required by any such applicable governmental authority.

(d) Testing. If any mortgagee or governmental authority requires testing to determine whether there has been any release of Hazardous Materials and such testing is required as a result of the acts or omissions of any of the Tenant Parties, then Tenant shall reimburse Landlord upon demand, as Additional Rent, for the reasonable costs thereof, together with interest at the Default Rate until paid in full. Tenant shall execute affidavits, certifications and the like, as may be reasonably requested by Landlord from time to time concerning Tenant's best knowledge and belief concerning the presence of Hazardous Materials in or on the Premises, the Building or the Property. In addition to the foregoing, if Landlord reasonably believes that any Hazardous Materials have been released on the

Premises in violation of this Lease or any Legal Requirement, Landlord shall have the right to conduct appropriate tests of the Premises or any portion thereof to demonstrate that Hazardous Materials are present or that contamination has occurred due to the acts or omissions of any of the Tenant Parties. Tenant shall pay all reasonable costs of such tests if such tests reveal that Hazardous Materials exist at the Premises in violation of this Lease or any Legal Requirement. Further, Landlord shall have the right to cause a third party consultant retained by Landlord, at Landlord's expense (provided, however, that such costs shall be included in Operating Costs), to review, but not more than once in any calendar year, Tenant's lab operations, procedures and permits to ascertain whether or not Tenant is complying with law and adhering to best industry practices. Tenant agrees to cooperate in good faith with any such review and to provide to such consultant any information requested by such consultant and reasonably required in order for such consultant to perform such review, but nothing contained herein shall require Tenant to provide proprietary or confidential information to such consultant.

(e) Indemnity; Remediation. Tenant hereby covenants and agrees to indemnify, defend and hold the Landlord Parties harmless from and against any and all Claims against any of the Landlord Parties arising out of contamination of any part of the Property or other adjacent property, which contamination arises as a result of: (i) the presence of Hazardous Material in the Premises, the presence of which is caused by any act or omission of any of the Tenant Parties (i.e., Tenant bringing such Hazardous Material into the Premises), or (ii) from a breach by Tenant of its obligations under this Section 20.24. This indemnification of the Landlord Parties by Tenant includes, without limitation, reasonable costs incurred in connection with any investigation of site conditions or any cleanup, remedial, removal or restoration work or any other response actions required by any federal, state or local governmental agency or political subdivision because of Hazardous Material present in the soil, soil vapor or ground water on or under or any indoor air in the Building based upon the circumstances identified in the first sentence of this Section 20.24. The indemnification and hold harmless obligations of Tenant under this Section 20.24 shall survive the expiration or any earlier termination of this Lease. Without limiting the foregoing, if the presence of any Hazardous Material in the Building or otherwise in the Property is caused or permitted by any of the Tenant Parties and results in any contamination of any part of the Property or any adjacent property, Tenant shall promptly take all actions at Tenant's sole cost and expense as are necessary to return the Property and/or the Building or any adjacent property to their condition as of the date of this Lease, provided that Tenant shall first obtain Landlord's written approval of such actions, which approval shall not be unreasonably withheld, conditioned or delayed so long as such actions, in Landlord's reasonable discretion, would not potentially have any adverse effect on the Property, and, in any event, Landlord shall not withhold its approval of any proposed actions which are required by

applicable Environmental Laws. The provisions of this Section 17.6 shall survive the expiration or earlier termination of the Lease.

Without limiting the obligations set forth above, if any Hazardous Material is in, on, under, at or about the Building or the Property as a result of the acts or omissions of any of the Tenant Parties and results in any contamination of any part of the Property or any adjacent property that is in violation of any applicable Environmental Law or that requires the performance of any response action pursuant to any Environmental Law, Tenant shall promptly take all actions at Tenant's sole cost and expense as are necessary to reduce such Hazardous Material to amounts below any applicable reportable quantity, any applicable reportable concentration and any other applicable standard set forth in any Environmental Law such that no further response actions are required; provided that Tenant shall first obtain Landlord's written approval of such actions, which approval shall not be unreasonably withheld, conditioned or delayed so long as such actions would not be reasonably expected to have an adverse effect on the market value or utility of the Property for the Permitted Uses, and in any event, Landlord shall not withhold its approval of any proposed actions which are required by applicable Environmental Laws (such approved actions, "Tenant's Remediation").

In the event that Tenant fails to complete Tenant's Remediation prior to the end of the Term, then:

(i) until the completion of Tenant's Remediation (as evidenced by the certification of Tenant's Licensed Site Professional (as such term is defined by applicable Environmental Laws), who shall be reasonably acceptable to Landlord) (the "Remediation Completion Date"), Tenant shall pay to Landlord, with respect to the portion of the Premises which reasonably cannot be occupied by a new tenant until completion of Tenant's Remediation, (A) Additional Rent on account of Operating Costs and Taxes and (B) Annual Rent in an amount equal to the greater of (1) the fair market rental value of such portion of the Premises (determined in substantial accordance with the process described in Section 1.2 above), and (2) Annual Rent attributable to such portion of the Premises in effect immediately prior to the end of the Term; and

(ii) Tenant shall maintain responsibility for Tenant's Remediation and Tenant shall complete Tenant's Remediation as soon as reasonably practicable in accordance with Environmental Laws. If Tenant does not diligently pursue completion of Tenant's Remediation, Landlord shall have the right to either (A) assume control for overseeing Tenant's Remediation, in which event Tenant shall pay all reasonable costs and expenses of Tenant's Remediation (it being understood and agreed that all costs and expenses of Tenant's Remediation incurred pursuant to contracts entered into, by Tenant shall be deemed reasonable) within thirty (30) days of demand therefor (which demand shall be made no more often than monthly), and Landlord shall be substituted as the party identified on any

governmental filings as the party responsible for the performance of such Tenant's Remediation or (B) require Tenant to maintain responsibility for Tenant's Remediation, in which event Tenant shall complete Tenant's Remediation as soon as reasonably practicable in accordance with Environmental Laws, it being understood that Tenant's Remediation shall not contain any requirement that Tenant remediate any contamination to levels or standards more stringent than those associated with the Property's current office, research and development, laboratory, and vivarium uses.

The provisions of this Section shall survive the expiration or earlier termination of this Lease.

(f) Disclosures. Prior to bringing any Hazardous Material into any part of the Property, Tenant shall deliver to Landlord the following information with respect thereto: (a) a description of handling, storage, use and disposal procedures; (b) all plans or disclosures and/or emergency response plans which Tenant has prepared, including without limitation Tenant's Spill Response Plan, and all plans which Tenant is required to supply to any governmental agency or authority pursuant to any Environmental Laws; (c) copies of all Required Permits relating thereto; and (d) other information reasonably requested by Landlord.

(g) Removal. Tenant shall be responsible, at its sole cost and expense, for Hazardous Material and other biohazard disposal services for the Premises. Such services shall be performed by contractors reasonably acceptable to Landlord and on a sufficient basis to ensure that the Premises are at all times kept neat, clean and free of Hazardous Materials and biohazards except in appropriate, specially marked containers reasonably approved by Landlord.

(h) End of Term Obligations. Prior to the expiration of this Lease (or within thirty (30) days after any earlier termination), Tenant shall clean and otherwise decommission all interior surfaces (including floors, walls, ceilings, and counters), piping, supply lines, waste lines, acid neutralization systems and plumbing in and/or exclusively serving the Premises, and all exhaust or other ductwork in and/or exclusively serving the Premises, in each case which has carried or released or been contacted by any Hazardous Materials or other chemical or biological materials used in the operation of the Premises, and shall otherwise clean the Premises so as to permit the Surrender Plan defined below) to be issued.

(i) Surrender Plan. At least thirty (30) days prior to the expiration of the Term (or, if applicable, within five (5) business days after any earlier termination of this Lease), Tenant shall deliver to Landlord a reasonably detailed narrative description of the actions proposed (or required by any Legal Requirements) to be taken by Tenant in order to render the Premises (including any Alterations permitted or required by Landlord to remain therein) free of Hazardous Materials

and otherwise released for unrestricted use and occupancy including without limitation causing the Premises to be decommissioned in accordance with the regulations of the U.S. Nuclear Regulatory Commission and/or the Massachusetts Department of Public health (the "MDPH") for the control of radiation, and cause the Premises to be released for unrestricted use by the Radiation Control Program of the MDPH (the "Surrender Plan"). The Surrender Plan (i) shall be accompanied by a current list of (A) all Required Permits held by or on behalf of any Tenant Party with respect to Hazardous Materials in, on, under, at or about the Premises, and (B) Tenant's Hazardous Materials, and (ii) shall be subject to the review and approval of Landlord's environmental consultant. In connection with review and approval of the Surrender Plan, upon request of Landlord, Tenant shall deliver to Landlord or its consultant such additional non-proprietary information concerning the use of and operations within the Premises as Landlord shall request. On or before the expiration of the Term, Tenant shall (i) perform or cause to be performed all actions described in the approved Surrender Plan, and (ii) deliver to Landlord a certification from a third party certified industrial hygienist reasonably acceptable to Landlord certifying that the Premises do not contain any Hazardous Materials and evidence that the approved Surrender Plan shall have been satisfactorily completed by a contractor acceptable to Landlord, 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 expiration of the Term (or, if applicable, the date which is thirty (30) days after any earlier termination of this Lease), free of Hazardous Materials and otherwise available for unrestricted use and occupancy as aforesaid. Landlord shall have the unrestricted right to deliver the Surrender Plan and any report by Landlord's environmental consultant with respect to the surrender of the Premises to third parties. Such third parties and the Landlord Parties shall be entitled to rely on the Surrender Report. 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 the use of Hazardous Materials by any of the Tenant Parties in, on, at, under or about the Premises, Landlord shall have the right to take any such actions as Landlord may deem reasonable or appropriate to assure that the Premises and the Property are surrendered in the condition required hereunder, the cost of which actions shall be reimbursed by Tenant as Additional Rent upon demand. Tenant's obligations under this Section shall survive the expiration or earlier termination of the Term.

(j) Pre-Existing Conditions. Notwithstanding any provision of this Lease to the contrary, Tenant shall in no event have any liability (by way of indemnification or otherwise) for removal or remediation of any Hazardous Materials from the Premises or the Property or for any loss or damage, to the extent that such Hazardous Materials: (i) existed in, on or under the Premises or the Property, as the case may be, on the Commencement Date, or (ii) were placed or released in,

on or under the Premises or the Property other than by the act or omission of Tenant or any Tenant Party, except to the extent (if any) Tenant or any Tenant Party exacerbates the same.

Section 20.25– REIT/UBTI.

Landlord and Tenant hereby agree that it is their intent that all Rent shall qualify as "rents from real property" within the meaning of Sections 512(b)(3) and 856(d) of the Internal Revenue Code of 1986, as amended, (the "Code") and the U.S. Department of the Treasury Regulations promulgated thereunder (the "Regulations"). In the event that (i) the Code or the Regulations, or interpretations thereof by the Internal Revenue Service contained in revenue rulings or other similar public pronouncements, shall be changed so that any Rent no longer so qualifies as "rent from real property" for purposes of either said Section 512(b)(3) or Section 856(d) or (ii) Landlord, in its sole discretion, determines that there is any risk that all or part of any Rent shall not qualify as "rents from real property" for the purposes of either said Sections 512(b)(3) or 856(d), such Rent shall be adjusted in such manner as Landlord may require so that it will so qualify; provided, however, that any adjustments required pursuant to this Section 20.25 shall be made so as to produce the equivalent (in economic terms) Rent as payable prior to such adjustment. The parties agree to execute such further commercially reasonable instrument as may reasonably be required by Landlord in order to give effect to the foregoing provisions of this Section 20.25.

Without limitation of the foregoing and notwithstanding anything contained in this Lease to the contrary, if a sublease, or license of all or any portion of the Premises is permitted under this Lease, the provisions of this Section 20.25 shall continue to apply, and any rent or other amounts received or accrued by Tenant from such sublease, or license shall not be based on the income or profits of any such sublessee, or licensee.

Section 20.26– Patriot Act.

As an inducement to Landlord to enter into this Lease, Tenant hereby represents and warrants that to the best of Tenant's knowledge: (i) Tenant is not, nor is it owned or controlled directly or indirectly by, any person, group, entity or nation named on any list issued by the Office of Foreign Assets Control of the United States Department of the Treasury ("OFAC") pursuant to Executive Order 13224 or any similar list or any law, order, rule or regulation or any Executive Order of the President of the United States as a terrorist, "Specially Designated National and Blocked Person" or other banned or blocked person (any such person, group, entity or nation being hereinafter referred to as a "Prohibited Person"); (ii) Tenant is not (nor is it owned, controlled, directly or indirectly, by any person, group, entity or nation which is) acting directly or indirectly for or on behalf of any Prohibited Person; and (iii) from and after the effective date of the above-referenced Executive Order, Tenant (and any person, group, or entity which Tenant controls, directly or indirectly) has not conducted nor will conduct business nor has engaged nor will engage in any transaction or dealing with any Prohibited Person in violation of the U.S. Patriot Act or any OFAC rule or regulation, including without limitation any assignment of this Lease or any subletting of all or any portion of the Premises or the making or receiving of any contribution of funds, goods or services to or for the benefit of a Prohibited Person in violation of

the U.S. Patriot Act or any OFAC rule or regulation. In connection with the foregoing, it is expressly understood and agreed that (x) any breach by Tenant of the foregoing representations and warranties shall be deemed an Event of Default by Tenant under Section 19.1 above, and (y) the representations and warranties contained in this subsection shall be continuing in nature and shall survive the expiration or earlier termination of this Lease. At Landlord's request Tenant shall furnish to Landlord evidence confirming the representations in this Section. Notwithstanding anything to the contrary contained in this Section 20.26, so long as Tenant or its ultimate parent is a company whose capital stock is traded on a recognized public exchange, Tenant makes no representations or warranties as to the persons or entities owning an interest in Tenant.

Section 20.27– Parking.

