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UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, DC 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 March 31, 2017

OR

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

Commission file number 001-37359

BLUEPRINT MEDICINES CORPORATION
(Exact Name of Registrant as Specified in Its Charter)

Delaware	**26-3632015**
(State or Other Jurisdiction of Incorporation or Organization)	**(I.R.S. Employer Identification No.)**
38 Sidney Street, Suite 200 Cambridge, Massachusetts	**02139**
(Address of Principal Executive Offices)	**(Zip Code)**

(617) 374-7580
(Registrant's Telephone Number, Including Area Code)

(Former Name, Former Address and Former Fiscal Year, if Changed Since Last Report)

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

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

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, smaller reporting company, or an emerging growth company. See 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	☐ (Do not check if a smaller reporting company)	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 ☑

Number of shares of the registrant's common stock, $0.001 par value, outstanding on May 1, 2017: 39,018,392

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Unless otherwise stated, all references to "us," "our," "Blueprint," "Blueprint Medicines," "we," the "Company" and similar designations in this Quarterly Report on Form 10-Q refer to Blueprint Medicines Corporation and its consolidated subsidiary, Blueprint Medicines Security Corporation.

FORWARD-LOOKING STATEMENTS

This Quarterly Report on Form 10-Q contains forward-looking statements that involve substantial risks and uncertainties. All statements, other than statements of historical facts, contained in this Quarterly Report on Form 10-Q are forward-looking statements. In some cases, you can identify forward-looking statements by words such as "anticipate," "believe," "contemplate," "continue," "could," "estimate," "expect," "intend," "may," "plan," "potential," "predict," "project," "seek," "should," "target," "will," "would" or the negative of these words or other comparable terminology, although not all forward-looking statements contain these identifying words.

The forward-looking statements in this Quarterly Report on Form 10-Q include, but are not limited to, statements about:

- the initiation, timing, progress and results of our pre-clinical studies and clinical trials, including our Phase 1 clinical trials for BLU-285, BLU-554 and BLU-667, and our research and development programs;
- our ability to advance drug candidates into, and successfully complete, clinical trials;
- the timing or likelihood of regulatory filings and approvals;
- the commercialization of our drug candidates, if approved;
- the pricing and reimbursement of our drug candidates, if approved;
- the implementation of our business model, strategic plans for our business, drug candidates and technology;
- the scope of protection we are able to establish and maintain for intellectual property rights covering our drug candidates and technology;
- estimates of our expenses, future revenues, capital requirements and our needs for additional financing;
- the potential benefits of our existing rare genetic disease collaboration with Alexion Pharma Holding and our existing cancer immunotherapy collaboration with F. Hoffmann-La Roche Ltd and Hoffmann-La Roche Inc., as well as our ability to enter into other strategic arrangements;
- the development of companion diagnostic tests for our drug candidates, including our companion diagnostic test with Ventana Medical Systems, Inc. for BLU-554 and our companion diagnostic test with QIAGEN Manchester Limited for BLU-285;
- our ability to maintain and establish collaborations;
- our financial performance; and
- developments relating to our competitors and our industry.

Any forward-looking statements in this Quarterly Report on Form 10-Q reflect our current views with respect to future events or to our future financial performance and involve known and unknown risks, uncertainties and other important factors that may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by these forward-looking statements. We have included important factors in the cautionary statements included in this Quarterly Report on Form 10-Q, particularly in the "Risk Factors" section, that could cause actual results or events to differ materially from the forward-looking statements that we make. Given these uncertainties, you should not place undue reliance on these forward-looking

statements. Our forward-looking statements do not reflect the potential impact of any future acquisitions, mergers, dispositions, joint ventures or investments we may make or enter into.

You should read this Quarterly Report on Form 10-Q and the documents that we have filed as exhibits to this Quarterly Report on Form 10-Q completely and with the understanding that our actual future results, performance or achievements may be materially different from what we expect. Except as required by law, we assume no obligation to update or revise these forward-looking statements for any reason, even if new information becomes available in the future.

This Quarterly Report on Form 10-Q also contains estimates, projections and other information concerning our industry, our business and the markets for certain diseases, including data regarding the estimated size of those markets, and the incidence and prevalence of certain medical conditions. Information that is based on estimates, forecasts, projections, market research or similar methodologies is inherently subject to uncertainties and actual events or circumstances may differ materially from events and circumstances reflected in this information. Unless otherwise expressly stated, we obtained this industry, business, market and other data from reports, research surveys, studies and similar data prepared by market research firms and other third parties, industry, medical and general publications, government data and similar sources.

PART I – FINANCIAL INFORMATION

Item 1. Financial Statements

Blueprint Medicines Corporation
Condensed Consolidated Balance Sheets
(in thousands, except share and per share data)
(Unaudited)

	March 31, 2017	December 31, 2016
Assets		
Current assets:		
Cash and cash equivalents	$ 56,356	$ 52,069
Investments, available-for-sale	150,040	162,090
Unbilled accounts receivable	2,826	3,577
Prepaid expenses and other current assets	4,736	2,689
Total current assets	213,958	220,425
Investments, available-for-sale	29,929	54,059
Property and equipment, net	6,081	6,188
Other assets	1,413	856
Restricted cash	1,267	1,267
Total assets	$ 252,648	$ 282,795
Liabilities and stockholders' equity		
Current liabilities:		
Accounts payable	2,282	2,211
Accrued expenses	10,346	11,746
Current portion of deferred revenue	10,396	11,426
Current portion of lease incentive obligation	578	578
Current portion of deferred rent	17	—
Current portion of term loan payable	2,140	2,551
Total current liabilities	25,759	28,512
Deferred rent, net of current portion	924	932
Deferred revenue, net of current portion	33,824	35,809
Lease incentive obligation, net of current portion	2,648	2,792
Term loan payable, net of current portion	1,106	1,518
Other long term liabilities	165	154
Commitments (Note 10)		
Stockholders' equity:		
Preferred stock, $0.001 par value; 5,000,000 shares authorized; no shares issued and outstanding	—	—
Common stock, $0.001 par value; 120,000,000 shares authorized; 33,249,614 and 33,125,479 shares issued at March 31, 2017 and December 31, 2016, respectively, and 33,249,360 and 33,123,354 shares outstanding at March 31, 2017 and December 31, 2016, respectively	33	33
Additional paid-in capital	423,750	420,533
Accumulated other comprehensive loss	(114)	(18)
Accumulated deficit	(235,447)	(207,470)
Total stockholders' equity	188,222	213,078
Total liabilities and stockholders' equity	$ 252,648	$ 282,795

Blueprint Medicines Corporation
Condensed Consolidated Statements of Operations and Comprehensive Loss
(in thousands, except per share data)
(Unaudited)

	Three Months Ended March 31,	
	2017	2016
Collaboration revenue	$ 5,840	$ 6,856
Operating expenses:		
Research and development	28,487	17,635
General and administrative	5,683	4,646
Total operating expenses	34,170	22,281
Other income (expense):		
Other income (expense), net	425	61
Interest expense	(72)	(140)
Total other income (expense)	353	(79)
Net loss	$ (27,977)	$ (15,504)
Other comprehensive loss:		
Unrealized (loss) gain on investments	(114)	31
Comprehensive loss	$ (28,091)	$ (15,473)
Net loss per share applicable to common stockholders — basic and diluted	$ (0.84)	$ (0.57)
Weighted-average number of common shares used in net loss per share applicable to common stockholders — basic and diluted	33,190	27,088

Blueprint Medicines Corporation
Condensed Consolidated Statements of Cash Flows
(in thousands)
(Unaudited)

	Three Months Ended March 31,	
	2017	**2016**
Operating activities		
Net loss	$ (27,977)	$ (15,504)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	398	386
Noncash interest expense	11	22
Stock-based compensation	2,240	1,102
Accretion of premiums and discounts on investments	86	35
Changes in assets and liabilities:		
Unbilled accounts receivable	751	(818)
Prepaid expenses and other current assets	(1,972)	2,262
Other assets	14	11
Accounts payable	71	567
Accrued expenses	(1,552)	(321)
Deferred revenue	(3,015)	43,127
Deferred rent	(135)	(118)
Net cash (used in) provided by operating activities	(31,080)	30,751
Investing activities		
Purchases of property and equipment	(210)	(1,262)
Restricted cash	—	119
Purchases of investments	(18,003)	(69,222)
Maturities of investments	54,000	—
Net cash provided by (used in) investing activities	35,787	(70,365)
Financing activities		
Principal payments on loan payable	(833)	(833)
Payment of offering costs	(489)	—
Proceeds from issuance of common stock, net of repurchases	902	29
Net cash used in financing activities	(420)	(804)
Net increase (decrease) in cash and cash equivalents	4,287	(40,418)
Cash and cash equivalents at beginning of period	52,069	162,707
Cash and cash equivalents at end of period	$ 56,356	$ 122,289
Supplemental cash flow information		
Public offering costs incurred but unpaid at period end	$ 516	$ —
Property and equipment purchases unpaid at period end	$ 80	$ 244
Cash paid for interest	$ 50	$ 95

Blueprint Medicines Corporation
Notes to Condensed Consolidated Financial Statements
(Unaudited)

1. Nature of Business

Blueprint Medicines Corporation (the Company), a Delaware corporation incorporated on October 14, 2008, is a biopharmaceutical company focused on improving the lives of patients with genomically defined diseases driven by abnormal kinase activation. The Company's approach is to systematically and reproducibly identify kinases that are drivers of diseases in genomically defined patient populations and to craft drug candidates that may provide significant and durable clinical response to patients without adequate treatment options.

The Company is devoting substantially all of its efforts to research and development, initial market development, and raising capital. The Company is subject to a number of risks similar to those of other early stage companies, including dependence on key individuals; establishing safety and efficacy in clinical trials for its drug candidates; the need to develop commercially viable drug candidates; competition from other companies, many of which are larger and better capitalized; and the need to obtain adequate additional financing to fund the development of its drug candidates. If the Company is unable to raise capital when needed or on attractive terms, it would be forced to delay, reduce, eliminate or out-license certain of its research and development programs or future commercialization efforts.

On May 5, 2015, the Company completed an initial public offering (IPO) of its common stock, which resulted in the sale of 9,367,708 shares of its common stock at a price to the public of $18.00 per share, including 1,221,874 shares of common stock sold by the Company pursuant to the exercise in full by the underwriters of their option to purchase additional shares in connection with the offering. The Company received net proceeds of $154.8 million, after deducting underwriting discounts and commissions and offering expenses paid by the Company.

On December 13, 2016, the Company closed a follow-on public offering of 5,750,000 shares of its common stock at a price to the public of $25.00 per share, including 750,000 shares of common stock sold by the Company pursuant to the exercise in full by the underwriters of their option to purchase additional shares in connection with the offering. The Company received net proceeds of $134.5 million, after deducting underwriting discounts and commissions and offering expenses payable by the Company.

On April 4, 2017, the Company closed a follow-on public offering of 5,750,000 shares of its common stock at a price to the public of $40.00 per share, including 750,000 shares of common stock sold by the Company pursuant to the exercise in full by the underwriters of their option to purchase additional shares in connection with the offering (the April 2017 follow-on public offering). The Company received net proceeds of $215.6 million, after deducting underwriting discounts and commissions and offering expenses payable by the Company.

As of March 31, 2017, the Company had cash, cash equivalents and investments of $236.3 million. Based on the Company's current plans, the Company believes its existing cash, cash equivalents and investments, including the $215.6 million in net proceeds from its April 2017 follow-on public offering but excluding any potential option fees and milestone payments under our existing collaborations, will be sufficient to enable the Company to fund its operating expenses and capital expenditure requirements into the second half of 2019.

2. Summary of Significant Accounting Policies and Recent Accounting Pronouncements

Basis of Presentation

The unaudited interim condensed consolidated financial statements of the Company included herein have been prepared in accordance with accounting principles generally accepted in the United States (GAAP) as found in the Accounting Standards Codification (ASC), Accounting Standards Update (ASU) of the Financial Accounting Standards Board (FASB) and the rules and regulations of the Securities and Exchange Commission (SEC). Certain information and footnote disclosures normally included in financial statements prepared in accordance with GAAP have been condensed or omitted from this report, as is permitted by such rules and regulations. Accordingly, these financial statements should be read in conjunction with the financial statements as of and for the year ended December 31, 2016 and notes thereto

included in the Company's Annual Report on Form 10-K for the year ended December 31, 2016, filed with the SEC on March 9, 2017.

The unaudited interim condensed consolidated financial statements have been prepared on the same basis as the audited financial statements and include the accounts of the Company and its wholly-owned subsidiary, Blueprint Medicines Security Corporation, which is a Massachusetts subsidiary created to buy, sell, and hold securities. All intercompany transactions and balances have been eliminated. In the opinion of the Company's management, the accompanying unaudited interim condensed consolidated financial statements contain all adjustments which are necessary to present fairly the Company's financial position as of March 31, 2017 and the results of its operations and cash flows for the three months ended March 31, 2017. Such adjustments are of a normal and recurring nature. The results for the three months ended March 31, 2017 are not necessarily indicative of the results for the year ending December 31, 2017, or for any future period.

On December 13, 2016, the Company closed its underwritten public offering of 5,750,000 shares. The significant increase in shares outstanding is expected to impact the year-over-year comparability of the Company's net loss per share calculations.

Use of Estimates

The preparation of financial statements in conformity with GAAP requires the Company's management to make estimates and assumptions that affect the amounts reported in the financial statements and accompanying notes. Actual results could differ from those estimates. Management considers many factors in selecting appropriate financial accounting policies and in developing the estimates and assumptions that are used in the preparation of the financial statements. Management must apply significant judgment in this process. Management's estimation process often may yield a range of potentially reasonable estimates and management must select an amount that falls within that range of reasonable estimates. Estimates are used in the following areas, among others: stock-based compensation expense; revenue recognition; accrued expenses; and income taxes.

Significant Accounting Policies

The Company's critical accounting policies are those policies that require the most significant judgments and estimates in the preparation of our financial statements. Management has determined that the Company's most critical accounting policies are those relating to revenue recognition, accrued research and development expenses, available-for-sale investments and stock-based compensation.