Tenant shall have the right, subject to the terms hereof, to utilize in the Parking Garage 2.45 parking spaces per 1,000 rentable square feet of the Premises (the foregoing referred to herein as "Tenant's Parking"), on an unassigned non-exclusive basis, all subject to the rights of other tenants of the Property for ingress and egress to the parking areas on the Property. Tenant's Parking shall be non-transferable (directly or indirectly) and intended solely for the use of Tenant's employees working from and business invitees to the Premises; and as such Tenant shall not offer them for "use" or "license" to any other entity, the general public, or any other tenants of the Building. Landlord shall not be responsible for money, jewelry, automobiles or other personal property lost in or stolen from the parking lot. In addition, Landlord shall not be liable for any loss, injury or damage to persons using the parking lot or automobiles or other property thereon, it being agreed that, to the fullest extent permitted by law, the use of the parking garage shall be at the sole risk of Tenant and its employees. Tenant's rights to park within the parking garage shall be subject to such reasonable rules and regulations therefor as may be set and changed with reasonable prior notice by the Landlord from time to time during the Term. Landlord agrees that such rules and regulations shall be established and applied by Landlord in a non-discriminatory fashion, such that all rules and regulations shall be generally applicable to all other tenants of the Building of a similar nature of Tenant. Landlord reserves the right to relocate and/or temporarily close the parking garage and any or all additional parking facilities to the extent necessary in the event of a casualty or governmental taking or for maintenance and repairs of the parking facilities provided Landlord shall reopen the same or provide replacement parking facilities as soon as practicable thereafter.

Section 20.28– Rooftop Premises.

During the Term, Tenant shall have the right to use that portion of the rooftop of the Building shown on Exhibit F attached hereto (the "Rooftop Premises") for the installation of certain equipment approved by Landlord and purchased and installed by Tenant in accordance with the terms of this Lease (any equipment installed within the Rooftop Premises, as the same may be modified, altered or replaced during the Term, is collectively referred to herein as "Tenant's Rooftop Equipment"). Landlord's approval of such equipment shall not be unreasonably withheld, conditioned or delayed provided Tenant demonstrates to Landlord's reasonable satisfaction that the proposed equipment (i) does not interfere with any base building equipment

operated by Landlord on the roof; (ii) will not affect the structural integrity of the Building or impact the roof or the roof membrane in any adverse manner; (iii) shall be adequately screened so as to minimize the visibility of such equipment; and (iv) shall be adequately sound-proofed to meet all requirements of Legal Requirements and Landlord's specified maximum decibel levels for equipment operations (provided that such Landlord requirements are not enforced in a discriminatory manner against Tenant). Tenant shall not install or operate Tenant's Rooftop Equipment until Tenant has obtained and submitted to Landlord copies of all required governmental permits, licenses, and authorizations necessary for the installation and operation thereof. In addition, Tenant shall comply with all reasonable construction rules and regulations promulgated by Landlord in connection with the installation, maintenance and operation of Tenant's Rooftop Equipment. Except for connection to electric service from which Tenant may obtain electricity at the Rooftop Premises, Landlord shall have no obligation to provide any services including, without limitation, electric current or gas service, to the Rooftop Premises or to Tenant's Rooftop Equipment. Tenant shall be responsible for the cost of repairing and maintaining Tenant's Rooftop Equipment and the cost of repairing any damage to the Building, or the cost of any necessary improvements to the Building, caused by or as a result of the installation, replacement and/or removal of Tenant's Rooftop Equipment. Tenant will have access to the Rooftop Premises as needed to ensure the ongoing maintenance and repair of Tenant's Rooftop Equipment, including by licensed contractors on behalf of Tenant. Landlord makes no warranties or representations to Tenant as to the suitability of the Rooftop Premises for the installation and operation of Tenant's Rooftop Equipment. In the event that at any time during the Term, Landlord determines, in its sole but bona fide business judgment, that the operation and/or periodic testing of Tenant's Rooftop Equipment interferes with the operation of the Building or the business operations of any of the occupants of the Building, then Tenant shall, upon notice from Landlord, cause all further testing of Tenant's Rooftop Equipment to occur after normal business hours (hereinafter defined).

Section 20.29– Letter of Credit.

On or prior to the date of this Lease, Tenant shall deliver to Landlord an irrevocable letter of credit (the "Letter of Credit") that shall (a) be in the initial amount of the Security Deposit; (b) be issued on a form reasonably acceptable to Landlord; (c) name Landlord as its beneficiary; (d) be drawn on an FDIC insured financial institution reasonably satisfactory to Landlord that both (x) has an office in the United States that will accept presentation of, and pay against, the Letter of Credit (and, if such office is not in the greater Boston metropolitan area, permits drawings by facsimile transmission) and (y) satisfies both the Minimum Rating Agency Threshold and the Minimum Capital Threshold (as those terms are defined below). The "Minimum Rating Agency Threshold" shall mean that the issuing bank has outstanding unsecured, uninsured and unguaranteed senior long-term indebtedness that is then rated (without regard to qualification of such rating by symbols such as "+" or "-" or numerical notation) "Baa" or better by Moody's Investors Service, Inc. and/or "BBB" or better by Standard & Poor's Rating Services, or a comparable rating by a comparable national rating agency designated by Landlord in its discretion. The "Minimum Capital Threshold" shall mean that the issuing bank has combined capital, surplus and undivided profits of not less than $1,000,000,000. The Letter of Credit (and any renewals or replacements thereof) shall be for a term of not less than one (1) year. If the

issuer of the Letter of Credit gives notice of its election not to renew such Letter of Credit for any additional period, Tenant shall be required to deliver a substitute Letter of Credit satisfying the conditions hereof at least thirty (30) days prior to the expiration of the term of such Letter of Credit. If the issuer of the Letter of Credit fails to satisfy either or both of the Minimum Rating Agency Threshold or the Minimum Capital Threshold, Tenant shall be required to deliver a substitute letter of credit from another issuer reasonably satisfactory to the Landlord and that satisfies both the Minimum Rating Agency Threshold and the Minimum Capital Threshold not later than twenty (20) business days after Landlord notifies Tenant of such failure. Tenant agrees that it shall from time to time, as necessary, whether as a result of a draw on the Letter of Credit by Landlord pursuant to the terms hereof or as a result of the expiration of the Letter of Credit then in effect, renew or replace the original and any subsequent Letter of Credit so that a Letter of Credit, in the amount required hereunder, is in effect until a date which is at least forty-five (45) days after the Expiration Date. If Tenant fails to furnish such renewal or replacement at least thirty (30) days prior to the stated expiration date of the Letter of Credit then held by Landlord, Landlord may draw upon such Letter of Credit and hold the proceeds thereof (and such proceeds need not be segregated unless otherwise required by Legal Requirements) as a Security Deposit pursuant to the terms of this Section 20.29. Any renewal or replacement of the original or any subsequent Letter of Credit shall meet the requirements for the original Letter of Credit as set forth above, except that such replacement or renewal shall be issued by a national bank reasonably satisfactory to Landlord at the time of the issuance thereof.

Upon an Event of Default, or if any proceeding shall be instituted by or against Tenant pursuant to any of the provisions of any Act of Congress or State law relating to bankruptcy, reorganizations, arrangements, compositions or other relief from creditors (and, in the case of any proceeding instituted against it, if Tenant shall fail to have such proceedings dismissed within sixty (60) days) or if Tenant is adjudged bankrupt or insolvent as a result of any such proceeding, Landlord at its sole option may draw down all or a part of the Letter of Credit to apply against any payment defaults of Tenant hereunder. The balance of any Letter of Credit cash proceeds shall be held in accordance with the provisions below. Should the entire Letter of Credit, or any portion thereof, be drawn down by Landlord, Tenant shall, upon the written demand of Landlord, deliver a replacement Letter of Credit in the amount drawn, and Tenant’s failure to do so within ten (10) days after receipt of such written demand shall constitute an additional Event of Default hereunder. The application of all or any part of the cash proceeds of the Letter of Credit to any obligation or default of Tenant under this Lease shall not deprive Landlord of any other rights or remedies Landlord may have nor shall such application by Landlord constitute a waiver by Landlord.

In the event that Landlord transfers its interest in the Premises, Tenant shall upon notice from and at no cost to Landlord, deliver to Landlord an amendment to the Letter of Credit or a replacement Letter of Credit naming Landlord’s successor as the beneficiary thereof. If Tenant fails to deliver such amendment or replacement within thirty (30) days after written notice from Landlord, Landlord shall have the right to draw down the entire amount of the Letter of Credit and hold the proceeds thereof in accordance with the requirements below.

Landlord shall hold the balance of cash proceeds remaining after a draw on the Letter of Credit (each hereinafter referred to as the "Security Deposit") as security for Tenant's performance of all its Lease obligations. After an Event of Default, Landlord may apply the Security Deposit, or any part thereof, to Landlord's damages without prejudice to any other Landlord remedy. Landlord has no obligation to pay interest on the Security Deposit and may, to the extent permitted by applicable Legal Requirements, co-mingle the Security Deposit with Landlord's funds. If Landlord conveys its interest under this Lease, the Security Deposit, or any part not applied previously, may be turned over to the grantee in which case Tenant shall look solely to the grantee for the proper application and return of the Security Deposit.

If at the end of the term of this Lease, there is no Event of Default hereunder, the Security Deposit and/or Letter of Credit or the remaining proceeds therefrom, as applicable, shall (less any portion thereof which may have been utilized by Landlord to cure any default or applied to any actual damage suffered by Landlord) be returned to Tenant within forty-five (45) days after the end of the Term**.**

Provided that Tenant has not been in default of any of its material non-monetary or monetary obligations under this Lease beyond applicable notice and cure periods at any time during the Term (the "Reduction Condition"), Tenant shall have the right to reduce the amount of the Letter of Credit to $808,338.64 on the first day of month following the fourth (4th) anniversary of the Rent Commencement Date. The reduction in the Letter of Credit shall be accomplished as follows: Tenant shall request such reduction in a written notice to Landlord, and if the Reduction Condition has been met as of the date that such written notice is received, Landlord shall so notify Tenant, whereupon Tenant shall provide Landlord with a substitute Letter of Credit in the reduced amount, or an amendment to the Letter of Credit reducing it to the reduced Security Deposit amount.

Section 20.30 Traffic Demand Management Plan. The Property is subject to a Memorandum of Understanding with the Town of Lexington dated March 9, 2020 (the "MOU"). Tenant agrees, at its sole expense, to comply with the requirements of the MOU, only insofar as they apply to the Premises and/or Tenant's use and occupancy thereof. In the event that the MOU is ever modified, supplemented, amended or replaced, Tenant agrees to comply with all such requirements, only insofar as they apply to the Premises and/or Tenant's use and occupancy thereof.

ARTICLE XXI

Right of First Offer

Section 21.1–Definitions. For the purposes of this Article XXI:

(a) "RFO Conditions" shall be deemed to be satisfied if as of both the date that Landlord provides Landlord's RFO Notice, and as of the commencement of the RFO Term, as said terms are hereinafter defined: (1) this Lease is in full force and effect, (2) there exists no uncured Event of Default by Tenant, (3) the originally named Tenant, itself, together with any Permitted Transferee, is

occupying at least 70% of the entire Premises, and (4) as of the date on which such RFO Premises are expected to be delivered to Tenant, there remain at least two (2) years left in the Term, including any applicable Extended Term.

(b) "Market Area" shall be defined as set forth in Section 3.4 hereof.

(c) "Prevailing Market Rent" shall be defined as set forth in Section 3.4 hereof.

(d) "RFO Premises" shall be all or any separately demised laboratory space in the Building which is contiguous and on the same floor as the Premises, when such area becomes Available for Lease to Tenant, as hereinafter defined.

(e) "Prior Rights" shall be defined as: (1) any extension or renewal option under the Initial Lease of such RFO Premises, (2) Landlord's right to enter into an agreement with the tenant or occupant under the Initial Lease to extend or renew the term of such occupancy, and (3) the rights (whether such rights are designated as a right of first offer, right of first refusal, expansion option, or otherwise) of any tenant or occupant of the Building existing as of the date of this Lease.

(f) Any RFO Premises shall be deemed to be "Available for Lease to Tenant": (1) after the expiration of the term of the initial lease ("Initial Lease") of such RFO Premises to a third party ("Initial Tenant"), as such lease may be extended or renewed, (2) when all Prior Rights to lease such RFO Premises, have either lapsed unexercised or by have been irrevocably waived by the holder of such Prior Rights, and (3) when Landlord intends to offer such RFO Premises for lease.

Section 21.2–Exercise and Negotiation Period.

Subject to satisfaction of all of the RFO Conditions (any of which RFO Conditions Landlord may waive, by written notice to Tenant, in Landlord's sole discretion), Tenant shall have a one-time right of first offer to lease the RFO Premises when such RFO Premises become Available for Lease to Tenant. When Landlord determines that the RFO Premises is Available for Lease to Tenant, Landlord shall give Tenant a written notice ("RFO Offer") offering to lease such RFO Premises to Tenant. Each RFO Offer shall set forth: (i) the location and size of the RFO Premises, (ii) the Annual Fixed Rent which would be payable by Tenant (which Annual Fixed Rent shall be the Prevailing Market Rent of such RFO Premises), (iii) the estimated commencement date with respect to such RFO Premises ("Estimated RFO Commencement Date"), (iv) the term of the Lease and the estimated expiration date with respect to the RFO Premises, and (v) any other material terms applicable to such RFO Offer. Tenant may accept such RFO Offer by giving written notice ("RFO Acceptance") to Landlord on or before the date fifteen (15) days after Landlord gives such RFO Offer to Tenant. If Tenant fails timely give a RFO Acceptance of such RFO Offer to Landlord, then Tenant shall have no further right to lease the offered RFO Premises pursuant to this Article XXII. Any RFO Acceptance by Tenant must be unconditional, except that Tenant may, in its RFO Acceptance, object to Landlord's designation of the Prevailing Market Rent of such RFO Premises. If the RFO Acceptance does not include an objection to Landlord's designation of the Prevailing Market Rent of such RFO

Premises, then Tenant shall conclusively be deemed to have accept such designation. If Tenant timely shall have objected to Landlord's designation of the Prevailing Market Rent, then Landlord and Tenant shall negotiate in good faith for thirty (30) days following the date of the RFO Acceptance to agree in writing on the Prevailing Market Rent for the RFO Premises. If Landlord and Tenant are unable to agree on the Prevailing Market Rent for the RFO Premises by the expiration of such thirty (30) day period, then the Prevailing Market Rent for the RFO Premises shall be determined by a Broker Determination in accordance with the procedures set forth in Section 3.4(e) hereof.

Section 21.3- Terms of RFO

Except as set forth herein, the leasing to Tenant of such RFO Premises shall be upon all of the same terms and conditions of the Lease, except as follows:

(a) The RFO commencement date shall be the later of: (x) the Estimated RFO Commencement Date in respect of such RFO Premises as set forth in Landlord's RFO Notice or (y) the date that Landlord delivers such RFO Premises to Tenant.

(b) The Annual Fixed Rent with respect to such RFO Premises shall be either (x) the Annual Fixed Rent set forth in Landlord's Notice with respect to such RFO Premises, or (y) the Annual Fixed Rent agreed upon in writing by Landlord and Tenant pursuant to the provisions above, or (z) the Annual Fixed Rent for the RFO Premises determined pursuant to Section 3.4(e), as applicable.

(c) Tenant shall take such RFO Premises "as-is" in its then (i.e., as of the date of premises delivery) state of construction, finish, and decoration, without any obligation on the part of Landlord to construct or prepare any RFO Premises for Tenant's occupancy (except that (i) all systems and equipment serving the RFO Premises shall be in good working order, (ii) the RFO Premises shall be in compliance with applicable Legal Requirements (or Landlord shall cause the same to comply), and (iii) such "as is" nature shall be taken into consideration in determining the Prevailing Market Rent).

Section 21.4- Lease Amendment for ROFO

Notwithstanding the fact that Tenant's exercise of the above-described option to lease RFO Premises shall be self-executing, the parties hereby agree promptly to execute a lease amendment reflecting the addition of such RFO Premises, and the Annual Fixed Rent payable in respect of such RFO Premises. The execution of such lease amendment shall not be deemed to waive any of the conditions to Tenant's exercise of the herein option to lease the RFO Premises, unless otherwise specifically provided in such lease amendment.

Section 21.5- Rights Subordinate to Prior Rights

Notwithstanding anything herein to the contrary, Tenant's RFO is subject and subordinate to the Prior Rights existing on the Effective Date.

Section 21.6- No ROFO in Last Two Years

In no event shall Tenant have any rights under this Article XXII if less than twenty-four (24) months remain in the Lease Term (including any Extended Term, and Tenant shall have the right to accept the offer for such RFO Premises if Tenant elects to exercise any renewal right hereunder extending the Lease Term such that twenty-four (24) months or more will remain in the Lease Term), and all rights of Tenant under this Article XVII shall terminate upon the expiration or earlier termination of the Term of this Lease.

(page ends here)

WITNESS the execution hereof in any number of counterpart copies, each of which shall be deemed an original for all purposes as of the day and year first above written.

REVOLUTION LABS OWNER, LLC, a Delaware limited liability company

By: /s/ Philip F. Dorman
Name: Philip F. Dorman
Its: Managing Partner
Hereunto duly authorized

[LANDLORD]

KEROS THERAPEUTICS, INC., a Delaware corporation

By: /s/ Jasbir S. Seehra
Name: Jasbir S. Seehra, Ph.D.
Its: President and CEO
Hereunto duly authorized

[TENANT]

EXHIBIT A

PREMISES PLAN

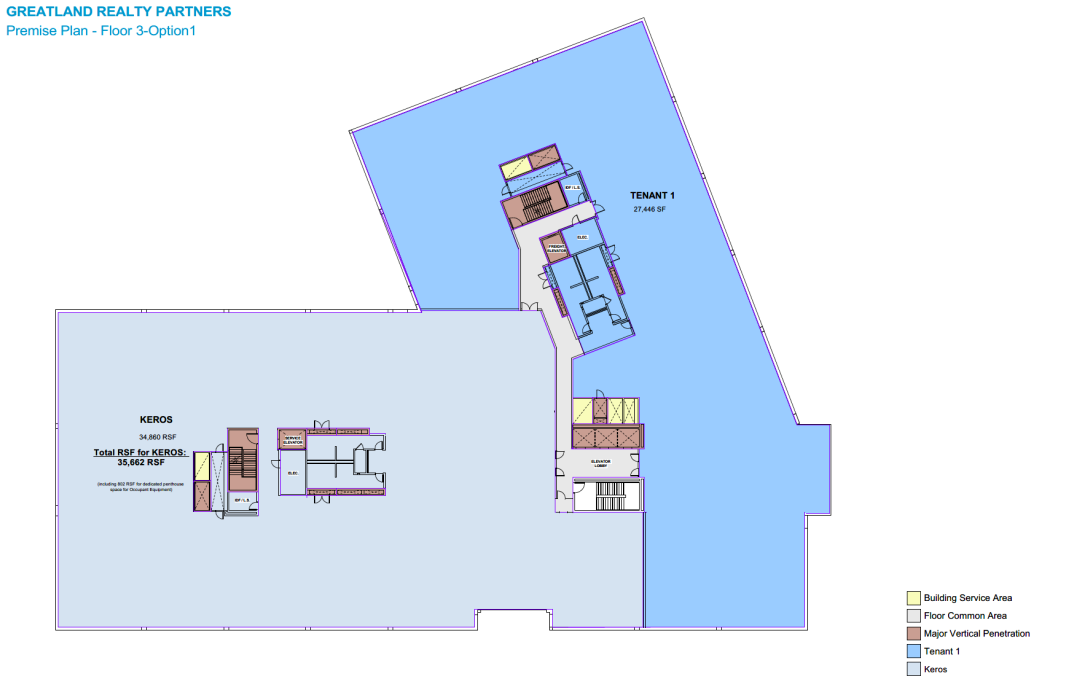


EXHIBIT B

SITE PLAN

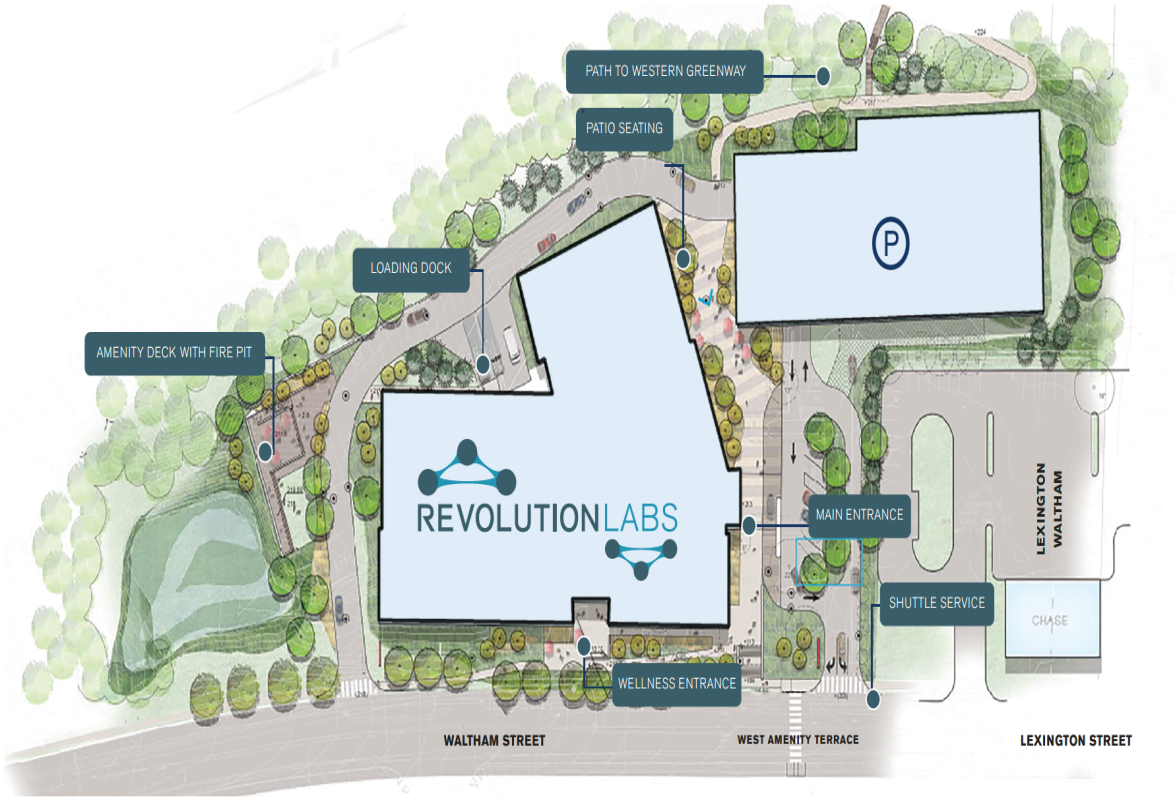


EXHIBIT C

WORK LETTER

This Work Letter shall set forth the obligations of Landlord and Tenant with respect to (i) the improvements to be performed by Landlord in constructing the Building (the "Base Building Work") and (ii) the improvements to be performed by Landlord in preparing the Premises for Tenant's Permitted Use (the "Premises Work" and together with the Base Building Work, the "Landlord's Work"). This Exhibit shall not be deemed applicable to any additional space added to the Premises at any time or from time to time, whether by any options under the Lease or otherwise, or to any portion of the original Premises or any additions to the Premises in the event of a renewal or extension of the original Term of the Lease, whether by any options under the Lease or otherwise, unless expressly so provided in the Lease or any amendment or supplement to the Lease.

I. Landlord's Work.

A. Base Building Work. Landlord shall, at Landlord's cost and expense, perform the Base Building Work consisting of the work listed on the matrix attached hereto and incorporated herein as Exhibit C-1 (Tenant/Landlord Responsibility Matrix) as "Landlord" and shown on the Base Building Plans attached hereto and incorporated herein as Exhibit C-2 including, without limitation, the structural portions of the Building, the public restrooms, and the Building mechanical, electrical and plumbing systems and equipment located in the internal core of the Building. Notwithstanding the foregoing, Landlord reserves the right to modify the Base Building Plans and Specifications provided that such modifications (i) shall not materially and adversely affect Tenant's use of or access to the Premises, and (ii) shall comply with the terms and conditions of this Lease. Landlord shall provide Tenant with reasonable notice of any changes to the Base Building Plans and Specifications that will affect the Premises.

B. Premises Work Plans. Landlord shall perform the Premises Work consisting of the work listed on the matrix attached hereto as Exhibit C-1 (Tenant/Landlord Responsibility Matrix) as "Tenant" and the Premises Work Plans (as hereinafter defined) provided, however, that in no event shall Landlord be obligated to expend an amount in excess of the Landlord's Contribution on account of the Premises Work. Within four (4) weeks of the date hereof, Tenant shall cause its architect to prepare schematic plans and specifications for Landlord's approval (once approved pursuant to the provisions of this Exhibit C, the "Schematic Plans"). After receipt of the Schematic Plans, Landlord shall have ten (10) days in which to provide comments on the Schematic Plans or approve or disapprove of the Schematic Plans, such approval or disapproval not to be unreasonably withheld, delayed or conditioned. In addition to the foregoing, within four (4) weeks of Landlord's approval of the Schematic Plans, Landlord shall provide Tenant with a construction budget prepared by the General Contractor (as hereinafter defined) for the work shown on the Schematic Plans. Within eight (8) weeks of approval of the Schematic Plans by Landlord, Tenant shall cause its architect to prepare design development plans and specifications for Landlord's approval (once approved pursuant to the provisions of this Exhibit C, the "DD Plans"), which DD Plans shall be consistent with the Schematic Plans. Landlord shall have ten (10) days in which to provide comments on the DD Plans or approve or

disapprove of the Schematic Plans, such approval or disapproval not to be unreasonably withheld, delayed or conditioned. In addition to the foregoing, within four (4) weeks of Landlord's approval of the DD Plans, Landlord shall provide Tenant with an updated construction budget prepared by the General Contractor for the work as shown on the DD Plans. Thereafter, and within six (6) weeks of the Landlord's approval of the DD Plans, Tenant shall cause its architect to prepare construction plans and specifications ("CD's") for Landlord's approval (once approved pursuant to the provisions of this Exhibit C, the "Premises Work Plans"), which shall be consistent with the DD Plans and sufficient to allow the Premises Work to be fully bid out by Callahan Construction (the "General Contractor"), the general contractor for the Base Building Work and the Premises Work. Landlord shall have ten (10) days in which to provide comments on the CD's or approve or disapprove of the CD's, such approval or disapproval not to be unreasonably withheld, delayed or conditioned. In addition to the foregoing, within four (4) weeks of Landlord's approval of the CD Plans, Landlord shall provide Tenant with an updated construction budget prepared by the General Contractor for the work as shown on the CD Plans. Landlord shall enter into a contract ("Contract") for the Premises Work with the General Contractor which shall be on the basis of a guaranteed maximum price. Final pricing of the Premises Work Plans by the General Contractor will stipulate the following number of supplier or subcontractor quotes be required, unless approved otherwise in advance by Landlord and Tenant:

(i) Scopes of work $50,000 or less: Solicitation of One (1) quote minimum.

(iii) Scopes of work greater than $50,000: Solicitation of three (3) quotes minimum

Landlord and Tenant acknowledge that because the Premises Work Plans have not yet been prepared, (x) it is impossible to determine the schedule impact of delivery and construction of items that Tenant will be required to select in connection with the various iterations of the Premises Work Plans; and (y) it is necessary to release certain lead time items prior to execution of the Contract with the General Contractor. As a result, Tenant hereby agrees to work in good faith with Landlord in order to allow Landlord to proceed with the Landlord's Work without any impact on Landlord's schedule as a result of the foregoing which may include, without limitation, making certain substitutions of Tenant selected items provided that the same are materially equivalent in terms of function and use. Any failure by Tenant to act in good faith in accordance with the foregoing shall be deemed a Tenant Delay.

C. Cost of Premises Work. Landlord and Tenant acknowledge that the Premises Work Plans have not yet been prepared and, therefore, it is impossible to determine the exact cost of the Premises Work at this time. Accordingly, Landlord and Tenant agree that Landlord's obligation to pay for the Cost of Premises Work, as hereinafter defined shall be limited to the Landlord Contribution and that Tenant shall be responsible for the Cost of the Premises Work to the extent that it exceeds the amount of the Landlord Contribution. The "Cost of Premises Work" shall be defined as all hard costs ("Hard Costs") incurred by Landlord relating to the performance of the Premises Work (including, without limitation, the cost of obtaining permits and any applicable state sales and use taxes) and soft costs ("Soft Costs") incurred by Landlord in connection with the Premises Work. Soft Costs will include a payment to Greatland Realty

Partners LLC of a construction management fee equal to 3% of all Hard Costs payable by Tenant in connection with the Premises Work. Such amount shall be payable on a monthly basis as such Hard Costs are incurred.