There have been no significant changes to the Company's critical accounting policies discussed in its Annual Report on Form 10-K for the year ended December 31, 2016 related to available-for-sale investments, revenue recognition, accrued research and development expenses and stock-based compensation.

Recent Accounting Pronouncements

In May 2014, the FASB issued ASU No. 2014-09, *Revenue from Contracts with Customers* (ASU 2014-09), which supersedes the revenue recognition requirements in ASC 605-25, *Multiple-Element Arrangements* and most industry-specific guidance. The new standard requires that an entity recognize revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the company expects to be entitled in exchange for those goods or services. The update also requires additional disclosure about the nature, amount, timing and uncertainty of revenue and cash flows arising from customer contracts, including significant judgments and changes in judgments and assets recognized from costs incurred to obtain or fulfill a contract. This new guidance will be effective for annual reporting periods (including interim reporting periods within those years) beginning January 1, 2018. Early adoption in 2017 is permitted. Companies have the option of applying this new guidance retrospectively to each prior reporting period presented (the full retrospective method) or retrospectively with the cumulative effect of initially applying this update recognized at the date of initial application (the modified retrospective method). The Company currently anticipates adoption of the new standard effective January 1, 2018 under the modified retrospective method. The Company believes there may be a potential impact in the way it recognizes revenue under its agreement with F. Hoffmann-La Roche Ltd and Hoffmann-La Roche Inc. (collectively, Roche) as well as the recognition of milestone

revenue prior to achievement. The Company is in the process of determining the impact of the new guidance on its financial statements.

In March 2016, the FASB issued ASU No. 2016-09, *Compensation – Stock Compensation* (ASU No. 2016-09), which amends ASC Topic 718, *Compensation – Stock Compensation*. The new standard identifies areas for simplification involving several aspects of accounting for share-based payment transactions, including the income tax consequences, classification of awards as either equity or liabilities, an option to recognize gross stock compensation expense with actual forfeitures recognized as they occur, as well as certain classifications on the statement of cash flows. The new standard was effective for the Company on January 1, 2017. The Company applied ASU 2016-09 using a modified retrospective approach and adopted the option to recognize gross stock compensation expense with actual forfeitures recognized as they occur. Given that the application of the estimated forfeiture rate prior to January 1, 2017 resulted in an insignificant reduction in stock-based compensation expense, the cumulative-effect adjustment to retained earnings recognized as of January 1, 2017 was not material to the consolidated financial statements. The adoption of ASU 2016-09 also requires all income tax adjustments to be recognized in the consolidated statements of operations. As the increase in net deferred tax assets is fully offset by a corresponding increase to the deferred tax asset valuation allowance, there was no material impact of the adoption of this standard. The amount of deferred tax assets that had not been previously recognized due to the recognition of excess tax benefits is $1.1 million.

In February 2016, the FASB issued ASU No. 2016-02, *Leases* (ASU No. 2016-02), which will change the way the Company recognizes its leased assets. ASU No. 2016-02 will require organizations that lease assets—referred to as "lessees"—to recognize on the balance sheet the assets and liabilities representing the rights and obligations created by those leases. ASU No. 2016-02 will also require disclosures to help investors and other financial statement users better understand the amount, timing, and uncertainty of cash flows arising from leases. The standard is effective for annual reporting periods (including interim reporting periods within those years) beginning after December 15, 2018. Early adoption is permitted. The Company is currently evaluating the methods of adoption allowed by the new standard and the effect that adoption of the standard is expected to have on the Company's consolidated financial statements and related disclosures.

In August 2016, the FASB issued ASU No. 2016-15, *Statement of Cash Flows (Topic 230)* (ASU No. 2016-15), which simplifies certain elements of cash flow classification. The new guidance is intended to reduce diversity in practice in how certain transactions are classified in the statement of cash flows. ASU No. 2016-15 is effective for annual periods beginning after December 15, 2017. The Company is currently evaluating the impact the adoption of ASU No. 2016-15 will have on its consolidated financial statements.

In November 2016, the FASB issued ASU No. 2016-18, *Restricted Cash* (ASU No. 2016-18). The amendments in ASU No. 2016-18 require an entity to reconcile and explain the period-over-period change in total cash, cash equivalents and restricted cash within its statements of cash flows. ASU No. 2016-18 is effective for fiscal years (including interim reporting periods within those years) beginning after December 15, 2017. Early adoption is permitted. A reporting entity must apply the amendments in ASU No. 2016-18 using a full retrospective approach. The Company believes that the adoption of this guidance will not have a significant impact on its consolidated financial statements and related disclosures.

3. *Cash Equivalents and Investments*

Cash equivalents are highly liquid investments that are readily convertible into cash with original maturities of three months or less when purchased. Investments consist of securities with original maturities greater than 90 days when purchased. The Company classifies these investments as available-for-sale and records them at fair value in the accompanying condensed consolidated balance sheets. Unrealized gains or losses are included in accumulated other comprehensive income (loss). Premiums or discounts from par value are amortized to investment income over the life of the underlying investment.

Cash equivalents and investments, available-for-sale, consisted of the following at March 31, 2017 and December 31, 2016 (in thousands):

March 31, 2017	Average Maturity	Amortized Cost	Unrealized Gain	Unrealized Losses	Fair Value
Cash equivalents:					
Money market funds		$ 50,364	$ —	$ —	$ 50,364
Government agency securities		5,991	1	—	5,992
Investments, available-for-sale:					
U.S. treasury obligations	321 Days	180,084	—	(115)	179,969
Total		$ 236,439	$ 1	$ (115)	$ 236,325

December 31, 2016	Average Maturity	Amortized Cost	Unrealized Gain	Unrealized Losses	Fair Value
Cash equivalents:					
Money market funds		$ 52,069	$ —	$ —	$ 52,069
Investments, available-for-sale:					
U.S. treasury obligations	298 Days	216,167	14	(32)	216,149
Total		$ 268,236	$ 14	$ (32)	$ 268,218

Although available to be sold to meet operating needs or otherwise, securities are generally held through maturity. The cost of securities sold is determined based on the specific identification method for purposes of recording realized gains and losses. During the three months ended March 31, 2017, there were no realized gains or losses on sales of investments, and no investments were adjusted for other than temporary declines in fair value.

At March 31, 2017, the Company held 33 securities that were in an unrealized loss position. The aggregate fair value of securities held by the Company in an unrealized loss position for less than twelve months as of March 31, 2017 was $179.9 million, and there were no securities held by the Company in an unrealized loss position for more than twelve months. The Company has the intent and ability to hold such securities until recovery. The Company determined that there was no material change in the credit risk of the above investments. As a result, the Company determined it did not hold any investments with an other-than temporary impairment as of March 31, 2017.

4. ***Fair Value of Financial Instruments***

The fair value hierarchy prioritizes the inputs to valuation techniques used to measure fair value into three broad levels as follows:

- Level 1 inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities.
- Level 2 inputs are inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly.
- Level 3 inputs are unobservable inputs that reflect the Company's own assumptions about the assumptions market participants would use in pricing the asset or liability. Financial assets and liabilities are classified in their entirety based on the lowest level of input that is significant to the fair value measurement.

Financial instruments measured at fair value as of March 31, 2017 are classified below based on the fair value hierarchy described above:

Description	March 31, 2017	Active Markets (Level 1)	Observable Inputs (Level 2)	Unobservable Inputs (Level 3)
Financial Assets				
Cash equivalents:				
Money market funds	$ 50,364	$ 50,364	$ —	$ —
Government agency securities	5,992	5,992		
Investments, available-for-sale:				
U.S Treasury obligations	179,969	179,969	—	—
Total	$ 236,325	$ 236,325	$ —	$ —

Financial instruments measured at fair value as of December 31, 2016 are classified below based on the fair value hierarchy described above:

Description	December 31, 2016	Active Markets (Level 1)	Observable Inputs (Level 2)	Unobservable Inputs (Level 3)
Financial Assets				
Cash equivalents:				
Money market funds	$ 52,069	$ 52,069	$ —	$ —
Investments, available-for-sale:				
U.S Treasury obligations	216,149	216,149	—	—
Total	$ 268,218	$ 268,218	$ —	$ —

The fair value of the Company's term loan payable is determined using current applicable rates for similar instruments as of the balance sheet date. The carrying value of the Company's term loan payable approximates fair value because the Company's interest rate yield approximates current market rates. The Company's term loan payable is a Level 3 liability within the fair value hierarchy.

5. Restricted Cash

As of March 31, 2017 and December 31, 2016, $1.3 million of restricted cash was included in long-term assets on the Company's balance sheet related to a security deposit for the lease agreement for the Company's corporate headquarters.

6. Collaborations

Roche

In March 2016, the Company entered into a collaboration and license agreement (as amended, Roche agreement) Roche for the discovery, development and commercialization of up to five small molecule therapeutics targeting kinases believed to be important in cancer immunotherapy, as single products or possibly in combination with other therapeutics. The parties initiated activities for three of the collaboration programs in 2016, and the parties have agreed to work together to use the Company's novel target discovery engine and proprietary compound library to select targets for up to two additional collaboration programs.

Under the Roche agreement, Roche is granted up to five option rights to obtain an exclusive license to exploit products derived from the collaboration programs in the field of cancer immunotherapy. Such option rights are triggered upon the achievement of Phase 1 proof-of-concept. For up to three of the five collaboration programs, if Roche exercises its option, Roche will receive worldwide, exclusive commercialization rights for the licensed products. For up to two of the five collaboration programs, if Roche exercises its option, the Company will retain commercialization rights in the United States for the licensed products, and Roche will receive commercialization rights outside of the United States for the licensed products. The Company will also retain worldwide rights to any products for which Roche elects not to exercise its applicable option.

Prior to Roche's exercise of an option, the Company will have the lead responsibility for drug discovery and pre-clinical development of all collaboration programs. In addition, the Company will have the lead responsibility for the conduct of all Phase 1 clinical trials other than those Phase 1 clinical trials for any product in combination with Roche's portfolio of therapeutics, for which Roche will have the right to lead the conduct of such Phase 1 clinical trials. Pursuant to the Roche agreement, the parties will share the costs of Phase 1 development for each collaboration program. In addition, Roche will be responsible for post-Phase 1 development costs for each licensed product for which it retains global commercialization rights, and the Company and Roche will share post-Phase 1 development costs for each licensed product for which the Company retains commercialization rights in the United States.

Subject to the terms of the Roche agreement, the Company received an upfront cash payment of $45.0 million and will be eligible to receive up to approximately $965.0 million in contingent option fees and milestone payments related to specified research, pre-clinical, clinical, regulatory and sales-based milestones. Of the total contingent payments, up to approximately $215.0 million are for option fees and milestone payments for research, pre-clinical and clinical development events prior to licensing across all five potential collaboration programs, including contingent milestone payments for initiation of each of the collaboration programs for which the parties will work together to select targets (pre-option exercise milestones). In addition, for any licensed product for which Roche retains worldwide commercialization rights, the Company will be eligible to receive tiered royalties ranging from low double-digits to high-teens on future net sales of the licensed product. For any licensed product for which the Company retains commercialization rights in the United States, the Company and Roche will be eligible to receive tiered royalties ranging from mid-single-digits to low double-digits on future net sales in the other party's respective territories in which it commercializes the licensed product. The upfront cash payment and any payments for milestones, option fees and royalties are non-refundable, non-creditable and not subject to set-off.

The Roche agreement will continue until the date when no royalty or other payment obligations are or will become due, unless earlier terminated in accordance with the terms of the Roche agreement. Prior to its exercise of its first option, Roche may terminate the Roche agreement at will, in whole or on a collaboration target-by-collaboration target basis, upon 120 days' prior written notice to the Company. Following its exercise of an option, Roche may terminate the Roche agreement at will, in whole, on a collaboration target-by-collaboration target basis, on a collaboration program-by-collaboration program basis or, if a licensed product has been commercially sold, on a country-by-country basis, (i) upon 120 days' prior written notice if a licensed product has not been commercially sold or (ii) upon 180 days' prior written notice if a licensed product has been commercially sold. Either party may terminate the Roche agreement for the other party's uncured material breach or insolvency and in certain other circumstances agreed to by the parties. In certain termination circumstances, the Company is entitled to retain specified licenses to be able to continue to exploit the licensed products.

The Company determined that there were five deliverables under the Roche agreement: (i) a non-transferable, sub-licensable and non-exclusive license to use the Company's intellectual property and collaboration compounds to conduct research activities;(ii) conducting research and development activities through Phase 1 clinical trials under the research plan; (iii) providing pre-clinical and clinical supply of collaboration compounds; (iv) participation on a joint research committee (JRC) and joint development committee (JDC); and (v) regulatory responsibilities under Phase 1 clinical trials.

The Company determined that the license did not have value to Roche on a stand-alone basis due to the specialized nature of the research activities to be provided by the Company that are not available in the marketplace and the fact that the license is to perform research and development only. Therefore, the license has limited value without the performance of the research and development activities and is not separable. The pre-clinical and clinical supply activities are integral to the performance of the research and development activities and can only be used for the performance of such activities, and the regulatory responsibilities are dependent on the research and development activities. The Company determined that the best estimate for the selling price of the JRC and JDC participation was inconsequential. Accordingly, the Company combined the license, pre-clinical and clinical supply, JRC and JDC participation and regulatory responsibilities deliverables with the research and development activities, the last item to be delivered in the arrangement, as one unit of accounting. The Company is recognizing the total allocable arrangement consideration consisting of the upfront payment of $45.0 million as revenue on a straight-line basis over the Company's best estimate of the period it expects to perform research and development activities. The Company expects the services to be delivered ratably.

The Company evaluated whether the option fees that may be received in connection with the Roche agreement are substantive. The Company concluded that the option fees were substantive due to the uncertainty around whether the goals of the collaboration will be achieved, and therefore the options are not a deliverable in the current arrangement. If Roche elects to exercise the options, the exercises and related contingent deliverables would be accounted for as a separate arrangement.