D. Tenant's Share. For the purposes of this Exhibit C: (i) if the Cost of the Premises Work is equal to, or less than, the Landlord's Contribution, then "Tenant's Share" shall be 0%, and (ii) if the Cost of the Premises Work is greater than the Landlord's Contribution, then Tenant's Share shall be a fraction, the numerator of which is the amount by which the total Cost of the Premises Work exceeds the sum of: (x) the Landlord's Contribution, plus (y) if Tenant has elected to use any portion of the Additional Landlord Contribution pursuant to this Exhibit C, the Elected Amount of Additional Landlord Contribution, and the denominator of which is the total Cost of the Premises Work.

E. Tenant's Obligation to Pay. If the Cost of the Premises Work exceeds the Landlord's Contribution, Tenant shall pay to Landlord such excess costs as follows: (i) Tenant shall pay Tenant's Share of the Cost of the Premises Work within ten (10) business days of Billing, as hereinafter defined, (ii) with respect to any Changes to the Premises Work, Tenant shall pay for the cost of such changes in accordance with this Exhibit C, and (iii) with respect to any increases in the Cost of the Premises Work arising from Claims by the General Contractor, Tenant shall pay for the cost of such Claims as set forth below. "Billing" shall be defined as any invoice from Landlord setting forth, reasonable detail, the amount due from Tenant, and shall include invoices from vendors and service providers, and applications for payment from the General Contractor for work completed through the date of Billing, as certified by the General Contractor. Billing may not be submitted to Tenant more than one time per calendar month. The amounts payable by Tenant hereunder constitute Rent payable pursuant to the Lease, and the failure to timely pay same constitutes an event of default under the Lease.

F. Soft Cost Amounts. In the event that the Cost of the Premises Work does not exceed the Landlord's Contribution, Tenant shall be permitted to utilize up to $534,930.00 of the Landlord's Contribution (i.e. $15.00 per square foot of the Premises) towards costs relating to the following: architectural, design, engineering, project management, IT/data wiring and furniture, fixtures and equipment. In such event, Landlord shall reimburse Tenant within thirty (30) days of receipt of invoices with reasonable back up showing in reasonable detail the costs, accompanied by certifications executed by the Chief Executive Officer, Chief Financial Officer, Chief Operations Officer, Vice President, or other officer of Tenant that the amount of the requisition in question does not exceed the cost of the items, services and work covered by such requisition. Landlord shall have no obligation to pay any portion of Landlord's Contribution with respect to any requisition submitted after the date which is six (6) months following the Commencement Date.

G. Changes. If Tenant desires any change, addition or alteration in any of the Premises Work Plans after approval by Landlord ("Changes"), Tenant shall have such desired revisions to the drawings prepared. Promptly upon receipt of the revisions, Landlord shall notify Tenant in writing of the increased cost, if any, which will be chargeable to Tenant by reason of such change, addition or deletion. Tenant, within three (3) business days, shall notify Landlord

in writing whether it desires to proceed with such Change and in the event that Tenant so desires to proceed, Tenant shall reimburse Landlord for the Cost of the Premises Work associated with such Changes within ten (10) business days of Billing. In the absence of such written authorization, Landlord shall have the option to continue work on the Premises disregarding the requested Change.

H. Claims. To the extent that any claims ("Claims") by the General Contractor cause the Cost of the Premises Work to exceed the Landlord's Contribution, Tenant shall pay for such excess within ten (10) business days of Billing. Claims shall include any amounts properly due to the General Contractor under the Contract based upon the claims of the General Contractor under the Contract, provided however, that the Claims shall not include any amounts arising from the default or negligence of Landlord, or Landlord's agents or employees, under the Contract.

I. Additional Allowance.

(1) At Tenant's written election ("Additional Allowance Election") Tenant shall have the right to require Landlord to provide the Additional Allowance towards Permitted Costs. Tenant must give the Additional Allowance Election on or before the date which is six (6) months after the Effective Date. The Additional Allowance Election shall set forth the amount ("Elected Amount") of Additional Allowance which Tenant elects to apply towards Permitted Costs. Landlord shall provide the Additional Allowance to Tenant on the same terms and conditions as Landlord provides the Allowance to Tenant, except as set forth in this Section F.

(2) If Tenant elects that Landlord provide the Additional Allowance to Tenant, then, commencing as of Construction Rent Commencement Date, as hereinafter defined, and continuing on the first day of each month thereafter throughout the Initial Term of the Lease, Tenant shall pay to Landlord, as Additional Rent, Construction Rent, as hereinafter defined. The "Construction Rent Commencement Date" shall be the Rent Commencement Date, if the Rent Commencement Date is the first day of a calendar month; otherwise, the Construction Rent Commencement Date shall be the first day of the calendar month next following the Rent Commencement Date,

(3) "Construction Rent" shall be the monthly payments, based upon the Elected Amount of Additional Allowance, equal to the monthly payment of principal and interest which would be necessary to repay a loan in the amount of the Elected Amount, together with interest at the rate of eight percent (8%) per annum, on a level direct reduction basis over the period commencing as of the Construction Rent Commencement Date and ending as of the expiration of the Initial Term of the Lease.

(4) Monthly payments of Construction Rent shall be payable at the same time and in the same manner as Fixed Rent is payable under the Lease. Construction Rent shall not be abated or reduced for any reason whatsoever (including, without limitation, untenantability of the Premises or termination of the Lease). Since the payment of Construction Rent represents a reimbursement to Landlord of costs which Landlord will incur in connection with the construction of the Premises, if there is any default (beyond the expiration of any applicable

grace periods) of any of Tenant's obligations under the Lease (including, without limitation, its obligation to pay Construction Rent) of if the Term of this Lease is terminated for any reason whatsoever prior to the termination of the Term of the Lease, Tenant shall pay to Landlord, immediately upon demand, the unamortized balance of the Elected Amount. Tenant's obligation to pay the unamortized balance of the Construction Rent shall be in addition to all other rights and remedies which Landlord has based upon any default of Tenant under the Lease, and Tenant shall not be entitled to any credit or reduction in such payment based upon amounts collected by Landlord from reletting the Premises after the default of Tenant.

J. Arbitration. Any disputes relating to provisions or obligations in this Work Letter as to which a specific provision for a reference to arbitration is made herein shall be submitted to arbitration in accordance with the provisions of expedited construction arbitration rules, as from time to time amended. Arbitration proceedings, including the selection of an arbitrator, shall be conducted pursuant to the rules, regulations and procedures from time to time in effect as promulgated by the American Arbitration Association. Prior written notice of application by either party for arbitration shall be given to the other at least ten (10) days before submission of the application to the said Association's office in the City wherein the Building is situated (or the nearest other city having an Association office). The arbitrator shall hear the parties and their evidence. The decision of the arbitrator shall be binding and conclusive, and judgment upon the award or decision of the arbitrator may be entered in the appropriate court of law, and the parties consent to the jurisdiction of such court and further agree that any process or notice of motion or other application to the Court or a Judge thereof may be served outside the State wherein the Building is situated by registered mail or by personal service, provided a reasonable time for appearance is allowed. The costs and expenses of each arbitration hereunder and their apportionment between the parties shall be determined by the arbitrator in his award or decision. No arbitrable dispute shall be deemed to have arisen under this Lease prior to the expiration of the period of twenty (20) days after the date of the giving of written notice by the party asserting the existence of the dispute together with a description thereof sufficient for an understanding thereof.

K. Landlord's Fit Plan Allowance. Landlord shall contribute an amount of up to $4,279.44 (i.e. $.12 per rentable square foot of the Premises) towards the cost of the test fit plan prepared by Tenant's architect. Landlord shall, within thirty (30) days of receipt of paid invoices from Tenant, pay the Landlord's Fit Plan Allowance to Tenant.

L. Early Access. Provided that Tenant does not materially interfere with or materially delay the completion by Landlord or its agents or contractors of Landlord's Work, Tenant shall have the right to enter the Premises during the thirty (30) day period prior to the Commencement Date, during normal business hours and without payment of Annual Fixed Rent or Additional Rent (as hereinafter defined), for the purpose of installing equipment, telecommunications and data wiring and cabling, furniture and similar items; and such entry shall be made in compliance with all terms and conditions of this Lease (except as set forth herein) and the Rules and Regulations then in effect for the Building and shall be coordinated with Landlord's building manager. Such right of entry shall be deemed a license from Landlord to Tenant, and any entry thereunder shall be at the risk of Tenant. For the avoidance of doubt,

any delays caused in the completion of Landlord's Work arising directly or indirectly from the entry by Tenant to the Premises pursuant to the provisions hereof shall be deemed a Tenant Delay, subject to any applicable notice and cure period. Provided that Tenant has not begun operating its business from the Premises, and subject to all of the terms and conditions of this Lease, the foregoing activity shall not constitute the delivery of possession of the Premises to Tenant and the Term shall not commence solely as a result of said activities. Prior to entering the Premises Tenant shall obtain all insurance it is required to obtain by the Lease and shall provide certificates of said insurance to Landlord

M. Landlord's Warranty.

(i) Landlord's Warranty. Landlord hereby warrants and represents to Tenant that Premises Work shall be performed: (i) in a good and workmanlike manner; (ii) in all material respects, in accordance with the Premises Plan, and (iii) in accordance with all applicable Legal Requirements ("Landlord's Warranty").

(ii) Tenant's Remedies in the Event of Breach of Landlord's Warranty. If, on or before the Warranty Expiration Date (as hereinafter defined), Tenant gives Landlord written notice of any breach of Landlord's Warranty promptly after Tenant becomes aware of such breach, Landlord shall, at no cost to Tenant, correct or repair such breach as soon as conditions reasonably permit and as to which, in either case, Tenant shall have given notice to Landlord, as aforesaid. The "Warranty Expiration Date" shall be defined as the date that is eleven (11) months and two (2) weeks after the Commencement Date. Except to the extent to which Tenant shall have given Landlord notice of respects in which Landlord has breached Landlord's Warranty or Landlord has otherwise failed to perform Landlord's construction obligations under this Exhibit C, Tenant shall be deemed conclusively to have: (i) approved the Premises Work, (ii) waived any claim that Landlord has breached Landlord's Warranty, and (iii) have agreed that Tenant has no claim that Landlord has failed to perform any of Landlord's obligations under this Exhibit C. The provisions of this Section L(ii) set forth the Tenant's sole remedies for any breach of the Landlord's Warranty. With respect to any latent defects in Landlord's Work discovered by Tenant after the Warranty Expiration Date, Landlord shall, upon request of Tenant, assign to Tenant its rights against any contractor, subcontractor, and/or designer engaged by Landlord in connection with Landlord's Work to the extent necessary to enable Tenant to assert claims against such contractor, subcontractor and/or designer in connection with such latent defect.

N. Applicability of Exhibit. This Exhibit shall not be deemed applicable to any additional space added to the Premises at any time or from time to time, whether by any options under the Lease or otherwise, or to any portion of the original Premises or any additions to the Premises in the event of a renewal or extension of the original Term of the Lease, whether by any options under the Lease or otherwise, unless expressly so provided in the Lease or any amendment or supplement to the Lease.

N. Construction Representation. Landlord hereby appoints Teri Ford as its construction representative and Tenant hereby appoints Ed Dondero as its construction

representative. Each party authorizes the other to rely in connection with design and construction upon approval and other actions on the party's behalf by any Construction Representative of the party named or any person hereafter designated in substitution or addition by written notice to the party relying.

EXHIBIT C-1

TENANT MATRIX

Revolution Labs - Landlord/Occupant Matrix	**RESPONSIBILITY**	
DESCRIPTION	**Building Owner**	**Occupant**
GENERAL		
Building Core & Shell construction in accordance with the requirements of Massachusetts State Building Code	X	
Occupant improvement construction in accordance with the requirements of Massachusetts State Building Code		X
Building Core & Shell shall be LEED gold certifiable by USGBC Standards	X	
SITEWORK		
Base building site work per base building plans	X	
Telephone service empty conduit to base building MDF room	X	
Domestic sanitary sewer connection to street	X	
Lab waste sewer connection to street (from pH neutralization system)	X	
Roof storm drainage	X	
Electrical service to main electric transformer room	X	
Gas service to gas meter location	X	
Domestic water service to water service/fire pump room	X	
Fire protection water service to water service/fire pump room	X	
LANDSCAPING		
Site improvements and furnishings per base building plans	X	
Landscape per base building plans	X	
Hardscape per base building plans (amenity deck, benches, firepit, etc.)	X	
STRUCTURE		
Reinforced concrete slabs with live load capacity of 100 psf	X	
Reinforced concrete slabs with 150 psf loading capacity in mechanical spaces	X	
Structural enhancements for specific Occupant load requirements		X
Upgrade structural reinforcing to meet vibration criterion required by Occupant		X
Typical Floor to Floor height framing as follows	X	
Level 1: 15'-0"/20'-0"		
Level 2: 15'-0"		
Level 3: 15'-0"		
Column bay spacing on typical floor: 33' wide column bays	X	
Structural framing dunnage above roof for Base Building equipment	X	
Structural framing dunnage above roof for Occupant equipment subject to Landlord review and approva		X
Framed openings for Base Building utility risers	X	
Framed openings for Occupant utility risers (Occupant use subject to Landlord review and approval)		X
Miscellaneous metals items and/or concrete pads for Base Building equipment	X	
Miscellaneous metals items and/or concrete pads for Occupant equipment		X
ROOFING		
TPO membrane roofing	X	
Roofing penetrations for Base Building equipment/systems and dunnage	X	
Roofing penetrations for Occupant equipment/systems or dunnage, installed by Base Building roofing subcontracto		X
Walkway pads to Base Building equipment	X	
Walkway pads to Occupant equipment		X
EXTERIOR		
Building exterior envelope	X	
Base Building entrances	X	
Building-mounted signage and/or ground-mounted exterior signage for Occupant identification subject to Landlord review and approval		X
Loading dock overhead doors	X	
Penthouse enclosure for Base Building rooftop equipment	X	
Penthouse enclosure for Occupant rooftop equipment (within base building penthouse	X	
Screening required for Occupant rooftop equipment (outside the penthouse)		X
COMMON AREAS		
Lobby finishes per base building plans	X	
Fitness center and amenity areas, per base building plans	X	
Above grade parking garage	X	
Bicycle Storage in garage	X	
Egress stairs	X	
Interior signage for all Base Building rooms (as required by Code)	X	
Core area toilet rooms per base building plans. Toilet room accessories shall be similar or equal to those manufactured by Bobrick Company, all in accordance with handicapped accessibility regulations.	X	
Janitor's closets in core areas	X	
Electrical closets in core areas. Electrical closets can be used for Occupant- provided electrical equipment, subject to coordination with Base Building equipment, and conformance to all Code requirements.	X	
Main Electric Room	X	
Stacked tel/data riser closet for connectivity between demarcation room and Occupant's remote IDF.	X	
Demarcation room (MDF)	X	
Water room	X	
Loading dock area per base building plans, including trash/recycle room	X	
Chemical Storage Room (2 hour rated CMU walls includes the ceiling with spray fire proofing	X	
PH Room - gravity-fed recessed pH neutralization tank on 1st floor	X	
Walls in toilet rooms, stairways, and Base Building utility rooms shall have a final paint finish	X	
Doors, frames, and hardware at common areas	X	
Finishes in Occupant areas		X
Egress corridors on multi-Occupant floors (if required floor layout)	X	

ELEVATORS		
3 Passenger destination elevators with 3500 lb. capacity, 150 FPM. Each serves main lobby Level 1 through Level 3	X	
1 Service elevator with 4500 lb. capacity, 150 FPM, Door width 4'-0"	X	
1 Garage elevator with 3500 lb. capacity, 200 FPM.	X	
WINDOW TREATMENT		
Furnish and install Building Standard window treatment including blocking in Occupant areas		X
Window sills as applicable in Occupant areas		X
Occupant AREAS		
Drywall and finishes at inside face of exterior wall		X
Finished drywall at building core partitions	X	
Drywall and finishes at column enclosures		X
Finishes at inside face at Occupant side of core partitions		X
Additional toilet rooms within Occupant Premises		X
Occupant Premises HVAC and Plumbing Rooms		X
Electrical closets within Occupant Premises		X
Tel/data rooms for interconnection with Occupant tel/data		X
Occupant kitchen areas		X
Modifications to core areas to accommodate Occupant requirements		X
Partitions, ceilings, flooring, painting, finishes, doors, frames, hardware, millwork, casework, and buildou		X
Fixed or movable casework		X
Laboratory equipment including, but not limited to, biosafety cabinets, autoclaves, glasswashers, bioreactor		X
Chemical fume hoods, bench fume hood, lab casework		X
Shaft enclosures for Base Building systems' risers	X	
Shaft enclosures for Occupant risers outside of the allocated space in the main vertical Base Building shafts (in coordinated locations approved by Building Owner)		X
All interior signage for Occupant Premises		X
Sound attenuation upgrades for Occupant Premises to comply with Occupant acoustical criteria and design of Occupant Areas		X
Fire safing and/or fire stopping, as required, for all penetrations both within the Occupant Premise and in Base Building areas for penetrations required for the installation of their MEP/FP systems.		X
FIRE PROTECTION		
Fire service entrance including fire department connection, alarm valve, and back flow protection	X	
Base Building area distribution piping and up-turned sprinkler heads	X	
Stair distribution piping and sprinkler heads	X	
Primary distribution and sprinkler heads adequate to support light hazard (with upturned heads	X	
All run outs, drop heads, and related equipment within Occupant Premises		X
Modification of sprinkler piping and head locations to suit Occupant layout and hazard index		X
Specialized extinguishing systems		X
Pre-action dry-pipe systems (if required) within Occupant Premises		X
Fire extinguisher cabinets within Base Building areas	X	
Fire extinguisher cabinets within Occupant Premises		X
Standpipes, distribution and hose connections within egress stairs, and lobby	X	
Additional hose connections within Occupant Premises, including distribution piping		X
Chemical fire extinguishing systems within Occupant Premises.		X
PLUMBING		
Domestic water service with backflow prevention and Base Building risers	X	
Domestic water distribution within Occupant Premises including reduced pressure backflow preventer		X
Base Building restroom plumbing fixtures compliant with accessibility requirements	X	
Occupant restroom plumbing fixtures compliant with accessibility requirements		X
Occupant metering and sub-metering at Occupant connection		X
Storm drainage system	X	
Sanitary waste and vent service for Base Building areas	X	
Sanitary waste and vent service for Occupant Premises		X
Hot water generation for Base Building restrooms	X	
Non-potable water risers for lab use including water booster system and reduced pressure backflow preventer	X	
Non-potable water distribution within Occupant Premises		X
Two stage active pH neutralization system with 5,000 gallon a day capacity (pro-rata per tenant	X	
Lab waste and vent pipe risers	X	
Non-potable hot water generation for Occupant use	X	
Lab air compressor		X
Compressed air piping risers		X
Compressed air pipe distribution within Occupant Premises for specific points of use		X
Lab vacuum system		X
Lab vacuum pipe risers		X
Lab vacuum pipe distribution within Occupant Premises for specific points of use		X
Central tepid water system	X	
Tepid water risers with taps for Occupant connection	X	
Tepid water pipe distribution and emergency fixtures within Occupant Premises		X
RO/DI Water Systems as required by Occupant		X
Manifolds, piping, and other requirements including cylinders, not specifically mentioned above		X
NATURAL GAS		
Natural gas service to Building	X	
Natural gas service to Base Building boilers	X	
Natural gas service, pressure regulator and meter for Occupant equipment		X
Natural gas piping from Occupant meter to Occupant Premises or Occupant equipment area		X
Natural gas pipe distribution within Occupant Premises		X
Natural gas pressure regulator vent pipe riser from Occupant meter location through roof		X

HEATING, VENTILATION, AIR CONDITIONING (HVAC)		
Cooling towers, supporting condenser water filtration, pumps and piping	X	
Stair pressurization if required by code	X	
Main electric room ventilation system	X	
Central gas fired boiler plant	X	
Hot water and chilled water pipe risers	X	
Hot water and chilled water pipe distribution within Occupant Premises		X
Reheat coils within Occupant Premises		X
Reheat coils within Base Building areas	X	
Building Management System (BMS) for Base Building	X	
BMS (compatible with Landlord's system) within Occupant's Premises monitoring Occupant infrastructure		X
Supply air duct distribution, VAV terminals or fan coils, equipment connections, insulation, air terminals, dampers, hangers, etc. within Occupant Premises		X
Supply air duct distribution, VAV terminals or fan coils, equipment connections, insulation, air terminals, dampers, hangers, etc. within Base Building areas	X	
Restroom exhaust for Base Building area restrooms	X	
Restroom exhaust for new restrooms built within Occupant Premises		X
Tel/data room ventilation system for Base Building tel/data closets	X	
Tel/data room ventilation system for tel/data closets within Occupant Premises		X
Electric room ventilation system for Base Building electrical closets	X	
Electric room ventilation system for electrical closets within Occupant Premises		X
Sound attenuation for Base Building equipment to comply with Zoning Ordinance	X	
Sound attenuation for Occupant equipment to comply with Zoning Ordinance		X
Additional / dedicated cooling equipment for Occupant requirements		X
Hot water and chilled water risers for future Occupant HVAC distribution systems	X	
~~Condenser water equipment and risers for future Occupant process cooling~~	~~X~~	
BTU meters on hot water, chilled water and condenser water runouts to Occupant fan coils, heat pumps, and reheat coils and radiation compatible with and tied back to Landlord BMS & Metering System		X
Fan coils, heat pumps, chilled beams and associated distribution and controls to support Occupant HVAC		X
Cooling Tower Capacity: ~~500~~ Tons/cell 750	X	
Central water-cooled chilled water plant.	X	
Chilled water pipe distribution within Occupant Premises		X
~~Condenser water pipe distribution within Occupant Premises~~		~~X~~
Boiler Plant Capacity: ~~20,000~~ MBH ~~(Providing N+1 Capacity;~~ 16,000 MBH	X	
Hot Water Capacity Occupant Floor: ~~80~~ GPM for each Occupant use on 1st floor and ~~60~~ GPM for each Occupant use on 2nd and 3rd floors (each floor has a total of 240 GMP of hot water) 120 120	X	
Cooling Tower Capacity: 1,500 Tons	X	
~~Process Condenser Water Capacity per Occupant Floor: 60 GPM for each Occupant use on 1st floor and 45 GPM for each Occupant use on 2nd and 3rd floors (each floor has a total of 150 GMP of processed condenser water)~~	X	
Central water-cooled chilled water plant (1,500 Tons capacity)	X	
Chilled Water Capacity allocated for Office Space: 60 GPM for each Occupant use on 1st floor and ~~45~~ 90 GPM for each Occupant use on 2nd and 3rd floors ~~(each floor has a total of 150 GMP of tenant chilled water)~~ (1st floor has a total of 120 GPM. 2nd and 3rd floors have a total of 180 GPM of tenant chilled water)	X	
Chilled water pipe distribution within Occupant Premises		X
Chilled water heat exchanger, pumps and pipe distribution to central air handling units	X	
High performance energy recovery system in air handling systems	X	
~~Condenser water pipe distribution within Occupant Premises~~		~~X~~
Lab once-through exhaust air handling units with prefilters, energy recovery coils and (3) three high plume exhaust fans (1 fan on stand-by). Units are sized for approximately 50,000 CFM	X	
Lab once-through supply air handling units with prefilters, final filters, chilled water coils, and energy recovery / hot water coils. Units are sized for approximately 50,000 CFM (1.75 CFM per usable SF) for lab space and 0.25 CFM / SF of office space, based on 60/40 lab/office.	X	
Occupant Individual specialty high plume exhaust fans		X
Airflow measuring station on supply air to Occupant duct distribution compatible with and tied back to Landlord BMS & Metering system.		X
Exhaust air duct distribution, exhaust air valves, equipment connections, insulation, air terminals, dampers, hangers, etc. within Base Building Areas	X	
Exhaust air duct distribution, exhaust air valves, equipment connections, insulation, air terminals, dampers, hangers, etc. within Occupant Premises		X
ELECTRICAL		
Natural Gas emergency generator (450kw) for Base Building use only	X	
Sound attenuation for emergency generator to comply with Zoning Ordinance	X	
480/277V bus riser in electrical closets for Occupant connection. Riser will include(2)1600 AMP vertical bus ways, one per wing	X	
Bus plug, meter socket, meter, and disconnect for bus tie in		X
Electric Check meter on Occupant distribution to lights, plugs, HVAC and general power on floor, compatible with and tied back to Landlord BMS & Metering System		X
Standby natural gas generator for Occupant		X
Standby power distribution within Occupant Premises		X
Automatic transfer switches for Occupant load		X
Lighting and power distribution for Base Building areas	X	
Lighting and power distribution for Occupant Premises		X
Life safety emergency lighting/signage including bus plugs, panels and circuit breakers for Base Building areas	X	
Life safety emergency lighting/signage for Occupant Premises		X
Base Building transformers and house panels for Base Building area	X	
Occupant panels, transformers, etc. in addition to Base Building house panels for Base Building areas		X
Allocation of bus power for Occupant use (w/USF):	X	
60% Lab:		
Lighting: 1.5 w / SF		
Lab Power: 10.0w/ SF		
Mechanical: 2.0w/ SF		
Misc.: 1.5 w/ SF		

40% Office:		
Lighting: 1.0 w / SF		
Office Power: 4.0 w / SF		
Mechanical: 1.5 w/ SF		
Misc.: 1.5 w/ SF		
Building Lightning Protection System	X	
Occupant roof mounted equipment connection to Building Lightning Protection System		X
Uninterruptable Power Source and associated distribution equipment		X
FIRE ALARM		
Base Building fire alarm system with devices within Base Building areas	X	
Fire alarm sub panels and devices for Occupant Premises with integration into Base Building system		X
Alteration to fire alarm system to facilitate Occupant program		X
TELEPHONE/DATA		
Underground local exchange carrier service to primary demarcation room	X	
Service from primary demarcation room to secondary demarcation room	X	
Tel/data riser closet	X	
Additional tel/data room as required by Occupant		X
Pathways from demarcation room directly into tel/data room	X	
Tel./Data cabling (demarcation rms. to intermediate distribution frame rms.)		X
Tel./Data cabling from demarcation room and/ or intermediate distribution frame rooms to Occupant tel./data room		X
Fiber optic service for Occupant use		X
Tel./data infrastructure including, but not limited to, servers, computers, phone systems, switches, routers, MUX panels, equipment racks, ladder racks etc.		X
Provisioning of circuits and service from service providers		X
Audio visual systems and support for Occupant Premises		X
Station cabling from Occupant tel./data room to all Occupant locations, within the suite and exterior to the suite, if needed		X
SECURITY		
Card access at base building entry	X	
Card access at Occupant entry		X

EXHIBIT C-2

BASE BUILDING PLANS

EXHIBIT B - Drawing Log

Revolution Labs
Lexington, MA
Owner: *Greatland Realty Partners LLC*
Architect: *SGA*

CALLAHAN
CONSTRUCTION MANAGERS
80 First Street
Bridgewater, MA 02324
P: (508) 279-0012
F: (508) 279 0032

General

DRAWING		100% Garage CD 2/25/2021	Add. 1 3/15/21	Add. 2 3/17/21	Add. 3 3/21/21	100% Lab CD 3/26/2021	Bull. 1 3/31/21	Add. 4 4/14/21	Add. 5 4/16/21	Add. 6 4/21/21	Add. 7 4/28/21	Bull. 2 4/29/21	Add. 8 4/29/21	Add. 9 4/29/21	VE Arch Dwgs 5/27/21
G-000	Cover Sheet	x				x									
G-001	Drawing List/ Symbols/ Abbreviations/ Building Key					x									
G-301	Signage and Branding					x									

Life Safety

DRAWING		100% Garage CD 2/25/2021	Add. 1 3/15/21	Add. 2 3/17/21	Add. 3 3/21/21	100% Lab CD 3/26/2021	Bull. 1 3/31/21	Add. 4 4/14/21	Add. 5 4/16/21	Add. 6 4/21/21	Add. 7 4/28/21	Bull. 2 4/29/21	Add. 8 4/29/21	Add. 9 4/29/21	VE Arch Dwgs 5/27/21
LS-001	Code Summary Sheet 1	x													
LS-002	Code Summary Sheet 2	x													
LS-101	First Floor Life Safety Plan	x													
LS-102	Second Floor Lafe Safety Plan	x													
LS-103	Third Floor Lafe Safety Plan	x													
LS-104	Fourth Floor Lafe Safety Plan	x													
LS-105	Fifth Floor Lafe Safety Plan	x													
LS-106	Sixth Floor Lafe Safety Plan	x													
LS-001	Cover Sheet					x									
LS-002	Code Summary 2					x									
LS-101	Level 1 Life Safety Plan					x									
LS-102	Level 2 Life Safety Plan					x									
LS-103	Level 3 Life Safety Plan					x									
LS-104	Mech. Level Life Safety Plan					x									