The Company evaluated whether the milestones that may be received in connection with the Roche agreement are substantive milestones. Pre-option exercise milestones, of up to $215.0 million, that are expected to be achieved as a result of the Company's efforts during the performance of the research and development activities are considered substantive and are recognized as revenue upon the achievement of the milestone, assuming all other revenue recognition criteria are met. The development event milestones are not considered substantive because the Company does not contribute effort to the achievement of such milestones as they are expected to be achieved after the performance of the research and development activities. Consideration received with respect to these milestones will be added to the total arrangement consideration that has been allocated to the identified units of accounting. As a result, that amount is recognized as revenue ratably over the period starting from the effective date of the agreement to the date that the Company will complete all of its obligations, with a cumulative catch-up from the effective date through the date of achievement of the milestone. If the consideration is received after the completion of all of the Company's obligations, the amount will be recognized as revenue immediately.

During the three months ended March 31, 2017 and 2016, the Company recognized revenue under the Roche agreement of $1.4 million and $0.2 million, respectively, which represents a portion of the $45.0 million upfront payment.

Alexion

In March 2015, the Company entered into a research, development and commercialization agreement (Alexion agreement) with Alexion Pharma Holding (Alexion) to research, develop and commercialize drug candidates for an undisclosed activated kinase target, which is the cause of a rare genetic disease. Under the terms of the Alexion agreement, the Company is responsible for research and pre-clinical development activities related to drug candidates and Alexion is responsible for all clinical development, manufacturing and commercialization activities related to drug candidates.

Alexion is responsible for funding 100% of the Company's research and development costs incurred under the research plan, including pass-through costs and a negotiated yearly rate per full-time equivalent for its employees' time and their associated overhead expenses. The Company received a $15.0 million non-refundable upfront payment in March 2015 upon execution of the Alexion agreement and is eligible to receive over $250.0 million in payments upon the successful achievement of pre-specified pre-clinical, clinical, regulatory and commercial milestones as follows: (i) up to $6.0 million in pre-clinical milestone payments for the first licensed product, (ii) up to $83.0 million and $61.5 million in development milestone payments for the first and second licensed products, respectively, and (iii) up to $51.0 million in commercial milestone payments for each of the first and second licensed products. Alexion will pay the Company tiered royalties, ranging from mid-single to low-double digit percentages, on a country-by-country and licensed-product-by-licensed product basis, on worldwide net product sales of licensed products. The royalty term for each licensed product in each country is the period commencing with first commercial sale of such licensed product in such country and ending on the later of (i) the expiration of the last-to-expire valid claim of specified patents covering such licensed product, (ii) the expiration of the applicable regulatory exclusivity period, and (iii) 10 or 15 years from specified commercial sales. There are no refund provisions in the Alexion agreement.

Alexion has the right to terminate the Alexion agreement if the Company undergoes a change of control or becomes an affiliate of a biotechnology or pharmaceutical company, and may terminate the Alexion agreement at will upon 90 days prior written notice. The Company and Alexion have the right to terminate the Alexion agreement in the event of the other party's uncured breach or insolvency, and in certain other circumstances agreed to by the parties.

The Company determined that there were three deliverables under the Alexion agreement: (i) an exclusive license to research, develop, manufacture and commercialize the licensed products and the compounds in the field in the territory, (ii) conducting research and development activities under the research plan and (iii) participation on a joint steering committee (JSC) and joint project team (JPT).

The Company determined that the license did not have value to Alexion on a stand-alone basis due to the specialized nature of the research services to be provided by the Company that are not available in the marketplace. Therefore, the deliverables are not separable and, accordingly, the license, undelivered research and development activities and JSC and JPT participation are a single unit of accounting. When multiple deliverables are accounted for as a single unit of accounting, the Company bases its revenue recognition model on the final deliverable. Under the Alexion agreement, the last deliverable to be completed is its research and development activities and participation on the JSC and JPT, which are expected to be delivered over the same performance period. The Company is utilizing a proportional performance model to recognize revenue under the Alexion agreement.

The Company evaluated whether the milestones that may be received in connection with the Alexion agreement are substantive or non-substantive milestones. The Company concluded that the first pre-clinical milestone payment in the Alexion agreement is non-substantive due to the certainty at the date the arrangement was entered into that the event will be achieved. In the second quarter of 2015, the Company achieved the first pre-clinical milestone under the Alexion agreement and received a $1.8 million payment from Alexion. The Company is recognizing revenues from the related milestone payment over the period of performance.

The remaining non-refundable pre-clinical milestones that are expected to be achieved as a result of the Company's efforts during the period of substantial involvement are considered substantive and are recognized as revenue upon the achievement of the milestone, assuming all other revenue recognition criteria are met. The Company has recognized and received an aggregate of $2.0 million in substantive milestones through March 31, 2017. Milestones that are expected to be achieved after the period of substantial involvement are not considered substantive because the Company does not contribute effort to the achievement of such milestones. These milestones are recognized as revenue upon achievement of the milestone, assuming all other revenue recognition criteria are met, as there are no undelivered elements remaining and no continuing performance obligations.

During the three months ended March 31, 2017, the Company recognized revenue under the Alexion agreement of $4.4 million, which represents $2.8 million of reimbursable research and development costs, as well as a portion of the $15.0 million upfront payment and the $1.75 million non-substantive milestone payment previously received. During the three months ended March 31, 2016, the Company recognized revenue under the Alexion agreement of $6.6 million, which represents $4.2 million of reimbursable research and development costs, a $0.75 million milestone payment, which was recognized upon achievement, as well as a portion of the $15.0 million upfront payment and the $1.75 million non-substantive milestone payment previously received. During the three months ended March 31, 2017, the Company received $3.6 million related to reimbursable research and development costs under the Alexion agreement. As of March 31, 2017, the Company has recorded unbilled accounts receivable of $2.8 million related to reimbursable research and development costs under the Alexion agreement for activities performed during the first quarter of 2017.

7. Term Loan

In May 2013, the Company entered into a loan and security agreement with Silicon Valley Bank (the 2013 Term Loan), which provided for up to $5.0 million in funding, to be made available in three tranches. Loan advances accrue interest at a fixed rate of 2% above the prime rate. In June 2013, the Company drew the first loan advance of $1.0 million under the 2013 Term Loan and was required to make interest-only payments until April 1, 2014, and consecutive monthly payments of principal, plus accrued interest, over the remaining term through March 2017. In September 2013, the Company drew the second loan advance of $2.0 million under the 2013 Term Loan and was required to make interest-only payments until April 1, 2014, and consecutive monthly payments of principal, plus accrued interest, over the remaining term through March 2017. In June 2014, the Company drew the remaining $2.0 million advance under the 2013 Term Loan and was required to make interest-only payments until January 1, 2015, and consecutive monthly payments of principal, plus accrued interest, over the remaining term through December 2017. In November 2014, the Company amended the 2013 Term Loan to allow the Company to borrow an additional $5.0 million (the 2014 Term Loan). The Company accounted for the amendment as a modification to the existing 2013 Term Loan. The Company immediately drew the additional $5.0 million under the 2014 Term Loan and was required to make interest-only payments until December 1, 2015, and consecutive monthly payments of principal, plus accrued interest, over the remaining term through November 2018. The Company is required to pay a fee of 4% of the total loan advances at the end of the term of each of the 2013 Term Loan and the 2014 Term Loan. The fee is being accreted to interest expense over the term of the 2013 Term Loan and the 2014 Term Loan. In the event of prepayment, the

Company is obligated to pay 1% to 2% of the amount of the outstanding principal depending upon the timing of the prepayment.

The 2013 Term Loan and 2014 Term Loan are collateralized by a blanket lien on all corporate assets, excluding intellectual property, and by a negative pledge of the Company's intellectual property. The 2013 Term Loan and 2014 Term Loan contain customary default provisions that include material adverse events, as defined therein. The Company has determined that the risk of subjective acceleration under the material adverse events clause is remote and therefore has classified the outstanding principal in current and long-term liabilities based on scheduled principal payments.

The Company assessed all terms and features of the 2013 Term Loan and the 2014 Term Loan in order to identify any potential embedded features that would require bifurcation. As part of this analysis, the Company assessed the economic characteristics and risks of the term loan, including put and call features. The Company determined that all features of each of the 2013 Term Loan and the 2014 Term Loan are clearly and closely associated with a debt host and do not require bifurcation as a derivative liability, or the fair value of the feature is immaterial to the Company's financial statements. The Company will continue to reassess the features on a quarterly basis to determine if they require separate accounting.

Future minimum payments, which include principal and interest due under each of the 2013 Term Loan and the 2014 Term Loan, are $1.9 million, in the aggregate, for the remainder of 2017 and $1.6 million, in the aggregate, thereafter.

In connection with the 2013 Term Loan, the Company issued a warrant to Silicon Valley Bank to purchase 150,000 shares of Series A convertible preferred stock at an exercise price of $1.00 per share (the Series A Warrant). In connection with the 2014 Term Loan, the Company issued an additional warrant to Silicon Valley Bank to purchase 83,333 shares of Series B convertible preferred stock at an exercise price of $1.20 per share (the Series B Warrant).

On May 13, 2015, Silicon Valley Bank exercised the Series A Warrant and the Series B Warrant pursuant to the cashless exercise feature of the warrants. In connection with the exercise of the Series A Warrant under the 2013 Term Loan, the Company issued 21,281 shares of common stock to Silicon Valley Bank. Warrants to purchase 5,991 shares of common stock were cancelled as payment for the aggregate exercise price of the Series A Warrant to Silicon Valley Bank. In connection with the exercise of the Series B Warrant under the 2014 Term Loan, the Company issued 11,157 shares of common stock. Warrants to purchase 3,994 shares of common stock were cancelled as payment for the aggregate exercise price of the Series B Warrant.

The Company recorded a debt discount upon issuance of the warrants, which is being accreted as interest expense over the remaining term of the loan. The Company recorded interest expense related to the Series A Warrant and the Series B Warrant of less than $0.1 million in the three months ended March 31, 2017 and 2016, respectively.

8. Stock Awards

2015 Stock Option and Incentive Plan

In 2015, the Company's board of directors and stockholders approved the 2015 Stock Option and Incentive Plan (the 2015 Plan), which replaced the Company's 2011 Stock Option and Grant Plan, as amended (the 2011 Plan). The 2015 Plan includes incentive stock options, nonstatutory stock options, stock appreciation rights, restricted stock, restricted stock units, unrestricted stock, performance share awards and cash-based awards. The Company initially reserved a total of 1,460,084 shares of common stock for the issuance of awards under the 2015 Plan. The 2015 Plan provides that the number of shares reserved and available for issuance under the 2015 Plan will be cumulatively increased on January 1 of each calendar year by 4% of the number of shares of common stock issued and outstanding on the immediately preceding December 31 or such lesser amount as specified by the compensation committee of the board of directors. For the calendar year beginning January 1, 2017, the number of shares reserved for issuance under the 2015 Plan was increased by 1,325,019 shares. In addition, the total number of shares reserved for issuance is subject to adjustment in the event of a stock split, stock dividend or other change in our capitalization. At March 31, 2017, there were 2,138,101 shares available for future grant under the 2015 Plan.

Awards

Options and restricted stock awards granted by the Company generally vest ratably over four years, with a one-year cliff for new employee awards, and are exercisable from the date of grant for a period of ten years.

A summary of the Company's unvested restricted stock and related information follows:

	Shares	Weighted-Average Grant Date Fair Value
Unvested at December 31, 2016	2,125	$ 1.25
Vested	(1,871)	1.22
Repurchased	—	—
Unvested at March 31, 2017	254	1.49

The total fair value of restricted stock that vested during the three months ended March 31, 2017 and 2016 was $0.1 million and $0.7 million, respectively.

A summary of the Company's stock option activity and related information follows:

	Shares	Weighted-Average Exercise Price	Remaining Contractual Life (in Years)	Aggregate Intrinsic Value(1) (in thousands)
Outstanding at December 31, 2016	2,622,741	$ 11.67	8.30	$ 44,025
Granted	750,300	35.94		
Exercised	(124,135)	7.87		
Canceled	(11,863)	6.80		
Outstanding at March 31, 2017	3,237,043	$ 17.45	8.58	$ 72,949
Exercisable at March 31, 2017	958,200	$ 7.76	7.78	$ 30,882
Vested and expected to vest at March 31, 2017	3,237,043	$ 17.45	8.58	$ 72,949

(1)Intrinsic value represents the amount by which the fair market value as of March 31, 2017 of the underlying common stock exceeds the exercise price of the option.

The fair value of stock options is estimated on the grant date using the Black-Scholes option-pricing model based on the following weighted average assumptions:

	Three Months Ended	
	March 31, 2017	March 31, 2016
Risk-free interest rate	2.11 %	1.59 %
Expected dividend yield	— %	— %
Expected term (years)	6.0	6.0
Expected stock price volatility	75.43 %	76.74 %

The weighted-average grant date fair value of options granted in the three months ended March 31, 2017 and 2016 was $23.98 and $10.29 respectively. The total intrinsic value of options exercised in the three months ended March 31, 2017 and 2016 was $3.5 million and $0.4 million, respectively.

Total stock-based compensation expense recognized for all stock-based compensation awards in the condensed consolidated statements of operations and comprehensive loss is as follows (in thousands):

	Three Months Ended March 31,	
	2017	2016
Research and development	$ 1,124	$ 526
General and administrative	1,116	576
Total stock-based compensation expense	$ 2,240	$ 1,102

At March 31, 2017, the Company had $31.4 million of total unrecognized compensation cost related to non-vested stock awards, which is expected to be recognized over a weighted-average period of 2.73 years. Due to an operating loss, the Company does not record tax benefits associated with stock-based compensation or option exercises. Tax benefit will be recorded when realized.

2015 Employee Stock Purchase Plan

In 2015, the Company's board of directors and stockholders approved the 2015 Employee Stock Purchase Plan (the 2015 ESPP), which became effective upon the closing of the IPO in May 2015. The Company initially reserved a total of 243,347 shares of common stock for issuance under the 2015 ESPP. The 2015 ESPP provides that the number of shares reserved and available for issuance under the 2015 ESPP will be cumulatively increased on January 1 of each calendar year by 1% of the number of shares of common stock issued and outstanding on the immediately preceding December 31 or such lesser amount as specified by the compensation committee of the board of directors. For the calendar year beginning January 1, 2017, the number of shares reserved for issuance under the 2015 ESPP was increased by 331,254 shares. The Company issued no shares under the ESPP during the three months ended March 31, 2017.