Civil

DRAWING		100% Garage CD 2/25/2021	Add. 1 3/15/21	Add. 2 3/17/21	Add. 3 3/21/21	100% Lab CD 3/26/2021	Bull. 1 3/31/21	Add. 4 4/14/21	Add. 5 4/16/21	Add. 6 4/21/21	Add. 7 4/28/21	Bull. 2 4/29/21	Add. 8 4/29/21	Add. 9 4/29/21	VE Arch Dwgs 5/27/21
C-1	Legend and General Notes	x				x									
C-2	Plot Plan	x				x									

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C-3	Site Demolition Plan - Utilities	x				x									
C-4	Layout and Materials Plan	x	x			x									
C-5	Grading and Drainange Plan	x				x	x								
C-6	Site Utilities Plan	x	x			x									
C-7	Site Details	x				x									
C-8	Site Details	x				x									
C-9	Site Details	x				x									

Landscape

DRAWING		100% Garage CD 2/25/2021	Add. 1 3/15/21	Add. 2 3/17/21	Add. 3 3/21/21	100% Lab CD 3/26/2021	Bull. 1 3/31/21	Add. 4 4/14/21	Add. 5 4/16/21	Add. 6 4/21/21	Add. 7 4/28/21	Bull. 2 4/29/21	Add. 8 4/29/21	Add. 9 4/29/21	VE Arch Dwgs 5/27/21
L000	Tree Protection Plan					x									
L100	Site Layout Plan					x									
L101	Site Layout Enlargement Plan					x									
L200	Site Materials Plan					x			x						
L201	Site Materials Enlargement Plan					x									
L300	Site Planting Plan					x									
L400	Site Schedules					x			x						
L401	Lighting Schedule					x			x						
L500	Site Enlargement Plan & Sections					x									
L600	Site Improvement Details					x									
L601	Site Improvement Details					x			x						
L602	Site Improvement Details					x			x						
L603	Site Improvement Details					x									

Architectural Grid

DRAWING		100% Garage CD 2/25/2021	Add. 1 3/15/21	Add. 2 3/17/21	Add. 3 3/21/21	100% Lab CD 3/26/2021	Bull. 1 3/31/21	Add. 4 4/14/21	Add. 5 4/16/21	Add. 6 4/21/21	Add. 7 4/28/21	Bull. 2 4/29/21	Add. 8 4/29/21	Add. 9 4/29/21	VE Arch Dwgs 5/27/21
AG-101	Building Column Grid Layout Plan					x									

Architectural Structural (EOS)

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AS-101	Level 1 EOS					x									
AS-102	Level 2 EOS					x		x							
AS-103	Level 3 EOS					x		x							
AS-104	Mech. Level EOS Plan					x		x							
AS-105	Roof Level EOS Plan					x									

Architectural

DRAWING		100% Garage CD 2/25/2021	Add. 1 3/15/21	Add. 2 3/17/21	Add. 3 3/21/21	100% Lab CD 3/26/2021	Bull. 1 3/21/21	Add. 4 4/14/21	Add. 5 4/16/21	Add. 6 4/21/21	Add. 7 4/28/21	Bull. 2 4/29/21	Add. 8 4/29/21	Add. 9 4/30/21	VE Arch Dwgs 5/27/21
AP-101	First Floor Garage plan	x							x						
AP-102	Second Floor Garage Plan	x		x											
AP-103	Third Floor Garage Plan	x													
AP-104	Fourth Floor Garage Plan	x													
AP-105	Fifth Floor Garage Plan	x							x						
AP-106	Sixth Floor Garage Plan	x													
AP-107	Roof (Solar Canopy)	x													
AP-142	Frist Floor Garage RCP	x													
AP-143	Typical Floor Garage RCP	x													
AP-201	Garage Elevations														
AP-202	Garage Elevations	x													
AP-301	Garage Building Sections	x													
AP-302	Garage Building Sections	x													
AP-401	Garage Enlarged Stair Plans	x	x												
AP-402	Garage Enlarged Stair Plans	x		x											
AP-403	Stair Details	x													
AP-404	Garage Elevator Plans and Sections	x							x						
AP-501	Gorage ections Details	x	x						x		x				
AP-511	Gorage Plan Details	x													
AP-604	Door and Frames Details								x		x				
A-101	Level 1 Plan and Site					x									
A-101 Alt.	Level 1 Plan Alternate #1 - Slab Height					x		x							

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A-102	Level 2 Plan					x									
A-103	Level 3 Plan					x									
A-104	Mech. Plan PR					x						x			
A-105	Roof Plan					x									
A-121	Level 1 RCP					x					x				
A-122	Level 2 RCP					x									
A-123	Level 3 RCP					x									
A-124	Mechanical Level + Roof Level RCP					x									
A-131	Level 1 Finish Plan					x					x				
A-132	Level 2 Finish Plan					x					x				
A-133	Level 3 Finish Plan					x					x				
A-134	Mechanical Level Finish Plan					x									
A-201	Exterior Elevations South					x		x							x
A-202	Exterior Elevations West					x		x							x
A-203	Exterior Elevations North					x		x							
A-204	Exterior Elevations East					x		x							
A-301	Building Sections					x		x							
A-302	Building Sections					x		x							
A-305	Building Section					x		x							
A-311	Exterior Wall Sections					x		x							
A-312	Exterior Wall Sections					x		x							
A-313	Exterior Wall Sections					x		x							
A-314	Exterior Wall Sections					x		x							x
A-315	Exterior Wall Sections					x		x							x
A-316	Exterior Wall Sections					x									
A-317	Exterior Wall Sections					x									
A-318	Exterior Wall Sections					x									
A-319	Exterior Wall Sections					x									
A-391	Roof Details					x									x
A-392	Roof Details					x									x
A-401	Enlarged Stair 1 Plans and Sections					x									
A-402	Enlarged Stair 2 Plans and Sections					x									
A-403	Enlarged Stair 3 Plans and Sections					x									
A-404	Stair Details					x									
A-421	Elevator Plans and Sections					x									
A-422	Elevator Plans and Sections					x									
A-423	Elevator Control Rooms and Service Elevator 2 (Alternate 2)					x									

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A-424	Elevator & Shaft Details					x		x							
A-425	Shaft Details					x									
A-432	Enlarged Building Core Level 2 & 3 Plans & RCP - West					x									
A-433	Enlarged Building Core Level 2 & 3 Plans & RCP - East					x									
A-441	Typical Toilet Enlarged Plans, Elevations, Details & Accessories					x									
A-442	Shower Room Enlarged Plans, Elevations, Details & Accessories					x									
A-451	Lobby/ Amenity Enlarged Plan					x		x							
A-452	Lobby / Amenity Enlarged RCP					x									
A-453	Lobby / Amenity Enlarged Finish Plan					x									
A-454	Lobby / Amenity Enlarged Furniture + Equipment Plan					x									
A-455	Lobby / Amenity Elevations					x									
A-456	Lobby Tiered Seating Enlarged Plan, Elevations, and Details					x									
A-457	Lobby / Amenity Enlarged Food Vendor					x									
A-458a	Lobby / Amenity Enlarged Food Vendor Details					x									
A-458b	Lobby / Amenity Enlarged Food Vendor Axons					x									
A-459	Lobby / Amenity Enlarged Details					x									
A-471	Loading Dock Enlarged Plan					x									x
A-472	Loading Dock Details					x									
A-473	Interior Foundation Details					x									
A-501	Exterior Foundation Details					x		x			x				
A-502	Exterior Foundation Details					x		x			x				
A-503	Exterior Wall Details					x		x			x				
A-504	Exterior Wall Details					x		x			x				x
A-505	Exterior Wall Details					x		x			x				
A-506	Exterior Wall Details					x		x			x				x
A-508	Exterior Entry Details					x		x			x				x
A-511	Exterior Plan Details					x		x			x				
A-512	Exterior Plan Details					x									
A-601	Wall Types					x									x
A-611	Door & Frame Types, Hardware, Schedules Details & Notes					x			x						
A-612	Door & Frame Details					x									

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A-621	Storefront Window Details					x									
A-622	Storefront Window Types					x									
A-623	Curtain Wall Window Types					x									
A-631	Interior Finish Short-Form Specifications					x									

Structural

DRAWING		100% Garage CD 3/25/2021	Add. 1 3/15/21	Add. 2 3/17/21	Add. 3 3/21/21	100% Lab CD 3/26/2021	Bull. 1 3/31/21	Add. 4 4/14/21	Add. 5 4/16/21	Add. 6 4/21/21	Add. 7 4/28/21	Bull. 2 4/29/21	Add. 8 4/29/21	Add. 9 4/29/21	VE Arch Dwgs 5/27/21
SP-000	Cover Sheet	x													
SP-001	General Notes I	x													
SP-002	General Notes II	x													
SP-101	First Floor Garage Framing Plan	x													
SP-102	Second Floor Garage Framing Plan	x													
SP-103	Third Floor Garage Framing Plan	x													
SP-104	Fourth Floor Garage Framing Plan	x													
SP-105	Fifth Floor Garage Framing Plan	x													
SP-106	Sixth Floor Garage Framing Plan	x													
SP-301	Typical Concrete Details I	x													
SP-302	Typical Concrete Details II	x													
SP-303	Typical Concrete Details III	x													
SP-602	Typical Precast Details I	x													
SP-603	Typical Precast Details II	x													
SP-700	Sections & Details I	x													
S000	Cover					x									
S001	General Notes I					x	x								
S002	General Notes II					x									
S003	Plan Notes and Legends					x									
S101	Level 1 / Foundation Plan					x	x								
S102	Level 2 Framing Plan					x	x								
S103	Level 3 Framing Plan					x	x					x			
S104	Mechanical PH Framing Plan					x	x					x			
S105	Roof Framing Plan					x	x								
S200	Column Schedule I					x									
S201	Column Schedule II					x	x								
S210	Braced Frame Elevations					x	x								

EXHIBIT B - Drawing Log

Revolution Labs
Lexington, MA
Owner: *Greatland Realty Partners LLC*
Architect: *SGA*

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S220	Screenwall Elevations					x									
S300	Typical Concrete Details I					x									
S301	Typical Concrete Details II					x									
S302	Typical Concrete Details III					x									
S303	Typical Concrete Details IV					x	x								
S400	Typical Masonry Details I					x									
S401	Typical Masonry Details II					x									
S500	Typical Structural Steel Details I					x	x								
S501	Typical Structural Steel Details II					x									
S502	Typical Structural Steel Details III					x									
S503	Typical Structural Steel Details IV					x									
S504	Typical Structural Steel Details V					x									
S505	Typical Structural Steel Details VI					x	x								
S506	Typical Structural Steel Details VII					x									
S507	Typical Structural Steel Details VIII					x									
S508	Typical Structural Steel Details IX					x									
S509	Typical Structural Steel Details X					x									
S600	Sections & Details					x	x								
S601	Sections & Details I											x			

Fire Alarm

DRAWING		100% Garage CD 2/25/2021	Add. 1 3/15/21	Add. 2 3/17/21	Add. 3 3/21/21	100% Lab CD 3/26/2021	Bull. 1 3/31/21	Add. 4 4/14/21	Add. 5 4/16/21	Add. 6 4/21/21	Add. 7 4/28/21	Bull. 2 4/29/21	Add. 8 4/29/21	Add. 9 4/29/21	VE Arch Dwgs 5/27/21
FA-001G	Fire Alarm Legend General Notes	x													
FA-101G	Fire Alarm Leve 1 & 2 Plans	x						x							
FA-102G	Fire Alarm Level 3 and 4 Plans	x													
FA-103G	Fira Alarm 5 & 6 Plans	x						x							
FA-001	Fire Alarm Legend, General Notes & Details					x		x							
FA-002	Fire Alarm Riser Diagram					x		x							
FA-101A	Fire Alarm Level 1A Plan					x		x							
FA-101B	Fire Alarm Level 1B Plan					x									
FA-101C	Fire Alarm Level 1C Plan					x									
FA-102A	Fire Alarm Level 2A Plan					x									
FA-102B	Fire Alarm Level 2B Plan					x		x							
FA-102C	Fire Alarm Level 2C Plan					x									
FA-103A	Fire Alarm Level 3A Plan					x									

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FA-103B	Fire Alarm Level 3B Plan					x									
FA-103C	Fire Alarm Level 3C Plan					x									
FA-104A	Fire Alarm Mech. Roof Plan A					x		x							
FA-104B	Fire Alarm Mech. Roof Plan B					x		x					x		
FA-104C	Fire Alarm Mech. Roof Plan C					x							x		

Fire Protection

DRAWING		100% Garage CD 2/25/2021	Add. 1 3/15/21	Add. 2 3/17/21	Add. 3 3/21/21	100% Lab CD 3/26/2021	Bull. 1 3/31/21	Add. 4 4/14/21	Add. 5 4/16/21	Add. 6 4/21/21	Add. 7 4/28/21	Bull. 2 4/29/21	Add. 8 4/29/21	Add. 9 4/29/21	VE Arch Dwgs 5/27/21
FP-001G	Fire Protection Legend & General Notes							x							
FP-101G	Fire Protection Level 1 & 2														
FP-001	Fire Protection Legend & General Notes					x		x							
FP-101A	Fire Protection Level 1A Plan					x									
FP-101B	Fire Protection Level 1B Plan					x									
FP-101C	Fire Protection Level 1C Plan					x									
FP-102A	Fire Protection Level 2A Plan					x		x							
FP-102B	Fire Protection Level 2B Plan					x									
FP-102C	Fire Protection Level 2C Plan					x									
FP-103A	Fire Protection Level 3A Plan					x									
FP-103B	Fire Protection Level 3B Plan					x									
FP-103C	Fire Protection Level 3C Plan					x									
FP-104A	Fire Protection Mech. Roof Plan A					x		x							
FP-104B	Fire Protection Mech. Roof Plan B					x		x					x		
FP-104C	Fire Protection Mech. Roof Plan C					x		x					x		

Plumbing

DRAWING		100% Garage CD 2/25/2021	Add. 1 3/15/21	Add. 2 3/17/21	Add. 3 3/21/21	100% Lab CD 3/26/2021	Bull. 1 3/31/21	Add. 4 4/14/21	Add. 5 4/16/21	Add. 6 4/21/21	Add. 7 4/28/21	Bull. 2 4/29/21	Add. 8 4/29/21	Add. 9 4/29/21	VE Arch Dwgs 5/27/21
P-001G	Plumbing Garage Legend	x													
P-002G	Plumbing Garage Details	x													
P-100G	Plumbing Garage Plans UG	x													
P-101G	Plumbing Garage Plans 1	x													
P-102G	Plumbing Garage Plans 2	x													

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P-103G	Plumbing Garage Plans 3	x													
P-301G	Plumbing Garage Isometric	x													
P-001	Plumbing Legend and General Notes					x									
P-002	Plumbing Schedules					x									
P-003	Plumbing Details					x									
P-100	Plumbing Level Below Slab Plan					x									
P-101	Plumbing Level 1					x									
P-102	Plumbing Level 2					x									
P-103	Plumbing Level 3					x									
P-104	Plumbing Penthouse Plan					x									
P-105	Plumbing Roof Plan					x									
P-200	Plumbing LIG & First Floor Part Plans					x									
P-201	Plumbing 1st Floor Part Plans					x									
P-202	Plumbing 2nd and 3rd Floor Part Plans					x									
P-203	Plumbing Penthouse Part Plans					x									
P-301	Plumbing Lab Waste/Vent Isometric					x									
P-302	Plumbing Waste/Vent Isometric					x									
P-302A	Plumbing W/V NE & SW Core Toilet Isometric					x									
P-302B	Plumbing W/V Amenities Isometric					x									
P-303	Plumbign Storm Isometric					x									
P-304	Plumbing Potable Water Isometric					x									
P-305	Plumbing Non-Potable Water Isometric					x									
P-306	Plumbing Air & Vac. Isometric					x									
P-307	Plumbing Natural Gas Isometric					x									
P-308	Plumbing Solar Thermal Isometric					x									

Mechanical

DRAWING		100% Garage CD 3/25/2021	Add. 1 3/15/21	Add. 2 3/17/21	Add. 3 3/21/21	100% Lab CD 3/26/2021	Bull. 1 3/31/21	Add. 4 4/14/21	Add. 5 4/16/21	Add. 6 4/21/21	Add. 7 4/26/21	Bull. 2 4/29/21	Add. 8 4/29/21	Add. 9 4/29/21	VE Arch Dwgs 4/27/21
M-001G	Mechanical Legend Abreviation Geranal Notes	x													
M-002G	Mechanical Details	x													
M-003G	Mechanical Specification	x													
M-101G	Garage Mechanical Part Plans	x													
M-001	Mechanical Legend & General Notes					x									
M-002	Mechanical Shedules (Sheet 1)					x								x	x

EXHIBIT B - Drawing Log

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M-003	Mechanical Shedules (Sheet 2)					x							x		
M-004	Mechanical Shedules (Sheet 3)					x				x					
M-005	Mechanical Shedules (Sheet 4)					x				x			x		
M-006	Mechanical Details (Sheet 1)					x									
M-007	Mechanical Details (Sheet 2)					x									
M-008	Mechanical Details (Sheet 3)					x									
M-009	Mechanical Details (Sheet 4)					x									
M-010	Mechanical Details (Sheet 5)					x									
M-011	Mechanical Details (Sheet 6)					x							x		
M-012	Mechanical Chilled/Condense Water Piping Schematic					x									
M-013	Mechanical Hot Water Piping Schematic					x							x		
M-014	Mechanical Konvekta Heat Recovery Piping Schematic					x									
M-015	Mechanical Supply and Exhaust Riser Diagrams					x									
M-016	Mechanical Piping Riser Diagrams					x									
M-101	Mechanical Level 1 Plan					x				x			x	x	x
M-102	Mechanical Level 2 Plan					x							x	x	x
M-103	Mechanical Level 3 Plan					x							x	x	x
M-104	Mechanical Level/Low Roof Plan					x				x				x	x
M-105	Mechanical Level Roof Plan					x				x				x	x
M-201	Mechanical Level 1 Piping Plan					x				x			x	x	x
M-301	Mechanical Part Plans					x				x			x	x	x

EXHIBIT B - Drawing Log

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VE ITEMS															
DRAWING		AHA VE Response													
SKE-1	VE - SKE-1 - Electrical Site Lighting Plan 5/26/21	x													
SKE-2	VE - SKE-2 - Electrical Site Power Plan 5/26/21	x													

Electrical															
DRAWING		100% Garage CD 7/25/2021	Add. 1 3/15/21	Add. 2 3/17/21	Add. 3 3/21/21	100% Lab CD 3/26/2021	Bull. 1 5/11/21	Add. 4 4/14/21	Add. 5 4/16/21	Add. 6 4/21/21	Add. 7 4/26/21	Bull. 2 4/29/21	Add. 8 4/29/21	Add. 9 4/29/21	VE Arch Dwgs 5/27/21
E-001G	Electrical Legend & General Notes	x							x						
E-002G	Electrical Riser Diagram	x		x											
E-003G	Electrical Schedules	x		x											
E-004G	Electrical Details	x													
E-005G	Electrical Details	x		x											
E-006G	Electrical Details	x													
E-101G	Electrical First Floor Garage LTG. And PWR Plan	x							x		x				
E-102G	Electrical Second Floor Garage LTG. And PWR Plan	x		x					x						
E-103G	Electrical Third Floor Garage LTG. And PWR Plan	x		x					x						
E-104G	Electrical Fourth Floor Garage LTG. And PWR Plan	x		x					x						
E-105G	Electrical Fifth Floor Garage LTG. And PWR Plan	x		x					x						
E-106G	Electrical Sixth Floor Garage LTG. And PWR Plan	x							x		x				
E-001	Electrical Legend & General Notes					x			x						
E-002	Electrical Riser Diagram					x									
E-003	Electrical Schedules					x		x					x	x	x
E-004	Electrical Schedules					x									
E-005	Electrical Schedules					x								x	x
E-006	Electrical Details					x									
E-007	Electrical Details					x									
E-008	Electrical Details					x		x							
E-009	Electrical Details					x									
E-100A	Electrical Site Lighting Plan					x									
E-100B	Electrical Site Power Plan					x		x							

EXHIBIT B - Drawing Log

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E-101	Electrical Overall Level 1 Lighting Plan					x									
E-101A	Electrical Lighting Level 1A Plan					x									
E-101B	Electrical Lighting Level 1B Plan					x									
E-101C	Electrical Lighting Level 1C Plan					x									
E-102	Electrical Overall Level 2 Lighting Plan					x									
E-102A	Electrical Lighting Level 2A Plan					x									
E-102B	Electrical Lighting Level 2B Plan					x									
E-102C	Electrical Lighting Level 2C Plan					x									
E-103	Electrical Overall Level 3 Lighting Plan					x									
E-103A	Electrical Lighting Level 3A Plan					x									
E-103B	Electrical Lighting Level 3B Plan					x									
E-103C	Electrical Lighting Level 3C Plan					x									
E-104	Electrical Overall Mech. Roof Lighting Plan					x									
E-104A	Electrical Lighting Penthouse A Plan					x									
E-104B	Electrical Lighting Penthouse B Plan					x									
E-104C	Electrical Lighting Penthouse C Plan					x									
E-201	Electrical Overall Level 1 Power Plan					x									
E-201A	Electrical Power Level 1A Plan					x		x	x				x	x	x
E-201B	Electrical Power Level 1B Plan					x		x	x				x	x	x
E-201C	Electrical Power Level 1C Plan					x			x				x	x	x
E-202	Electrical Overall Level 2 Power Plan					x									
E-202A	Electrical Power Level 2A Plan					x									
E-202B	Electrical Power Level 2B Plan					x									
E-202C	Electrical Power Level 2C Plan					x									
E-203	Electrical Overall Level 3 Power Plan					x									
E-203A	Electrical Power Level 3A Plan					x									
E-203B	Electrical Power Level 3B Plan					x									
E-203C	Electrical Power Level 3C Plan					x									
E-204	Electrical Overall Mech. Roof Power Plan					x									
E-204A	Electrical Power Level Penthouse A Plan					x		x						x	x
E-204B	Electrical Power Level Penthouse B Plan					x									
E-204C	Electrical Power Level Penthouse C Plan					x									
E-205	Electrical Power Roof Plan					x									

EXHIBIT D

LIST OF HAZARDOUS MATERIALS

KEROS THERAPEUTICS

Keros Therapeutics

Flammable Materials List 2021

Class I Flammables

1A - Liquids with a flashpoint < 73°F and a boiling point < 100°F
1B - Liquids with a flashpoint < 73°F and a boiling point at or > 100°F
1C - Liquids with a flashpoint of > 73°F and below 100°F

Chemical Name	Location	Flash Point (°F)	Flammable Class	Amount (gallons)
2- Propanol	Building E	53	1B	0.26
Acetone	Building E	-4	1B	1.05
Acetonitrile	Building E	53	1B	2.11
Acetonitrile	Building C	53	1B	0.79
Ethanol	Building E	55	1B	0.26
Ethanol	Building C	55	1B	1.59
Ethanol, 200 proof	Building E	55	1B	1.59
Isopropyl alcohol	Building E	53	1B	1.06
Isopropyl alcohol	Building C	53	1B	13.07
Isopropyl alcohol 99%	Building E	53	1B	0.26
Methanol	Building E	53.6	1B	6.33
Methanol	Building C	53.6	1B	0.26
Oil of Turpentine	Building E	35	1B	0.26
				TOTAL = 28.89

Class II Combustibles

Liquids with a flashpoint > 100°F and < 140°F

Chemical Name	Location	Flammable Class	Flash Point (°F)	Amount (gallons)
Acetic Acid	Building E	II	102	1
Acetic Anhydride	Building E	II	120	0.06
				TOTAL = 1.06

Class III Combustibles

IIIA - Liquids with a flashpoint at or > 140°F and < 200°F
IIIB - Liquids with a flashpoint > 200°F

Chemical Name	Location	Flammable Class	Flash Point (°F)	Amount (gallons)
Dimethylsulfoxide	Building E	IIIA	190	1
Formaldehyde solution	Building E	IIIA	140	0.25
Glycerol	Building E	IIIB	200	0.5
2-Mercaptoethanol	Building E	IIIA	163	0.25
MOPS	Building E	IIIB	230	0.5
				TOTAL = 2.5

EXHIBIT E

FORM OF SNDA

prepared by and upon
recordation return to:
[_____]
[_____]
[_____]
[_____]

SUBORDINATION, NON-DISTURBANCE AND ATTORNMENT AGREEMENT

THIS SUBORDINATION, NON-DISTURBANCE AND ATTORNMENT AGREEMENT (this "**Agreement**") is entered into as of _____, 20__ (the "**Effective Date**") by and between ACORE CAPITAL MORTGAGE, LP, a Delaware limited partnership, in its capacity as Administrative Agent for the Lenders from time to time party to the Loan Agreement defined below (together with its successors and/or assigns, the "**Administrative Agent**"), and _____, a _____ (together with its permitted successors and assigns, the "**Tenant**"), with reference to the following facts:

A. _____, a _____, whose address is _____ (the "**Landlord**") owns fee simple title or a leasehold interest in the real property described in Exhibit "A" attached hereto (the "**Property**").

B. Pursuant to that certain Loan Agreement dated as of the date hereof among Landlord, the Lenders from time to time party thereto (the "**Lenders**"), and Administrative Agent (the "**Loan Agreement**"), the Lenders have made a loan to Landlord in the original principal amount of [_____] Dollars ($[_____]) (the "**Loan**").

C. The Loan is secured by, among other things, that certain [Deed of Trust, Assignment of Leases and Rents, Security Agreement, and Fixture Filing] dated _____, 20__ in favor of Administrative Agent, recorded in the _____ County Clerk's Office as Instrument Number _____ in Book _____, Page _____ (as may be further amended, increased, renewed, extended, spread, consolidated, severed, restated, or otherwise changed from time to time, the "**Deed of Trust**").

D. Pursuant to that certain [Lease] effective _____, [as amended by _____] (the "**Lease**"), Landlord demised to Tenant a portion of the Property consisting of the following (the "**Leased Premises**"): _____.

E. Tenant and Administrative Agent desire to agree upon the relative priorities of their interests in the Property and their rights and obligations if certain events occur.

NOW, THEREFORE, for good and sufficient consideration, Tenant and Administrative Agent agree:

1. Definitions. The following terms shall have the following meanings for purposes of this Agreement.

a. Foreclosure Event. A "**Foreclosure Event**" means: (i) foreclosure under the Deed of Trust; (ii) any other exercise by Administrative Agent of rights and remedies (whether under the Deed of Trust or under applicable law, including bankruptcy law) as holder of the Loan and/or the Deed of Trust, as a result of which a Successor Landlord becomes owner of the Property; or (iii) delivery by Landlord to Administrative Agent (or its designee or nominee) of a deed or other conveyance of Landlord's interest in the Property in lieu of any of the foregoing.

b. Former Landlord. A "**Former Landlord**" means Landlord and any other party that was landlord under the Lease at any time before the occurrence of any attornment under this Agreement.

c. Offset Right. An "**Offset Right**" means any right or alleged right of Tenant to any offset, defense (other than one arising from actual payment and performance, which payment and performance would bind a Successor Landlord pursuant to this Agreement), claim, counterclaim, reduction, deduction, or abatement against Tenant's payment of Rent or performance of Tenant's other obligations under the Lease, arising (whether under the Lease or under applicable law) from Landlord's breach or default under the Lease.

d. Rent. The "**Rent**" means any fixed rent, base rent or additional rent under the Lease.

e. Successor Landlord. A "**Successor Landlord**" means any party that becomes owner of the Property as the result of a Foreclosure Event.

f. Termination Right. A "**Termination Right**" means any right of Tenant to cancel or terminate the Lease or to claim a partial or total eviction arising (whether under the Lease or under applicable law) from Landlord's breach or default under the Lease.

g. Other Capitalized Terms. If any capitalized term is used in this Agreement and no separate definition is contained in this Agreement, then such term shall have the same respective definition as set forth in the Lease.