9. Net Loss per Share

Basic net loss per share applicable to common stockholders is calculated by dividing net loss applicable to common stockholders by the weighted average shares outstanding during the period, without consideration for common stock equivalents. Diluted net loss per share applicable to common stockholders is calculated by adjusting weighted average shares outstanding for the dilutive effect of common stock equivalents outstanding for the period. For purposes of the dilutive net loss per share applicable to common stockholders calculation, stock options, and unvested restricted stock are considered to be common stock equivalents but are excluded from the calculation of diluted net loss per share applicable to common stockholders, as their effect would be anti-dilutive; therefore, basic and diluted net loss per share applicable to common stockholders were the same for all periods presented as a result of the Company's net loss. The following common stock equivalents were excluded from the calculation of diluted net loss per share applicable to common stockholders for the periods indicated because including them would have had an anti-dilutive effect.

	Three Months Ended March 31,	
	2017	2016
Stock options	3,237,043	2,395,469
Unvested restricted stock	254	90,130
Total	3,237,297	2,485,599

The weighted average number of common shares used in net loss per share applicable to common stockholders on a basic and diluted basis were 33,189,759 and 27,087,919 for the three months ended March 31, 2017 and 2016, respectively.

10. Commitments

On February 12, 2015, the Company entered into a lease for approximately 38,500 rentable square feet of office and laboratory space in Cambridge, Massachusetts, which the Company gained control over on June 15, 2015, and occupancy commenced in October 2015. The lease ends on October 31, 2022. The Company has an option to extend the lease for five additional years. The lease has a total commitment of $17.8 million over the seven year term. The Company has agreed to pay an initial annual base rent of approximately $2.3 million, which rises periodically until it

reaches approximately $2.8 million. The Company is recording rent expense on a straight-line basis through the end of the lease term. The Company has recorded deferred rent on the condensed consolidated balance sheet at March 31, 2017, accordingly. The lease provides the Company with an allowance for leasehold improvements of $4.3 million. The Company accounts for leasehold improvement incentives as a reduction to rent expense ratably over the lease term. The balance from the leasehold improvement incentives is included in lease incentive obligations on the balance sheets. The lease agreement required the Company to pay a security deposit of $1.3 million, which is recorded in restricted cash on the Company's balance sheet. For the three months ended March 31, 2017 and 2016, rent expense was $0.5 million and $0.6 million, respectively.

11. Subsequent Events

Follow-On Public Offering

On April 4, 2017, the Company closed the April 2017 follow-on public offering and received net proceeds of $215.6 million, after deducting underwriting discounts and commissions and offering expenses payable by the Company.

Lease Agreement

On April 28, 2017, the Company entered into a lease agreement (the Lease Agreement) with UP 45/75 Sidney Street, LLC (Landlord) for approximately 99,833 rentable square feet of office and laboratory space located at 45 Sidney Street in Cambridge, Massachusetts. The initial term of the Lease Agreement will be for a 146 month period, which the Company currently anticipates will commence on October 1, 2017. The Lease Agreement also provides the Company with an option to extend the lease for two consecutive five-year periods. During the initial term of the Lease Agreement, the Company's monthly base rent will start at approximately $641,000 beginning on the commencement date through the 14 month anniversary of the commencement date. The monthly base rent will increase by 3.0% on the 14 month anniversary of the commencement date and will increase by an additional 3.0% on an annual basis for the remainder of the initial term up to a maximum monthly base rent of approximately $887,000. The Landlord has also agreed to provide the Company with a tenant improvement allowance of approximately $14.2 million for improvements to be made to the premises. The Company will be obligated to maintain a security deposit with the Landlord in the amount of $3.5 million, which is subject to reduction by up to $1.0 million during the term of the Lease Agreement, subject to the satisfaction of specified terms and conditions.

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

The following discussion and analysis of our financial condition and results of operations should be read in conjunction with our unaudited consolidated financial statements and related notes appearing elsewhere in this Quarterly Report on Form 10-Q and the audited consolidated financial statements and related notes thereto and management's discussion and analysis of financial condition and results of operations included in our Annual Report on Form 10-K for the year ended December 31, 2016, filed with the Securities and Exchange Commission, or the SEC, on March 9, 2017. 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 or timing of certain events could differ materially from the results or timing described in, or implied by, these forward-looking statements.

Overview

We are a biopharmaceutical company focused on improving the lives of patients with genomically defined diseases driven by abnormal kinase activation. Our approach is to systematically and reproducibly identify kinases that are drivers of diseases in genomically defined patient populations and to craft drug candidates that may provide significant and durable clinical responses for patients without adequate treatment options. This integrated biology and chemistry approach enables us to identify, characterize and design drug candidates to inhibit novel kinase targets that have been difficult to selectively inhibit. By focusing on diseases in genomically defined patient populations, we believe that we will have a more efficient development path with a greater likelihood of success. Leveraging our novel target discovery engine, we have developed a robust small molecule drug pipeline in cancer and a rare genetic disease.

Our most advanced drug candidates are BLU-285, BLU-554 and BLU-667. BLU-285 is an orally available, potent and highly selective inhibitor that targets KIT, including Exon 17 mutations, and targets PDGFRα, including the D842V mutation. These mutations abnormally activate receptor tyrosine kinases that are drivers of cancer and proliferative disorders, including gastrointestinal stromal tumors, or GIST, and systemic mastocytosis, or SM. We are currently evaluating BLU-285 in an ongoing Phase 1 clinical trial for defined subsets of patients with GIST and an ongoing Phase 1 clinical trial for advanced SM. GIST is a rare disease that is a sarcoma, or tumor of bone or connective tissue, of the gastrointestinal tract, or GI tract, and SM is a rare disorder that causes an overproduction of mast cells and the accumulation of mast cells in the bone marrow and other organs, which can lead to a wide range of debilitating symptoms and organ dysfunction and failure. We plan to report updated data from our Phase 1 clinical trial for GIST at the 2017 ASCO Annual Meeting in Chicago, IL on June 5, 2017, and we plan to report updated data from our Phase 1 clinical trial for advanced SM in the second half of 2017. BLU-554 is an orally available, potent and highly selective inhibitor that targets FGFR4, a kinase that is aberrantly activated in a defined subset of patients with hepatocellular carcinoma, or HCC, the most common type of liver cancer. We are currently evaluating BLU-554 in an ongoing Phase 1 clinical trial in patients with advanced HCC. We plan to report updated data from our Phase 1 clinical trial for advanced HCC in the second half of 2017. BLU-667 targets RET, a receptor tyrosine kinase that is abnormally activated by mutations or translocations, and RET resistant mutants that we predict will arise from treatment with first generation therapies. RET is a driver of disease in non-small cell lung cancer, or NSCLC, and cancers of the thyroid, including medullary thyroid carcinoma, or MTC, and our research suggests that RET may be a driver of disease in subsets of colon cancer, breast cancer and other cancers. In March 2017, we dosed the first patient in our Phase 1 clinical trial for BLU-667 in patients with NSCLC, MTC and other advanced solid tumors, and enrollment is ongoing.

In September 2015, the U.S. Food and Drug Administration, or FDA, granted orphan drug designation to BLU-554 for the treatment of HCC, and in January 2016, the FDA granted orphan drug designation to BLU-285 for the treatment of GIST and SM. In addition, in October 2016, the FDA granted fast track designation to BLU-285 for the treatment of patients with unresectable or metastatic GIST that progressed following treatment with imatinib and a second tyrosine kinase inhibitor and for the treatment of patients with unresectable or metastatic GIST with the PDGFRα D842V mutation regardless of prior therapy. We have worldwide development and commercialization rights to BLU-285, BLU-554 and BLU-667.

We also have initiated a discovery program targeting protein kinase cAMP-activated catalytic subunit alpha, or PRKACA, fusions for the treatment of fibrolamellar carcinoma, or FLC, a rare and distinct subtype of liver cancer that typically arises in young adults. PRKACA fusions are the only known recurrent genomic events in FLC and are

considered to be the driver gene of the disease. Currently, there are no approved therapies for FLC, and surgery is the only available treatment option for some patients, but most patients inevitably progress. We plan to continue to leverage our discovery platform to systematically and reproducibly identify kinases that are drivers of diseases in genomically defined patient populations and craft drug candidates that potently and selectively target these kinases. We anticipate nominating at least one additional discovery program in 2017.

In addition to our wholly-owned clinical and pre-clinical programs, we have leveraged our discovery platform to enter into collaboration programs with Alexion Pharma Holding, or Alexion, and F. Hoffmann-La Roche Ltd and Hoffmann-La Roche Inc., which we refer to collectively as Roche.

Since inception, our operations have focused on organizing and staffing our company, business planning, raising capital, establishing our intellectual property, building our discovery platform, including our proprietary compound library and new target discovery engine, identifying kinase drug targets and potential drug candidates, producing drug substance and drug product material for use in pre-clinical studies and clinical trials, conducting pre-clinical studies, including GLP toxicology studies and commencing clinical development activities. We do not have any drugs approved for sale and have not generated any revenue from drug sales.

To date, we have financed our operations primarily through public offerings of our common stock, private placements of our convertible preferred stock, collaborations and a debt financing. Through March 31, 2017, we have received an aggregate of $501.3 million from such transactions, including $312.4 million in aggregate gross proceeds from the sale of common stock in our May 2015 initial public offering, or IPO, and December 2016 follow-on public offering, $115.1 million in gross proceeds from the issuance of convertible preferred stock, $18.8 million of upfront and milestone payments from Alexion, a $45.0 million upfront payment from Roche and $10.0 million in gross proceeds from the debt financing. In addition, we received gross proceeds of $230.0 million from the sale of common stock in our April 2017 follow-on public offering.

Since inception, we have incurred significant operating losses. Our net losses were $28.0 million for the three months ended March 31, 2017 and $72.5 million, $52.8 million and $40.3 million for the years ended December 31, 2016, 2015 and 2014, respectively. As of March 31, 2017, we had an accumulated deficit of $235.4 million. We expect to continue to incur significant expenses and operating losses over the next several years. We anticipate that our expenses will increase significantly in connection with our ongoing activities, particularly as we:

- continue the planned clinical development activities for our lead drug candidates, BLU-285, BLU-554 and BLU-667;
- continue to produce drug substance and drug product material for use in pre-clinical studies, clinical trials, and for use as commercial supply;
- continue to discover, validate and develop additional drug candidates;
- conduct research and development activities under our collaborations with Alexion and Roche;
- conduct development and commercialization activities for companion diagnostic tests, including our companion diagnostic tests with Ventana Medical Systems, Inc., or Ventana, for BLU-554 and with QIAGEN Manchester Limited, or Qiagen, for BLU-285;
- maintain, expand and protect our intellectual property portfolio;
- hire additional research, development and business personnel; and
- incur additional costs associated with operating as a public company.

Financial Operations Overview

Revenue

To date, we have not generated any revenue from drug sales and do not expect to generate any revenue from the sale of drugs in the near future. Our revenue consists of collaboration revenue under our research, development and commercialization agreement that we entered into with Alexion in March 2015, which we refer to as the Alexion Agreement, and our collaboration and license agreement that we entered into with Roche in March 2016, which we refer to as the Roche agreement, including amounts that are recognized related to upfront payments, milestone payments and amounts due to us for research and development services. In the future, revenue may include additional milestone payments and royalties on any net product sales under the respective collaboration agreements. We expect that any revenue we generate will fluctuate from quarter to quarter as a result of the timing and amount of license fees, research and development reimbursements, payments for manufacturing services, and milestone and other payments.

In the future, we will seek to generate revenue from a combination of drug sales and additional strategic relationships we may enter into.

Expenses

Research and Development Expenses

Research and development expenses consist primarily of costs incurred for our research activities, including our drug discovery efforts, and the development of our drug candidates, which include:

- employee-related expenses including salaries, benefits, and stock-based compensation expense;
- expenses incurred under agreements with third parties that conduct research and development, pre-clinical activities, clinical activities and manufacturing on our behalf;
- the cost of consultants;
- the cost of lab supplies and acquiring, developing and manufacturing pre-clinical study and clinical trial materials; and
- facilities, depreciation, and other expenses, which include direct and allocated expenses for rent and maintenance of facilities, insurance, and other operating costs.

Research and development costs are expensed as incurred. Costs for certain activities are recognized based on an evaluation of the progress to completion of specific tasks. Nonrefundable advance payments for goods or services to be received in the future for use in research and development activities are capitalized. The capitalized amounts are expensed as the related goods are delivered or the services are performed.

The successful development of our drug candidates is highly uncertain. As such, at this time, we cannot reasonably estimate or know the nature, timing and estimated costs of the efforts that will be necessary to complete the remainder of the development of these drug candidates. We are also unable to predict when, if ever, material net cash inflows will commence from our drug candidates. This is due to the numerous risks and uncertainties associated with developing drugs, including the uncertainty of:

- establishing an appropriate safety profile with Investigational New Drug, or IND, application-enabling toxicology studies;
- successful enrollment in, and completion of clinical trials;
- receipt of marketing approvals from applicable regulatory authorities;

- establishing commercial manufacturing capabilities or making arrangements with third-party manufacturers;
- obtaining and maintaining patent and trade secret protection and regulatory exclusivity for our drug candidates;
- commercializing the drug candidates, if and when approved, whether alone or in collaboration with others; and
- continued acceptable safety profile of the drugs following approval.

A change in the outcome of any of these variables with respect to the development of any of our drug candidates would significantly change the costs and timing associated with the development of that drug candidate.

Research and development activities are central to our business model. Drug candidates in later stages of clinical development 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. We expect research and development costs to increase significantly for the foreseeable future as our drug candidate development programs progress. However, we do not believe that it is possible at this time to accurately project total program-specific expenses through commercialization. There are numerous factors associated with the successful commercialization of any of our drug candidates, 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. In addition, future commercial and regulatory factors beyond our control will impact our clinical development programs and plans.

A significant portion of our research and development expenses have been external expenses, which we track on a program-by-program basis following nomination of a development candidate. Our internal research and development expenses are primarily personnel-related expenses, including stock-based compensation expense. We do not track our internal research and development expenses on a program-by-program basis as they are deployed across multiple projects under development.