2. Subordination. The Lease, as the same may hereafter be modified, amended or extended, shall be, and shall at all times remain, subject and subordinate to the terms conditions and provisions of the Deed of Trust, the lien imposed by the Deed of Trust, and all advances made under the Deed of Trust.

3. Nondisturbance, Recognition and Attornment.

a. No Exercise of Deed of Trust Remedies Against Tenant. So long as the Tenant is not in default under this Agreement or under the Lease beyond any applicable grace or cure periods (an "**Event of Default**"), Administrative Agent (i) shall not terminate or disturb Tenant's possession of the Leased Premises under the Lease, except in accordance with the terms of the Lease and this Agreement and (ii) shall not name or join Tenant as a defendant in any exercise of Administrative Agent's rights and remedies arising upon a default under the Deed of Trust unless applicable law requires Tenant to be made a party thereto as a condition to proceeding against Landlord or prosecuting such rights and remedies. In the latter case, Administrative Agent may join Tenant as a defendant in such action only for such purpose

and not to terminate the Lease or otherwise adversely affect Tenant's rights under the Lease or this Agreement in such action.

b. Recognition and Attornment. Upon Successor Landlord taking title to the Property (i) Successor Landlord shall be bound to Tenant under all the terms and conditions of the Lease (except as provided in this Agreement); (ii) Tenant shall recognize and attorn to Successor Landlord as Tenant's direct landlord under the Lease as affected by this Agreement; and (iii) the Lease shall continue in full force and effect as a direct lease, in accordance with its terms (except as provided in this Agreement), between Successor Landlord and Tenant. Tenant hereby acknowledges notice that pursuant to the Deed of Trust and assignment of rents, leases and profits, Landlord has granted to the Administrative Agent an absolute, present assignment of the Lease and Rents which provides that Tenant continue making payments of Rents and other amounts owed by Tenant under the Lease to or at the direction of the Landlord and to recognize the rights of Landlord under the Lease until notified otherwise in writing by the Administrative Agent. After receipt of such notice from Administrative Agent, the Tenant shall thereafter make all such payments directly to the Administrative Agent or as the Administrative Agent may otherwise direct, without any further inquiry on the part of the Tenant. Landlord consents to the foregoing and waives any right, claim or demand which Landlord may have against Tenant by reason of such payments to Administrative Agent or as Administrative Agent directs.

c. Further Documentation. The provisions of this Article 3 shall be effective and self-operative without any need for Successor Landlord or Tenant to execute any further documents. Tenant and Successor Landlord shall, however, confirm the provisions of this Article 3 in writing upon request by either of them within ten (10) days of such request.

4. Protection of Successor Landlord. Notwithstanding anything to the contrary in the Lease or the Deed of Trust, Successor Landlord shall not be liable for or bound by any of the following matters:

a. Claims Against Former Landlord. Any Offset Right that Tenant may have against any Former Landlord relating to any event or occurrence before the date of attornment, including any claim for damages of any kind whatsoever as the result of any breach by Former Landlord that occurred before the date of attornment. The foregoing shall not limit either (i) Tenant's right to exercise against Successor Landlord any Offset Right otherwise available to Tenant because of events occurring after the date of attornment or (ii) Successor Landlord's obligation to correct any conditions that existed as of the date of attornment and violate Successor Landlord's continuing obligations as landlord under the Lease.

b. Prepayments. Any payment of Rent that Tenant may have made to Former Landlord more than thirty (30) days before the date such Rent was first due and payable under the Lease with respect to any period after the date of attornment other than, and only to the extent that, the Lease expressly required such a prepayment.

c. Payment; Security Deposit; Work. Any obligation: (i) to pay Tenant any sum(s) that any Former Landlord owed to Tenant unless such sums, if any, shall have been actually delivered to Administrative Agent by way of an assumption of escrow accounts or otherwise; (ii) with respect to any security deposited with Former Landlord, unless such security deposit was actually delivered to Administrative Agent; (iii) to commence or complete any initial construction of improvements in the Leased Premises or any expansion or rehabilitation of existing improvements thereon; (iv) to reconstruct or repair improvements following a fire, casualty or condemnation; or (v) arising from representations and warranties related to Former Landlord.

d. Modification, Amendment or Waiver. Any modification or amendment of the Lease, or any waiver of the terms of the Lease, made without Administrative Agent's prior written consent.

e. Surrender, Etc. Any consensual or negotiated surrender, cancellation, or termination of the Lease, in whole or in part, agreed upon between Landlord and Tenant, unless effected unilaterally by Tenant pursuant to the express terms of the Lease.

5. Exculpation of Successor Landlord. Notwithstanding anything to the contrary in this Agreement or the Lease, Successor Landlord's obligations and liability under the Lease shall never extend beyond Successor Landlord's (or its successors' or assigns') interest, if any, in the Leased Premises from time to time, including insurance and condemnation proceeds, security deposits, escrows, Successor Landlord's interest in the Lease, and the proceeds from any sale, lease or other disposition of the Property (or any portion thereof) by Successor Landlord (collectively, the "**Successor Landlord's Interest**"). Tenant shall look exclusively to Successor Landlord's Interest (or that of its successors and assigns) for payment or discharge of any obligations of Successor Landlord under the Lease as affected by this Agreement. If Tenant obtains any money judgment against Successor Landlord with respect to the Lease or the relationship between Successor Landlord and Tenant, then Tenant shall look solely to Successor Landlord's Interest (or that of its successors and assigns) to collect such judgment. Tenant shall not collect or attempt to collect any such judgment out of any other assets of Successor Landlord.

6. Administrative Agent's Right to Cure. Notwithstanding anything to the contrary in the Lease or this Agreement, before exercising any Offset Right or Termination Right:

a. Notice to Administrative Agent. Tenant shall provide Administrative Agent with notice of the breach or default by Landlord giving rise to same (the "**Default Notice**") and, thereafter, the opportunity to cure such breach or default as provided for below.

b. Administrative Agent's Cure Period. After Administrative Agent receives a Default Notice, Administrative Agent shall have the same period of time available to Landlord under the Lease in which to cure the breach or default by Landlord. Administrative Agent shall have no obligation to cure (and shall have no liability or obligation for not curing) any breach or default by Landlord, except to the extent that Administrative Agent agrees or undertakes otherwise in writing.

7. Miscellaneous.

a. Notices. Any notice or request given or demand made under this Agreement by one party to the other shall be in writing, and may be given or served by hand-delivered personal service, or by depositing the same with a reliable overnight courier service or by deposit in the United States mail, postpaid, registered or certified mail, and addressed to the party to be notified, with return receipt requested or by telefax transmission, with the original machine- generated transmit confirmation report as evidence of transmission. Notice deposited in the mail in the manner hereinabove described shall be effective from and after the expiration of three (3) days after it is so deposited; provided, however, delivery by overnight courier service shall be deemed effective on the next succeeding business day after it is so deposited and notice by personal service or telefax transmission shall be deemed effective when delivered to its addressee or within two (2) hours after its transmission unless given after 3:00 p.m. on a business day, in which case it shall be deemed effective at 9:00 a.m. on the next business day. For purposes of notice, the addresses and telefax number of the parties shall, until changed as herein provided,

be as follows (any inclusion of an e-mail address below is for informational purposes only, and communication via e-mail shall not be an effective method of notice for purposes of this Agreement):

If to Administrative Agent: ACORE Capital Mortgage, LP
80 E. Sir Francis Drake Blvd., Suite 2A
Larkspur, California 94939
Attention: Stew Ward, Managing Partner
Email: notices@acorecapital.com

with a copy to: ACORE Capital Mortgage, LP
Sterling Plaza
5949 Sherry Lane, St. 1255
Dallas, Texas 75225
Attention No.: David Homsher, Director / Head of Asset Management
Email: dhomsher@acorecapital.com

If to the Tenant, at: Keros Therapeutics, Inc.
1050 Waltham Street
Lexington, Massachusetts 02421
Attention: Esther Cho, VP and Head of Legal

with a copy to: Cooley LLP
55 Hudson Yards
New York, New York 10001
Attention: Daniel A. Goldberger, Esq.

and

Cooley LLP
500 Boylston Street
Boston, Massachusetts 02116
Attention: Daniel A. Goldberger, Esq.

b. Successors and Assigns. This Agreement shall bind and benefit the parties, their successors and assigns, any Successor Landlord, and its successors and assigns. If Administrative Agent assigns the Deed of Trust, then upon delivery to Tenant of written notice thereof accompanied by the assignee's written assumption of all obligations under this Agreement, all liability of the assignor shall terminate.

c. Entire Agreement. This Agreement constitutes the entire agreement between Administrative Agent and Tenant regarding the subordination of the Lease to the Deed of Trust and the rights and obligations of Tenant and Administrative Agent as to the subject matter of this Agreement.

d. Interaction with Lease and with Deed of Trust. If this Agreement conflicts with the Lease, then this Agreement shall govern as between the parties and any Successor Landlord, including upon any attornment pursuant to this Agreement. This Agreement supersedes, and constitutes full compliance with, any provisions in the Lease that provide for subordination of the Lease to, or for delivery of nondisturbance agreements by the holder of, the Deed of Trust.

e. Administrative Agent's Rights and Obligations. Except as expressly provided for in this Agreement, Administrative Agent shall have no obligations to Tenant with respect to the Lease. If an attornment occurs pursuant to this Agreement, then all rights and obligations of Administrative Agent under this Agreement shall terminate, without thereby affecting in any way the rights and obligations of Successor Landlord provided for in this Agreement.

f. Interpretation; Governing Law. The interpretation, validity and enforcement of this Agreement shall be governed by and construed under the internal laws of the State in which the Leased Premises are located, excluding such State's principles of conflict of laws.

g. Amendments. This Agreement may be amended, discharged or terminated, or any of its provisions waived, only by a written instrument executed by the party to be charged.

h. Due Authorization. Tenant represents to Administrative Agent that it has full authority to enter into this Agreement, which has been duly authorized by all necessary actions. Administrative Agent represents to Tenant that it has full authority to enter into this Agreement, which has been duly authorized by all necessary actions.

i. Execution. This Agreement may be executed in any number of counterparts, each of which shall be deemed an original and all of which together shall constitute one and the same instrument.

[THIS SPACE INTENTIONALLY LEFT BLANK]

IN WITNESS WHEREOF, Administrative Agent and Tenant have caused this Agreement to be executed as of the date first above written.

ADMINISTRATIVE AGENT:

ACORE CAPITAL MORTGAGE, LP,
a Delaware limited partnership

By: ACORE Capital Mortgage GP, LLC, a Delaware limited liability company, its general partner

By: __
Name:
Title:

TENANT:

[_____]

By: __
Name:
Title:

LANDLORD'S CONSENT

Landlord consents and agrees to the foregoing Agreement, which was entered into at Landlord's request. The foregoing Agreement shall not alter, waive or diminish any of Landlord's obligations under the Deed of Trust or the Lease. The above Agreement discharges any obligations of Administrative Agent under the Deed of Trust and related loan documents to enter into a nondisturbance agreement with Tenant. Landlord is not a party to the above Agreement.

LANDLORD:

_____
a _____

By:_____
Name:
Title:

Dated: _____, 20__

ADMINISTRATIVE AGENT'S ACKNOWLEDGMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California

County of _____)

On _____ before me, _____ (insert name and title of the officer)

personally appeared _____,

who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under **PENALTY OF PERJURY** under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature _____ (Seal)

TENANT'S ACKNOWLEDGMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California)

County of _____)

On _____, 20__, before me, _____, a Notary Public, personally appeared _____, who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature _____ (Seal)

LANDLORD'S ACKNOWLEDGMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California)

County of _____)

On _____, 20__, before me, _____, a Notary Public, personally appeared _____, who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature _____ (Seal)

LIST OF EXHIBITS

If any exhibit is not attached hereto at the time of execution of this Agreement, it may thereafter be attached by written agreement of the parties, evidenced by initialing said exhibit.

Exhibit “A” - Legal Description of the Land

EXHIBIT F

LOCATION OF GENERATOR AND ROOFTOP EQUIPMENT AREA

GREATLAND REALTY PARTNERS
Rentable Area Calculation - Mechanical Level

COLOR LEGEND
- Building Service Area
- Floor Common Area
- Major Vertical Penetration
- Tenant 1
- Keros

SGA

Revolution Labs
3/32" = 1'-0" | 8/2/2021
Project Number 4813.00
RA-4

Exhibit 31.1

CERTIFICATION OF PRINCIPAL EXECUTIVE OFFICER PURSUANT TO RULES 13a-14(a) AND 15d-14(a) UNDER THE SECURITIES EXCHANGE ACT OF 1934, AS ADOPTED PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Jasbir Seehra, Ph.D., certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Keros Therapeutics, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(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)) 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) 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

   (c) 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: November 4, 2021

By: /s/ Jasbir Seehra, Ph.D.

Jasbir Seehra, Ph.D.

Chief Executive Officer

(Principal Executive Officer)

Exhibit 31.2

CERTIFICATION OF PRINCIPAL FINANCIAL OFFICER PURSUANT TO RULES 13a-14(a) AND 15d-14(a) UNDER THE SECURITIES EXCHANGE ACT OF 1934, AS ADOPTED PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Keith Regnante, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Keros Therapeutics, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(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)) 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) 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

   (c) 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: November 4, 2021

By: /s/ Keith Regnante

Keith Regnante

Chief Financial Officer

(Principal Financial Officer and Principal Accounting Officer)

Exhibit 32.1

CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

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), Jasbir Seehra, Ph.D., Chief Executive Officer of Keros Therapeutics, Inc. (the "Company") and Keith Regnante, Chief Financial Officer of the Company, each hereby certifies that, to the best of his knowledge:

(1) The Company's Quarterly Report on Form 10-Q for the period ended September 30, 2021, to which this Certification is attached as Exhibit 32.1 (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 4th day of November, 2021.

/s/ Jasbir Seehra
Jasbir Seehra, Ph.D.
Chief Executive Officer
(Principal Executive Officer)

/s/ Keith Regnante
Keith Regnante
Chief Financial Officer
(Principal Financial Officer and Principal Accounting Officer)

This certification accompanies the Form 10-Q to which it relates, is not deemed filed with the Securities and Exchange Commission and is not to be incorporated by reference into any filing of Keros Therapeutics, Inc. under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended (whether made before or after the date of the Form 10-Q), irrespective of any general incorporation language contained in such filing.