The following table summarizes our external research and development expenses by program for the three months ended March 31, 2017 and 2016. Pre-development candidate expenses and unallocated expenses and internal research and development expenses have been classified separately.

	Three Months Ended March 31,	
	2017	2016
	(in thousands)	
BLU-285 external expenses	$ 6,542	$ 1,641
BLU-554 external expenses	4,900	1,476
BLU-667 external expenses	2,018	1,864
External pre-development candidate expenses and unallocated expenses	9,054	8,327
Internal research and development expenses	5,973	4,327
Total research and development expenses	$ 28,487	$ 17,635

We expect that our research and development expenses will increase in future periods as we expand our operations and incur additional costs in connection with our clinical trials. These increases will likely include the costs related to the implementation and expansion of clinical trial sites and related patient enrollment, monitoring, program management, drug product and drug substance manufacturing expenses and development activities for companion diagnostic tests, including our companion diagnostic tests with Ventana and Qiagen. In addition, we expect that our research and development expenses will increase in future periods as we incur additional costs in connection with research and development activities under our existing collaboration agreements.

General and Administrative Expenses

General and administrative expenses consist primarily of salaries and other related costs, including stock-based compensation, for personnel in executive, finance, accounting, business development, legal and human resources

functions. Stock-based compensation includes expense associated with stock-based awards issued to non-employees, including directors for non-board related services. Other significant costs include facility costs not otherwise included in research and development expenses, legal fees relating to patent and corporate matters and fees for accounting and consulting services.

We expect that our general and administrative expenses will increase in the future to support continued research and development activities, including as we continue our existing clinical trials and initiate additional clinical trials, as well as pre-commercial development activities. These increases will likely include increased costs related to the hiring of additional personnel, legal, auditing and filing fees and general compliance and consulting expenses, among other expenses. We have incurred and will continue to incur additional costs associated with operating as a public company.

Other Income (Expense), net

Other income (expense), net consists primarily of income earned on cash equivalents and investments.

Interest Expense

Interest expense consists primarily of interest expense on amounts outstanding under a loan and security agreement that we entered into with Silicon Valley Bank in May 2013 and amortization of debt discount.

Critical Accounting Policies and Estimates

Our critical accounting policies are those policies that require the most significant judgments and estimates in the preparation of our financial statements. Management has determined that our most critical accounting policies are those relating to revenue recognition, accrued research and development expenses, available-for-sale investments and stock-based compensation.

There have been no significant changes to our critical accounting policies discussed in our Annual Report on Form 10-K for the year ended December 31, 2016 related to available-for-sale investments, revenue recognition, accrued research and development expenses and stock-based compensation.

Results of Operations

Comparison of Three Months Ended March 31, 2017 and 2016

The following table summarizes our results of operations for the three months ended March 31, 2017 and 2016, together with the changes in those items in dollars and as a percentage:

	Year Ended March 31,			
	2017	2016	Dollar Change	% Change
	(in thousands)			
Collaboration revenue	$ 5,840	$ 6,856	$ (1,016)	(15)%
Operating expenses:				
Research and development	28,487	17,635	10,852	62
General and administrative	5,683	4,646	1,037	22
Total operating expenses	34,170	22,281	11,889	53
Other income (expense):				
Other income (expense), net	425	61	364	597
Interest expense	(72)	(140)	68	49
Total other income (expense)	353	(79)	432	547
Net loss	$ (27,977)	$ (15,504)	$ (12,473)	(80)%

Collaboration Revenue

Collaboration revenue decreased by $1.0 million from $6.8 million for the three months ended March 31, 2016 to $5.8 million for the three months ended March 31, 2017. Collaboration revenue for the three months ended March 31, 2017 was related to the Alexion and Roche agreements. We recorded collaboration revenue of $4.4 million and $6.6 million under the Alexion agreement for the three months ended March 31, 2017 and March 31, 2016, respectively. The decrease in collaboration revenue under the Alexion agreement was primarily related to a decrease in reimbursable research and development costs and a decrease in recognition of portions of the $15.0 million upfront payment and $1.8 million in milestone payments received from Alexion that are recognized over the period of performance. Also contributing to the decrease was the impact of the recognition of a milestone payment upon achievement included in the three months ended March 31, 2016. We entered into the Roche agreement in March 2016 and recorded $1.4 million and $0.2 million in collaboration revenue under the Roche agreement for the three months ended March 31, 2017 and March 31, 2016, respectively.

Research and Development Expense

Research and development expense increased by $10.9 million from $17.6 million for the three months ended March 31, 2016 to $28.5 million for the three months ended March 31, 2017. The increase in research and development expense was primarily related to the following:

- approximately $5.0 million in increased expenses for external clinical activities as we advanced our lead drug candidates, BLU-285, BLU-554 and BLU-667, in Phase 1 clinical trials;
- approximately $4.3 million in increased expenses associated with clinical manufacturing activities; and
- approximately $1.8 million in increased personnel expense primarily due to a 29% increase in headcount and an increase in stock-based compensation expense, which were driven by growth in the clinical and non-clinical organizations.

General and Administrative Expense

General and administrative expense increased by $1.0 million from $4.6 million for the three months ended March 31, 2016 to $5.6 million for the three months ended March 31, 2017. The increase in general and administrative expense was primarily related to approximately $0.9 million in increased personnel expenses due to an increase of 25% in general and administrative headcount to support our overall growth as a publicly traded company and an increase in stock-based compensation expense.

Other Income (Expense), Net

Other income (expense), net, increased by $0.4 million from less than $0.1 million of income for the three months ended March 31, 2016 to $0.4 million of income for the three months ended March 31, 2017. The increase in other income (expense), net, was primarily related to an increase in investment income during the three months ended March 31, 2017.

Interest Expense

Interest expense decreased by less than $0.1 million from $0.1 million for the three months ended March 31, 2016 to less than $0.1 million for the three months ended March 31, 2017. The decrease was primarily related to a decrease in the average outstanding principle balance under the loan and security agreement with Silicon Valley Bank for the three months ended March 31, 2017. We expect that interest expense will continue to decrease in subsequent periods as the principal amount under the loan decreases.

Liquidity and Capital Resources

Sources of Liquidity

To date, we have financed our operations primarily through public offerings of our common stock, private placements of our convertible preferred stock, collaborations and a debt financing. Through March 31, 2017, we have received an aggregate of $501.3 million from such transactions, including $312.4 million in aggregate gross proceeds from the sale of common stock in our May 2015 IPO and December 2016 follow-on public offering, $115.1 million in gross proceeds from the issuance of convertible preferred stock, $18.8 million of upfront and milestone payments from Alexion, a $45.0 million upfront payment from Roche and $10.0 million in gross proceeds from the debt financing. In addition, we received gross proceeds of $230.0 million from the sale of common stock in our April 2017 follow-on public offering.

As of March 31, 2017, we had cash, cash equivalents and investments of $236.3 million.

Cash Flows

The following table provides information regarding our cash flows for the three months ended March 31, 2017 and 2016:

	Three Months Ended March 31,	
(in thousands)	**2017**	**2016**
Net cash (used in) provided by operating activities	$ (31,080)	$ 30,751
Net cash provided by (used in) investing activities	35,787	(70,365)
Net cash provided by financing activities	(420)	(804)
Net increase (decrease) in cash and cash equivalents	$ 4,287	$ (40,418)

Net Cash (Used in) Provided by Operating Activities. Net cash used in operating activities was $31.1 million during the three months ended March 31, 2017 compared to net cash provided by operating activities of $30.8 million during the three months ended March 31, 2016. The change in net cash used in operating activities was primarily due to changes in deferred revenue related to the timing of the upfront payment from Roche. In the three months ended March 31, 2016, we received a $45.0 million upfront payment from Roche, and in the three months ended March 31, 2017 we did not receive any upfront payments. Further, the change in net cash used by operating activities was related to an increase in net loss of $12.5 million for the three months ended March 31, 2017 as compared to the three months ended March 31, 2016.

Net Cash Provided by (Used in) Investing Activities. Net cash provided by investing activities was $35.8 million during the three months ended March 31, 2017 compared to net cash used in investing activities of $70.4 million during the three months ended March 31, 2016. Net cash provided by investing activities for the three months ended March 31, 2017 consisted primarily of maturities of investments offset by purchases of investments. We classify these investments as available-for-sale and record them at fair value in the accompanying condensed consolidated balance sheets. Net cash used in investing activities for three months ended March 31, 2016 consisted primarily of purchases of investments and purchases of property and equipment.

Net Cash Used in Financing Activities. Net cash used in financing activities was $0.4 million during the three months ended March 31, 2017 compared to net cash used in financing activities of $0.8 million during the three months ended March 31, 2016. Net cash used in financing activities for the three months ended March 31, 2017 was primarily due to principal payments under the loan and security agreement with Silicon Valley Bank offset by net proceeds from the issuance of common stock upon the exercise of outstanding stock options. Net cash used in financing activities for the three months ended March 31, 2016 was primarily due to principal payments under the loan and security agreement with Silicon Valley Bank.

Borrowings

In May 2013, we entered into the loan and security agreement with Silicon Valley Bank. Under the terms of the loan and security agreement, we borrowed $5.0 million. Loan advances accrue interest at a fixed rate of 2.0% above the prime rate. In November 2014, we amended the loan and security agreement and borrowed an additional $5.0 million. Each loan advance included an interest only payment period. Through March 31, 2017, we have made principal payments of $6.7 million on the $10.0 million of advances. We are required to pay a fee of 4% of the total loan advances at the end of the term of the loan. There are no financial covenants associated with the loan and security agreement. As of March 31, 2017, we had $3.3 million in outstanding principal under the loan and security agreement.

The term loan is collateralized by a blanket lien on all corporate assets, excluding intellectual property, and by a negative pledge of our intellectual property. The term loan contains covenants, including restrictions on dividends and default provisions. We have determined that the risk of subjective acceleration under the material adverse events clause is remote and therefore have classified the outstanding principal in current and long term liabilities based on scheduled principal payments.

See Note 7, “Term Loan,” in the accompanying notes to our unaudited consolidated financial statements for additional information.

Funding Requirements

We expect our expenses to increase in connection with our ongoing activities, particularly as we continue the research and development of, continue and initiate clinical trials of, and seek marketing approval for, our drug candidates. In addition, if we obtain marketing approval for any of our drug candidates, we expect to incur significant commercialization expenses related to drug sales, marketing, manufacturing and distribution to the extent that such sales, marketing and distribution are not the responsibility of potential collaborators. Furthermore, we expect to continue 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 would be forced to delay, reduce or eliminate our research and development programs or future commercialization efforts.

As of March 31, 2017, we had cash, cash equivalents and investments of $236.3 million. Based on our current plans, we believe our existing cash, cash equivalents and investments, including the $215.6 million of net proceeds from our April 2017 follow-on public offering but excluding any potential option fees and milestone payments under our existing collaborations, will be sufficient to enable us to fund our operating expenses and capital expenditure requirements into the second half of 2019. Our future capital requirements will depend on many factors, including:

- the scope, progress, results and costs of drug discovery, pre-clinical development, laboratory testing and clinical trials for our drug candidates;
- the costs of securing and producing drug substance and drug product material for use in pre-clinical studies, clinical trials and for use as commercial supply;
- the scope, prioritization and number of our research and development programs;
- the success of our collaborations with Alexion and Roche;
- the success of our current or future collaborations for companion diagnostic tests, including our companion diagnostic test with Ventana for BLU-554 and our companion diagnostic test with Qiagen for BLU-285;
- the costs, timing and outcome of regulatory review of our drug candidates;
- our ability to establish and maintain additional collaborations on favorable terms, if at all;

- the achievement of milestones or occurrence of other developments that trigger payments under any collaboration agreements we obtain;
- the extent to which we are obligated to reimburse, or entitled to reimbursement of, clinical trial costs under future collaboration agreements, if any;
- the costs of preparing, filing and prosecuting patent applications, maintaining and enforcing our intellectual property rights and defending intellectual property-related claims;
- the extent to which we acquire or in-license other drug candidates and technologies; and
- the costs of establishing or contracting for sales and marketing capabilities if we obtain regulatory approvals to market our drug candidates.

Identifying potential drug candidates and conducting pre-clinical studies and clinical trials is a time-consuming, expensive and uncertain process that takes many years to complete, and we may never generate the necessary data or results required to obtain marketing approval and achieve drug sales. In addition, our drug candidates, if approved, may not achieve commercial success. Our commercial revenues, if any, will be derived from sales of drugs that we do not expect to be commercially available for many years, if at all. Accordingly, we will need to continue to rely on additional financing to achieve our business objectives. Adequate additional financing may not be available to us on acceptable terms, or at all.

Until such time, if ever, as we can generate substantial drug revenues, we expect to finance our cash needs through a combination of equity offerings, debt financings, collaborations, strategic alliances and licensing arrangements. At this time, we do not have any committed external source of funds outside of those to be earned in connection with our agreements with Alexion and Roche. To the extent that we raise additional capital through the sale of equity or convertible debt securities, the ownership interest of our stockholders will be diluted, and the terms of these securities may include liquidation or other preferences that adversely affect the rights of our common stockholders. Debt financing, if available, may involve agreements that include covenants limiting or restricting our ability to take specific actions, such as incurring additional debt, making capital expenditures or declaring dividends.

If we raise funds through additional collaborations, strategic alliances or licensing arrangements with third parties, we may have to relinquish valuable rights to our technologies, future revenue streams, research programs or drug candidates or to grant licenses on terms that may not be favorable to us. If we are unable to raise additional funds through equity or debt financings when needed, we may be required to delay, limit, reduce or terminate our drug development or future commercialization efforts or grant rights to develop and market drug candidates that we would otherwise prefer to develop and market ourselves.

Contractual Obligations

As of March 31, 2017, there have been no material changes to our contractual obligations and commitments from those described under “Management’s Discussion and Analysis of Financial Condition and Results of Operations” included in the Annual Report on Form 10-K for the year ended December 31, 2016.

On April 28, 2017, we entered into a lease agreement with UP 45/75 Sidney Street, LLC, as the landlord, pursuant to which we will lease approximately 99,833 rentable square feet of office and laboratory space located at 45 Sidney Street, Cambridge, Massachusetts 02139, which we refer to as the new premises, and will relocate our corporate headquarters to the new premises. We currently anticipate relocating our corporate headquarters in the first quarter of 2018. See Part II, Item 5. “Other Information” of this Quarterly Report on Form 10-Q for additional information on the lease agreement.

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 under applicable SEC rules.

Item 3. Quantitative and Qualitative Disclosures About Market Risk

As of March 31, 2017, we had cash, cash equivalents and investments of $236.3 million, consisting primarily of money market funds and investments in U.S. treasury obligations and U.S government agency securities.

Our primary exposure to market risk is interest rate sensitivity, which is affected by changes in the general level of U.S. interest rates, particularly because our investments are in short-term marketable securities. Due to the short-term duration of our investment portfolio and the low risk profile of our investments, we believe an immediate 10% change in interest rates would not have a material effect on the fair market value of our investment portfolio. We have the ability to hold our investments until maturity, and therefore, we would not expect our operating results or cash flows to be affected to any significant degree by the effect of a change in market interest rates on our investment portfolio.

We are also exposed to market risk related to changes in foreign currency exchange rates. From time to time, we contract with vendors that are located Asia and Europe, which are denominated in foreign currencies. We are subject to fluctuations in foreign currency rates in connection with these agreements. We do not currently hedge our foreign currency exchange rate risk. As of March 31, 2017 and December 31, 2016, we had minimal liabilities denominated in foreign currencies.

Inflation generally affects us by increasing our cost of labor and clinical trial costs. We do not believe that inflation had a material effect on our business, financial condition or results of operations during the three months ended March 31, 2017 and 2016.

Item 4. Controls and Procedures

Management's Evaluation of our Disclosure Controls and Procedures

We maintain "disclosure controls and procedures," as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended, or the Exchange Act, that are designed to ensure that information required to be disclosed in the reports that we file or submit under the Exchange Act is (1) recorded, processed, summarized and reported, within the time periods specified in the Securities and Exchange Commission's rules and forms and (2) accumulated and communicated to our management, including our principal executive and principal financial officer, as appropriate to allow timely decisions regarding required disclosure. Our management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving their objectives and our management necessarily applies its judgment in evaluating the cost-benefit relationship of possible controls and procedures. Our disclosure controls and procedures are designed to provide reasonable assurance of achieving their control objectives.

Our management, with the participation of our Chief Executive Officer and Vice President of Finance (our principal executive officer and principal financial officer, respectively), evaluated the effectiveness of our disclosure controls and procedures as of March 31, 2017. Based upon such evaluation, our Chief Executive Officer and Vice President of Finance have concluded that, as of March 31, 2017, our disclosure controls and procedures were effective at the reasonable assurance level.

Changes in Internal Control over Financial Reporting

No change in our internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act) occurred during the three months ended March 31, 2017 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

PART II – OTHER INFORMATION

Item 1. Legal Proceedings

We are not currently a party to any material legal proceedings.

Item 1A. Risk Factors

The following risk factors and other information included in this Quarterly Report on Form 10-Q should be carefully considered. The risks and uncertainties described below are not the only ones we face. Additional risks and uncertainties not presently known to us or that we presently deem less significant may also impair our business operations. Please see page 3 of this Quarterly Report on Form 10-Q for a discussion of some of the forward-looking statements that are qualified by these risk factors. If any of the following risks occur, our business, financial condition, results of operations and future growth prospects could be materially and adversely affected.

Risks Related to Our Financial Position and Need for Additional Capital

We are a biopharmaceutical company with a limited operating history and have not generated any revenue from drug sales. We have incurred significant operating losses since our inception and anticipate that we will incur continued losses for the foreseeable future.

We are a biopharmaceutical company with a limited operating history on which investors can base an investment decision. Biopharmaceutical drug development is a highly speculative undertaking and involves a substantial degree of risk. We commenced operations in April 2011. Our operations to date have been limited primarily to organizing and staffing our company, business planning, raising capital, developing our technology, identifying potential drug candidates and undertaking pre-clinical studies and commencing Phase 1 clinical trials for our most advanced drug candidates, BLU-285, BLU-554 and BLU-667.

We are currently evaluating BLU-285 in an ongoing Phase 1 clinical trial for defined subsets of patients with gastrointestinal stromal tumors, or GIST, BLU-285 in an ongoing Phase 1 clinical trial for advanced systemic mastocytosis, or SM, BLU-554 in an ongoing Phase 1 clinical trial in patients with advanced hepatocellular carcinoma, or HCC, and BLU-667 in an ongoing Phase 1 clinical trial in patients with non-small cell lung cancer, or NSCLC, medullary thyroid cancer, or MTC, and other advanced solid tumors.

In September 2015, the U.S. Food and Drug Administration, or FDA, granted orphan drug designation to BLU-554 for the treatment of HCC, and in January 2016, the FDA granted orphan drug designation to BLU-285 for the treatment of GIST and SM. In addition, in October 2016, the FDA granted fast track designation to BLU-285 for the treatment of patients with unresectable or metastatic GIST that progressed following treatment with imatinib and a second tyrosine kinase inhibitor and for the treatment of patients with unresectable or metastatic GIST with the PDGFRα D842V mutation regardless of prior therapy. We have never generated any revenue from drug sales. We have not obtained regulatory approvals for any of our drug candidates.

We have not yet demonstrated our ability to successfully complete any clinical trials, including large-scale, pivotal clinical trials, obtain regulatory approvals, manufacture a commercial scale drug, or arrange for a third party to do so on our behalf, or conduct sales and marketing activities necessary for successful commercialization. Typically, it takes many years to develop one new drug from the time it is discovered to when it is available for treating patients. Consequently, any predictions you make about our future success or viability may not be as accurate as they could be if we had a longer operating history. We will need to transition from a company with a research focus to a company capable of supporting commercial activities. We may not be successful in such a transition.

Since inception, we have focused substantially all of our efforts and financial resources on developing our proprietary compound library, novel target discovery engine and initial drug candidates. To date, we have financed our operations primarily through public offerings of our common stock, private placements of our convertible preferred stock, collaborations and a debt financing. Through March 31, 2017, we have received an aggregate of $501.3 million from such transactions, including $312.4 million in aggregate gross proceeds from the sale of common stock in our May 2015 initial public offering, or IPO, and December 2016 follow-on public offering, $115.1 million in gross proceeds

from the issuance of convertible preferred stock, $18.8 million of upfront and milestone payments from Alexion Pharma Holding, or Alexion, a $45.0 million upfront payment from F. Hoffmann-La Roche Ltd and Hoffmann-La Roche Inc., which we refer to collectively as Roche, and $10.0 million in gross proceeds from the debt financing. In addition, we received gross proceeds of $230.0 million from the sale of common stock in our April 2017 follow-on public offering.

Since inception, we have incurred significant operating losses. Our net losses were $28.0 million for the three months ended March 31, 2017 and $72.5 million, $52.8 million and $40.3 million for the years ended December 31, 2016, 2015 and 2014, respectively. As of March 31, 2017, we had an accumulated deficit of $235.4 million. Substantially all of our operating losses have resulted from costs incurred in connection with our research and development programs and from general and administrative costs associated with our operations. We expect to continue to incur significant expenses and operating losses over the next several years and for the foreseeable future. Our prior losses, combined with expected future losses, have had and will continue to have an adverse effect on our stockholders' deficit and working capital. We expect our research and development expenses to significantly increase in connection with continuing our existing clinical trials and beginning additional clinical trials. In addition, if we obtain marketing approval for our drug candidates, we will incur significant sales, marketing and outsourced-manufacturing expenses. We have incurred and will continue to incur additional costs associated with operating as a public company. As a result, we expect to continue to incur significant and increasing operating losses for the foreseeable future. Because of the numerous risks and uncertainties associated with developing pharmaceuticals, we are unable to predict the extent of any future losses or when we will become profitable, if at all. Even if we do become profitable, we may not be able to sustain or increase our profitability on a quarterly or annual basis. Our ability to become profitable depends upon our ability to generate revenue.

To date, we have not generated any revenue from our lead drug candidates, BLU-285, BLU-554 and BLU-667, and we do not expect to generate any revenue from the sale of drugs in the near future. We do not expect to generate significant revenue unless and until we obtain marketing approval of, and begin to sell, BLU-285, BLU-554, BLU-667 or one of our other drug candidates. Our ability to generate revenue depends on a number of factors, including, but not limited to, our ability to:

- initiate and successfully complete clinical trials that meet their clinical endpoints;
- initiate and successfully complete all safety studies required to obtain U.S. and foreign marketing approval for our drug candidates;
- establish commercial manufacturing capabilities or make arrangements with third-party manufacturers for clinical supply and commercial manufacturing;
- commercialize our drug candidates, if approved, by developing a sales force or entering into additional collaborations with third parties; and
- achieve market acceptance of our drug candidates in the medical community and with third-party payors.

We expect to incur significant sales and marketing costs as we prepare to commercialize our drug candidates. Even if we initiate and successfully complete pivotal clinical trials of our drug candidates, and our drug candidates are approved for commercial sale, and despite expending these costs, our drug candidates may not be commercially successful. We may not achieve profitability soon after generating drug sales, if ever. If we are unable to generate drug revenue, we will not become profitable and may be unable to continue operations without continued funding.

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

The development of pharmaceuticals is capital-intensive. We are currently advancing our lead drug candidates, BLU-285, BLU-554 and BLU-667, through clinical development. We expect our expenses to increase in connection with our ongoing activities, particularly as we continue the research and development of, initiate or continue clinical trials of, and seek marketing approval for, our drug candidates. In addition, depending on the status of regulatory approval or, if we obtain marketing approval for any of our drug candidates, we expect to incur significant

commercialization expenses related to drug sales, marketing, manufacturing and distribution to the extent that such sales, marketing and distribution are not the responsibility of Alexion, Roche or other collaborators. We may also need to raise additional funds sooner if we choose to pursue additional indications or geographies for our drug candidates or otherwise expand more rapidly than we presently anticipate. Furthermore, we expect to continue 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 would be forced to delay, reduce or eliminate certain of our research and development programs or future commercialization efforts.

As of March 31, 2017, we had cash, cash equivalents and investments of $236.3 million. Based on our current plans, we believe our existing cash, cash equivalents and investments, including the net proceeds from our April 2017 follow-on public offering but excluding any potential option fees and milestone payments under our existing collaborations, will be sufficient to enable us to fund our operating expenses and capital expenditure requirements into the second half of 2019. Our future capital requirements will depend on and could increase significantly as a result of many factors, including:

- the scope, progress, results and costs of drug discovery, pre-clinical development, laboratory testing and clinical trials for our drug candidates;
- the costs of securing and producing drug substance and drug product material for use in pre-clinical studies, clinical trials and for use as commercial supply;
- the scope, prioritization and number of our research and development programs;
- the success of our collaborations with Alexion and Roche;
- the success of our current or future collaborations for companion diagnostic tests, including our companion diagnostic test with Ventana Medical Systems, Inc., or Ventana, for BLU-554 and our companion diagnostic test with QIAGEN Manchester Limited, or Qiagen, for BLU-285;
- the costs, timing and outcome of regulatory review of our drug candidates;
- our ability to establish and maintain additional collaborations on favorable terms, if at all;
- the achievement of milestones or occurrence of other developments that trigger payments under any collaboration agreements we obtain;
- the extent to which we are obligated to reimburse, or entitled to reimbursement of, clinical trial costs under future collaboration agreements, if any;
- the costs of preparing, filing and prosecuting patent applications, maintaining and enforcing our intellectual property rights and defending intellectual property-related claims;
- the extent to which we acquire or in-license other drug candidates and technologies; and
- the costs of establishing or contracting for sales and marketing capabilities if we obtain regulatory approvals to market our drug candidates.

Identifying potential drug candidates and conducting pre-clinical development and testing and clinical trials is a time-consuming, expensive and uncertain process that takes years to complete, and we may never generate the necessary data or results required to obtain marketing approval and achieve drug sales. In addition, our drug candidates, if approved, may not achieve commercial success. Our commercial revenues, if any, will be derived from sales of drugs that we do not expect to be commercially available for many years, if at all. Accordingly, we will need to continue to rely on additional financing to achieve our business objectives.

Any additional fundraising efforts may divert our management from their day-to-day activities, which may adversely affect our ability to develop and commercialize our drug candidates. Dislocations in the financial markets have generally made equity and debt financing more difficult to obtain and may have a material adverse effect on our ability to meet our fundraising needs. We cannot guarantee that future financing will be available in sufficient amounts or on terms acceptable to us, if at all. Moreover, the terms of any financing may adversely affect the holdings or the rights of our stockholders 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 shares to decline. The sale of additional equity or convertible securities would dilute all of our stockholders. The incurrence of indebtedness would 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, 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. We could also be required to seek funds through arrangements with collaborators or otherwise at an earlier stage than otherwise would be desirable and we may be required to relinquish rights to some of our technologies or drug candidates or otherwise agree to terms unfavorable to us, any of which may have a material adverse effect on our business, operating results and prospects.

If we are unable to obtain funding on a timely basis, we may be required to significantly curtail, delay or discontinue one or more of our research or development programs or the commercialization of any drug candidate or be unable to expand our operations or otherwise capitalize on our business opportunities, as desired, which could materially affect our business, financial condition and results of operations.

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

Until such time, if ever, as we can generate substantial drug revenues, we expect to finance our cash needs through a combination of public and private equity offerings, debt financings, collaborations, strategic alliances and licensing arrangements. We do not have any committed external source of funds, other than our collaborations with Alexion and Roche, each of which is limited in scope and duration, and funds already borrowed under the loan and security agreement that we entered into with Silicon Valley Bank in May 2013. To the extent that we raise additional capital through the sale of common stock or securities convertible or exchangeable into common stock, the ownership interest of our stockholders will be diluted, and the terms of these securities may include liquidation or other preferences that materially adversely affect the rights of our common stockholders. Debt financing, if available, would increase our fixed payment obligations and may involve agreements that include covenants limiting or restricting our ability to take specific actions, such as incurring additional debt, making capital expenditures or declaring dividends.

If we raise funds through additional collaborations, strategic alliances or licensing arrangements with third parties, we may have to relinquish valuable rights to our intellectual property, future revenue streams, research programs or drug candidates or to grant licenses on terms that may not be favorable to us. If we are unable to raise additional funds through equity or debt financings when needed, we may be required to delay, limit, reduce or terminate our drug development or future commercialization efforts or grant rights to develop and market drug candidates that we would otherwise prefer to develop and market ourselves.

Risks Related to Drug Development and Regulatory Approval

We are very early in our development efforts with only three drug candidates, BLU-285, BLU-554 and BLU-667, in clinical development. All of our other drug candidates are currently in pre-clinical or earlier stages of development. If we are unable to advance our other drug candidates to clinical development, obtain regulatory approval for our lead drug candidates or other drug candidates and ultimately commercialize our lead drug candidates or other drug candidates, or experience significant delays in doing so, our business will be materially harmed.

We are very early in our development efforts with only three drug candidates, BLU-285, BLU-554 and BLU-667, in clinical development. All of our other drug candidates are currently in pre-clinical or earlier stages of development. We have invested substantially all of our efforts and financial resources in the identification and pre-clinical development of kinase inhibitors, including the development of our lead drug candidates, BLU-285, BLU-554 and BLU-667. Our ability to generate drug revenues, which we do not expect will occur for many years, if ever, will depend heavily on the successful development and eventual commercialization of our drug candidates, which may never occur. We currently generate no revenues from sales of any drugs, and we may never be able to develop or

commercialize a marketable drug. Each of our drug candidates will require additional pre-clinical or clinical development, management of clinical, pre-clinical and manufacturing activities, regulatory approval in multiple jurisdictions, obtaining manufacturing supply, building of a commercial organization, substantial investment and significant marketing efforts before we generate any revenues from drug sales. In addition, for some of our drug candidates, in order to select patients most likely to respond to treatment and rapidly confirm mechanistic and clinical proof-of-concept, we may seek to develop companion diagnostic tests, which are assays or tests to identify an appropriate patient population. For example, we have entered into agreements with Ventana to develop and commercialize a companion diagnostic test for BLU-554 that we expect to use to identify HCC patients with aberrantly active FGFR4 signaling as indicated by FGF19 overexpression and Qiagen to develop and commercialize a companion diagnostic test for BLU-285 that we expect to use to identify GIST patients with the PDGFRα D842V mutation. Companion diagnostic tests are subject to regulation as medical devices and must themselves be approved for marketing by the FDA or certain other foreign regulatory agencies before we may commercialize our drug candidates. The success of our lead drug candidates and other drug candidates will depend on several factors, including the following:

- successful enrollment in, and completion of, clinical trials, including our current Phase 1 clinical trials for BLU-285, BLU-554 and BLU-667;
- successful completion of pre-clinical studies for our other drug candidates;
- approval of Investigational New Drug applications for future clinical trials for our other drug candidates;
- successful development of any companion diagnostic tests for use with our drug candidates, including the development of a companion diagnostic test for BLU-554 for identifying HCC patients with FGF19 signaling and BLU-285 for identifying GIST patients with the PDGFRα D842V mutation;
- receipt of regulatory approvals from applicable regulatory authorities;
- establishing commercial manufacturing capabilities or making arrangements with third-party manufacturers for clinical supply and commercial manufacturing;
- obtaining and maintaining patent and trade secret protection or regulatory exclusivity for our drug candidates;
- launching commercial sales of our drug candidates, if and when approved, whether alone or in collaboration with others;
- acceptance of the drug candidates, if and when approved, by patients, the medical community and third-party payors;
- effectively competing with other therapies;
- obtaining and maintaining healthcare coverage and adequate reimbursement;
- enforcing and defending intellectual property rights and claims; and
- maintaining a continued acceptable safety profile of the drug candidates following approval.

If we do not achieve one or more of these factors in a timely manner or at all, we could experience significant delays or an inability to successfully commercialize our drug candidates, which would materially harm our business. If we do not receive regulatory approvals for our drug candidates, we may not be able to continue our operations.

Our approach to the discovery and development of drug candidates that inhibit kinases is unproven, and we do not know whether we will be able to develop any drugs of commercial value.

Our scientific approach focuses on using our novel target discovery engine and our proprietary compound library to identify new kinase targets in disease indications. Our focus on using our novel target discovery engine to identify potential kinase targets in disease indications may not result in the discovery and development of commercially viable drugs for these diseases. The use of our proprietary compound library may not lead to the development of commercially viable drugs. Even if we are able to develop a drug candidate that successfully targets these kinases in pre-clinical studies, we may not succeed in demonstrating safety and efficacy of the drug candidate in clinical trials.

Clinical drug development involves a lengthy and expensive process, with an uncertain outcome. We may incur additional costs or experience delays in completing, or ultimately be unable to complete, the development and commercialization of our drug candidates.

Each of our lead drug candidates, BLU-285, BLU-554 and BLU-667, is in clinical development, and all of our other drug candidates are in pre-clinical development. The risk of failure for our lead drug candidates and other drug candidates is high. It is impossible to predict when or if any of our drug candidates will prove effective and safe in humans or will receive regulatory approval. Before obtaining marketing approval from regulatory authorities for the sale of any drug candidate, we must complete pre-clinical studies and then conduct extensive clinical trials to demonstrate the safety and efficacy of our drug candidates in humans. Clinical testing is expensive, difficult to design and implement, can take many years to complete and is uncertain as to outcome. A failure of one or more clinical trials can occur at any stage of testing. The outcome of pre-clinical development testing and early clinical trials may not be predictive of the success of later clinical trials, and interim results of a clinical trial do not necessarily predict final results. Moreover, pre-clinical and clinical data are often susceptible to varying interpretations and analyses, and many companies that have believed their drug candidates performed satisfactorily in pre-clinical studies and clinical trials have nonetheless failed to obtain marketing approval of their product candidates. Our pre-clinical studies, current Phase 1 clinical trials and future clinical trials may not be successful.

We are currently evaluating BLU-285 in an ongoing Phase 1 clinical trial for defined subsets of patients with GIST, BLU-285 in an ongoing Phase 1 clinical trial for advanced SM, BLU-554 in an ongoing Phase 1 clinical trial in patients with advanced HCC and BLU-667 in an ongoing Phase 1 clinical trial in patients with NSCLC, MTC and other advanced solid tumors.

Successful completion of our clinical trials is a prerequisite to submitting a new drug application, or NDA, to the FDA and a Marketing Authorization Application, or MAA, in the European Union for each drug candidate and, consequently, the ultimate approval and commercial marketing of BLU-285, BLU-554, BLU-667 and our other drug candidates. We do not know whether any of our clinical trials for our lead drug candidates will be completed on schedule, if at all.

We may experience delays in completing our pre-clinical studies and initiating or completing clinical trials, and we may experience numerous unforeseen events during, or as a result of, any future clinical trials that we could conduct that could delay or prevent our ability to receive marketing approval or commercialize our drug candidates, including:

- regulators or institutional review boards, or IRBs, or ethics committees may not authorize us or our investigators to commence a clinical trial or conduct a clinical trial at a prospective trial site;
- we may experience delays in reaching, or fail to reach, agreement on acceptable terms with prospective trial sites and prospective contract research organizations, or CROs, the terms of which can be subject to extensive negotiation and may vary significantly among different CROs and trial sites;
- clinical trials of our drug candidates may produce negative or inconclusive results, and we may decide, or regulators may require us, to conduct additional pre-clinical studies or clinical trials or we may decide to abandon drug development programs;

- the number of patients required for clinical trials of our drug candidates may be larger than we anticipate, enrollment in these clinical trials may be slower than we anticipate or participants may drop out of these clinical trials or fail to return for post-treatment follow-up at a higher rate than we anticipate;

- our third-party contractors may fail to comply with regulatory requirements or meet their contractual obligations to us in a timely manner, or at all, or may deviate from the clinical trial protocol or drop out of the trial, which may require that we add new clinical trial sites or investigators;

- we may elect to, or regulators or IRBs or ethics committees may require that we or our investigators suspend or terminate clinical research for various reasons, including noncompliance with regulatory requirements or a finding that the participants are being exposed to unacceptable health risks;

- the cost of clinical trials of our drug candidates may be greater than we anticipate;

- the supply or quality of our drug candidates or other materials necessary to conduct clinical trials of our drug candidates may be insufficient or inadequate;

- our drug candidates may have undesirable side effects or other unexpected characteristics, causing us or our investigators, regulators or IRBs or ethics committees to suspend or terminate the trials, or reports may arise from pre-clinical or clinical testing of other cancer therapies that raise safety or efficacy concerns about our drug candidates; and

- the FDA or other regulatory authorities may require us to submit additional data or impose other requirements before permitting us to initiate a clinical trial.

We could encounter delays if a clinical trial is suspended or terminated by us, by the IRBs of the institutions in which such trials are being conducted, by the Data Safety Monitoring Board, or DSMB, for such trial or by the FDA or other regulatory authorities. Such authorities may impose such a suspension or termination due to a number of factors, including failure to conduct the clinical trial in accordance with regulatory requirements or our clinical protocols, inspection of the clinical trial operations or trial site by the FDA or other regulatory authorities resulting in the imposition of a clinical hold, unforeseen safety issues or adverse side effects, failure to demonstrate a benefit from using a drug, 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 drug candidates. Further, the FDA may disagree with our clinical trial design and our interpretation of data from clinical trials, or may change the requirements for approval even after it has reviewed and commented on the design for our clinical trials.

If we are required to conduct additional clinical trials or other testing of our drug candidates beyond those that we currently contemplate, if we are unable to successfully complete clinical trials of our drug candidates or other testing, if the results of these trials or tests are not positive or are only modestly positive or if there are safety concerns, we may:

- be delayed in obtaining marketing approval for our drug candidates;

- not obtain marketing approval at all;

- obtain approval for indications or patient populations that are not as broad as intended or desired;

- be subject to post-marketing testing requirements; or

- have the drug removed from the market after obtaining marketing approval.

Our drug development costs will also increase if we experience delays in testing or regulatory 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 pre-clinical study or clinical trial delays also could shorten any periods during which we may have the exclusive right to commercialize our drug candidates or allow our competitors to bring products to market before we do and impair our ability to successfully commercialize our drug candidates and may harm our business and

results of operations. Any delays in our pre-clinical or future clinical development programs may harm our business, financial condition and prospects significantly.

We may choose not to develop a potential product candidate, or we may suspend or terminate one or more discovery programs or pre-clinical drug candidates or programs.

At any time and for any reason, we may determine that one or more of our discovery programs or pre-clinical drug candidates or programs does not have sufficient potential to warrant the allocation of resources toward such program or drug candidate. Accordingly, we may choose not to develop a potential drug candidate or elect to suspend or terminate one or more of our discovery programs or pre-clinical drug candidates or programs. For example, we have determined to suspend our discovery program for inhibitors of neurotrophic tyrosine receptor kinase, or NTRK, and predicted NTRK resistant mutants. If we suspend or terminate a program or drug candidate in which we have invested significant resources, we will have expended resources on a program that will not provide a full return on our investment and may have missed the opportunity to have allocated those resources to potentially more productive uses, including existing or future programs or drug candidates.

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

We may not be able to initiate or continue clinical trials for our drug candidates if we are unable to locate and enroll a sufficient number of eligible patients to participate in these trials as required by the FDA or similar regulatory authorities outside the United States. In particular, because we are focused on diseases in genomically defined patient populations, our ability to enroll eligible patients may be limited or may result in slower enrollment than we anticipate. In addition, some of our competitors have ongoing clinical trials for drug candidates that treat the same indications as our drug candidates, and patients who would otherwise be eligible for our clinical trials may instead enroll in clinical trials of our competitors' drug candidates.

Patient enrollment may be affected by other factors including:

- the severity of the disease under investigation;
- the size of the target patient population;
- the eligibility criteria for the clinical trial;
- the availability of an appropriate genomic screening test;
- the perceived risks and benefits of the drug candidate under study;
- the efforts to facilitate timely enrollment in clinical trials;
- the patient referral practices of physicians;
- the ability to monitor patients adequately during and after treatment; and
- the proximity and availability of clinical trial sites for prospective patients.

Because the target patient populations for our drug candidates are relatively small, it may be difficult to successfully identify patients, which may lead to delays in enrollment for our trials. If the market opportunities for our drug candidates are smaller than we believe they are, our product revenues may be adversely affected and our business may suffer.

We focus our research and product development on treatments for cancer and rare genetic diseases, including genomically defined cancer and diseases driven by abnormal kinase activation. Because the target patient populations for our drug candidates are relatively small, it may be difficult to successfully identify patients. We have entered into agreements with Ventana to develop and commercialize a companion diagnostic test for BLU-554 in order to identify

HCC patients with aberrantly active FGFR4 signaling as indicated by FGF19 overexpression and with Qiagen to develop and commercialize a companion diagnostic test for BLU-285 in order to identify GIST patients with the PDGFRα D842V mutation. We may engage third parties to develop companion diagnostic tests for use in some of our other current or future clinical trials. However, Ventana, Qiagen or other third parties may not be successful in developing such companion diagnostic tests, furthering the difficulty in identifying patients for our clinical trials. Our inability to enroll a sufficient number of patients in our clinical trials would result in significant delays and could require us to abandon one or more clinical trials altogether. Enrollment delays in our clinical trials may result in increased development costs for our drug candidates, which would cause the value of our company to decline and limit our ability to obtain additional financing. If we are unable to include patients with the driver of the disease, including the applicable genomic alteration for diseases in genomically defined patient populations, this could compromise our ability to seek participation in the FDA's expedited review and approval programs, including breakthrough therapy designation and fast track designation, or otherwise to seek to accelerate clinical development and regulatory timelines. In addition, our projections of both the number of people who have these diseases, as well as the subset of people with these diseases who have the potential to benefit from treatment with our drug candidates, are based on estimates. These estimates may prove to be incorrect, and new studies may reduce the estimated incidence or prevalence of these diseases. The number of patients in the United States, European Union and elsewhere may turn out to be lower than expected, may not be otherwise amenable to treatment with our drug candidates or patients may become increasingly difficult to identify and access, all of which would adversely affect our business, prospects and ability to achieve or sustain profitability.

If we are not able to obtain, or if there are delays in obtaining, required regulatory approvals both for our drug candidates and for any related companion diagnostic tests, we will not be able to commercialize, or will be delayed in commercializing, our drug candidates, and our ability to generate revenue will be materially impaired.

Our drug candidates and any related companion diagnostic tests, including the companion diagnostic tests that we are developing with Ventana for BLU-554 in order to identify HCC patients with aberrantly active FGFR4 signaling as indicated by FGF19 overexpression and with Qiagen for BLU-285 in order to identify GIST patients with the PDGFRα D842V mutation, and the activities associated with their development and commercialization, including their design, testing, manufacture, safety, efficacy, recordkeeping, labeling, storage, approval, advertising, promotion, sale, distribution, import and export, are subject to comprehensive regulation by the FDA and other regulatory agencies in the United States and by comparable authorities in other countries. Before we can commercialize any of our drug candidates, we must obtain marketing approval. We may also need marketing approval for any related companion diagnostic tests, including the companion diagnostic tests that we are developing with Ventana for BLU-554 and with Qiagen for BLU-285. We have not received approval to market any of our drug candidates or related companion diagnostic tests from regulatory authorities in any jurisdiction, and it is possible that none of our current or future drug candidates or related companion diagnostic tests will ever obtain regulatory approval. We have only limited experience in filing and supporting the applications necessary to gain regulatory approvals and expect to rely on third-party CROs and/or regulatory consultants to assist us in this process. Securing regulatory approval requires the submission of extensive pre-clinical and clinical data and supporting information to the various regulatory authorities for each therapeutic indication to establish the drug candidate's safety and efficacy. Securing regulatory approval also requires the submission of information about the drug manufacturing process to, and inspection of manufacturing facilities by, the relevant regulatory authority. Our drug candidates may not be effective, may be only moderately effective or may prove to have undesirable or unintended side effects, toxicities or other characteristics that may preclude our obtaining marketing approval or prevent or limit commercial use.

The process of obtaining regulatory approvals, if approval is obtained at all, both in the United States and abroad is expensive, may take many years if additional clinical trials are required and can vary substantially based upon a variety of factors, including the type, complexity and novelty of the drug candidates involved. Changes in marketing approval policies during the development period, changes in or the enactment of additional statutes or regulations, or changes in regulatory review for each submitted NDA for a drug candidate, Pre-Market Approval, or PMA, application for a companion diagnostic test or equivalent application types, may cause delays in the approval or rejection of an application. The FDA and comparable authorities in other countries have substantial discretion in the approval process and may refuse to accept any application or may decide that our data are insufficient for approval and require additional pre-clinical, clinical or other studies. Our drug candidates could be delayed in receiving, or 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 drug candidate is safe and effective for its proposed indication or a related companion diagnostic test is suitable to identify appropriate patient populations;
- 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 drug 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 pre-clinical studies or clinical trials;
- the data collected from clinical trials of our drug candidates may not be sufficient to support the submission of an NDA or other submission or to obtain regulatory approval in the United States or elsewhere;
- the FDA or comparable foreign regulatory authorities may fail to approve the manufacturing processes or facilities of third-party manufacturers with which we contract for clinical and commercial supplies; and
- the approval policies or regulations of the FDA or comparable foreign regulatory authorities may significantly change in a manner rendering our clinical data insufficient for approval.

In addition, even if we were to obtain approval, regulatory authorities may approve any of our drug candidates for fewer or more limited indications than we request, may not approve the price we intend to charge for our drugs and related companion diagnostic tests, may grant approval contingent on the performance of costly post-marketing clinical trials, or may approve a drug candidate with a label that does not include the labeling claims necessary or desirable for the successful commercialization of that drug candidate. Any of the foregoing scenarios could materially harm the commercial prospects for our drug candidates.

If we experience delays in obtaining approval or if we fail to obtain approval of our drug candidates and related companion diagnostic tests, the commercial prospects for our drug candidates may be harmed and our ability to generate revenues will be materially impaired.

Our drug candidates may cause undesirable side effects that could delay or prevent their regulatory approval, limit the commercial profile of an approved label, or result in significant negative consequences following marketing approval, if any.

Undesirable side effects caused by our drug candidates could cause us to interrupt, delay or halt pre-clinical studies or 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 other regulatory authorities. As is the case with all oncology drugs, it is likely that there may be side effects associated with the use of our drug candidates. Results of our trials could reveal a high and unacceptable severity and prevalence of these or other side effects. 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 drug 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 prospects significantly.

Further, our drug candidates could cause undesirable side effects in clinical trials related to on-target toxicity. For example, the FGF19/FGFR4 signaling axis has been shown to play a role in the regulation of de novo bile acid synthesis. Modulation of this signaling axis by treatment with a small molecule FGFR4 inhibitor could lead to the

clinical symptoms that were observed with administration of an FGF19 antibody. If on-target toxicity is observed, or if our drug candidates have characteristics that are unexpected, we may need to abandon their development or limit 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. Many compounds that initially showed promise in early stage testing for treating cancer have later been found to cause side effects that prevented further development of the compound.

Further, clinical trials by their nature utilize a sample of the potential patient population. With a limited number of patients and limited duration of exposure, rare and severe side effects of our drug candidates may only be uncovered with a significantly larger number of patients exposed to the drug candidate. If our drug candidates receive marketing approval and we or others identify undesirable side effects caused by such drug candidates (or any other similar drugs) after such approval, a number of potentially significant negative consequences could result, including:

- regulatory authorities may withdraw or limit their approval of such drug candidates;
- regulatory authorities may require the addition of labeling statements, such as a “boxed” warning or a contraindication;
- we may be required to create a medication guide outlining the risks of such side effects for distribution to patients;
- we may be required to change the way such drug candidates are distributed or administered, conduct additional clinical trials or change the labeling of the drug candidates;
- regulatory authorities may require a Risk Evaluation and Mitigation Strategy, or REMS, plan to mitigate risks, which could include medication guides, physician communication plans, or elements to assure safe use, such as restricted distribution methods, patient registries and other risk minimization tools;
- we may be subject to regulatory investigations and government enforcement actions;
- we may decide to remove such drug candidates from the marketplace;
- we could be sued and held liable for injury caused to individuals exposed to or taking our drug candidates; and
- our reputation may suffer.

We believe that any of these events could prevent us from achieving or maintaining market acceptance of the affected drug candidates and could substantially increase the costs of commercializing our drug candidates, if approved, and significantly impact our ability to successfully commercialize our drug candidates and generate revenues.

A breakthrough therapy designation by the FDA for our drug candidates may not lead to a faster development or regulatory review or approval process, and it does not increase the likelihood that our drug candidates will receive marketing approval.

We may seek a breakthrough therapy designation for some of our drug candidates. A breakthrough therapy is defined as a drug that is intended, alone or in combination with one or more other drugs, to treat a serious or life-threatening disease or condition, and preliminary clinical evidence indicates that the drug may demonstrate substantial improvement over existing therapies on one or more clinically significant endpoints, such as substantial treatment effects observed early in clinical development. For drugs that have been designated as breakthrough therapies, interaction and communication between the FDA and the sponsor of the trial can help to identify the most efficient path for clinical development while minimizing the number of patients placed in ineffective control regimens. Drugs designated as breakthrough therapies by the FDA are also eligible for accelerated approval.

Designation as a breakthrough therapy is within the discretion of the FDA. Accordingly, even if we believe one of our drug candidates meets the criteria for designation as a breakthrough therapy, the FDA may disagree and instead determine not to make such designation. In any event, the receipt of a breakthrough therapy designation for a drug candidate may not result in a faster development process, review or approval compared to drugs considered for approval under conventional FDA procedures and does not assure ultimate approval by the FDA. In addition, even if one or more of our drug candidates qualify as breakthrough therapies, the FDA may later decide that the drugs no longer meet the conditions for qualification.

A fast track designation by the FDA may not actually lead to a faster development or regulatory review or approval process.

In October 2016, the FDA granted fast track designation to BLU-285 for the treatment of patients with unresectable or metastatic GIST that progressed following treatment with imatinib and a second tyrosine kinase inhibitor and for the treatment of patients with unresectable or metastatic GIST with the PDGFRα D842V mutation regardless of prior therapy. We may also seek fast track designation for some of our other drug candidates. If a drug is intended for the treatment of a serious or life-threatening condition and the drug demonstrates the potential to address unmet medical needs for this condition, the drug sponsor may apply for fast track designation. The FDA has broad discretion whether or not to grant this designation, so even if we believe a particular drug candidate is eligible for this designation, we cannot assure you that the FDA would decide to grant it. Even though we have received fast track designation for BLU-285 for treatment of patients with unresectable or metastatic GIST that progressed following treatment with imatinib and a second tyrosine kinase inhibitor and for the treatment of patients with unresectable or metastatic GIST with the PDGFRα D842V mutation regardless of prior therapy, or even if we receive fast track designation for our other drug candidates, we may not experience a faster development process, review or approval compared to conventional FDA procedures. The FDA may withdraw fast track designation if it believes that the designation is no longer supported by data from our clinical development program.

While we have received orphan drug designation for two of our lead drug candidates, BLU-285 and BLU-554, for specified indications, we may seek orphan drug designation for some of our other drug candidates. However, we may be unsuccessful in obtaining or may be unable to maintain the benefits associated with orphan drug designation, including the potential for market exclusivity.

In September 2015, the FDA granted orphan drug designation to BLU-554 for the treatment of HCC, and in January 2016, the FDA granted orphan drug designation to BLU-285 for the treatment of GIST and SM. As part of our business strategy, we may seek orphan drug designation for some of our other drug candidates, and we may be unsuccessful. Regulatory authorities in some jurisdictions, including the United States and the European Union, may designate drugs for relatively small patient populations as orphan drugs. Under the Orphan Drug Act, 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 clinical trial costs, tax advantages and user-fee waivers.

Similarly, in the European Union, the European Commission grants orphan drug designation after receiving the opinion of the European Medicines Agency's, or EMA, Committee for Orphan Medicinal Products on an orphan drug designation application. Orphan drug designation is intended to promote the development of drugs that are intended for the diagnosis, prevention or treatment of life-threatening or chronically debilitating conditions affecting not more than 5 in 10,000 persons in the European Union and for which no satisfactory method of diagnosis, prevention, or treatment has been authorized (or the product would be a significant benefit to those affected). In addition, designation is granted for drugs intended for the diagnosis, prevention, or treatment of a life-threatening, seriously debilitating or serious and chronic condition and when, without incentives, it is unlikely that sales of the drug in the European Union would be sufficient to justify the necessary investment in developing the drug. In the European Union, orphan drug designation entitles a party to financial incentives such as reduction of fees or fee waivers.

Generally, 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 EMA or the FDA from approving another marketing application for the same drug and indication for that time period,

except in limited circumstances. The applicable period is seven years in the United States and ten years in the European Union. The European Union exclusivity period can be reduced to six years if a drug no longer meets the criteria for orphan drug designation or if the drug is sufficiently profitable so that market exclusivity is no longer justified.

Even if we obtain orphan drug exclusivity for a drug, that exclusivity may not effectively protect the designated drug from competition because different drugs can be approved for the same condition. 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 intend to seek orphan drug designation for our other drug candidates in addition to BLU-554 for the treatment of HCC and BLU-285 for the treatment of GIST and SM, we may never receive such designations. Even if we receive orphan drug designation for any of our drug candidates, there is no guarantee that we will enjoy the benefits of those designations.

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

If the FDA or a comparable foreign regulatory authority approves any of our drug candidates, the manufacturing processes, labeling, packaging, distribution, adverse event reporting, storage, advertising, promotion and recordkeeping for the drug will be subject to extensive and ongoing regulatory requirements. These requirements include submissions of safety and other post-marketing information and reports, registration, as well as continued compliance with current Good Manufacturing Practices, or cGMPs, and Good Clinical Practices, or GCPs, for any clinical trials that we conduct post-approval. Any regulatory approvals that we receive for our drug candidates may also be subject to limitations on the approved indicated uses for which the drug 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 drug. Later discovery of previously unknown problems with a drug, 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, among other things:

- restrictions on the marketing or manufacturing of the drug, withdrawal of the drug from the market, or voluntary drug 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 marketing approvals;
- drug seizure or detention, or refusal to permit the import or export of drugs; and
- injunctions or the imposition of civil or criminal penalties.

The FDA's policies may change and additional government regulations may be enacted that could prevent, limit or delay regulatory approval of our drug candidates. 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, which would adversely affect our business, prospects and ability to achieve or sustain profitability.

We may not be successful in our efforts to use and expand our discovery platform to build a pipeline of drug candidates.

A key element of our strategy is to use our novel target discovery engine to identify kinases that are drivers of diseases in genomically defined patient populations with high unmet medical need in order to build a pipeline of drug candidates. Although our research and development efforts to date have resulted in a pipeline of drug candidates, we may not be able to continue to identify novel kinase drivers and develop drug candidates. Even if we are successful in continuing to build our pipeline, the potential drug candidates that we identify may not be suitable for clinical development. For example, they may be shown to have harmful side effects or other characteristics that indicate that they are unlikely to be drugs that will receive marketing approval and achieve market acceptance. If we do not successfully develop and commercialize drug candidates based upon our approach, we will not be able to obtain drug revenues in future periods, which likely would result in significant harm to our financial position and adversely affect our stock price.

We may expend our limited resources to pursue a particular drug candidate or indication and fail to capitalize on drug candidates or indications that may be more profitable or for which there is a greater likelihood of success.

Because we have limited financial and managerial resources, we focus on research programs and drug candidates that we identify for specific indications. As a result, we may forego or delay pursuit of opportunities with other drug candidates or for other indications that later prove to have greater commercial potential. Our resource allocation decisions may cause us to fail to capitalize on viable commercial drugs or profitable market opportunities. Our spending on current and future research and development programs and drug candidates for specific indications may not yield any commercially viable drugs. If we do not accurately evaluate the commercial potential or target market for a particular drug candidate, we may relinquish valuable rights to that drug candidate through collaboration, licensing or other royalty arrangements in cases in which it would have been more advantageous for us to retain sole development and commercialization rights to such drug candidate.

Risks Related to Commercialization

The incidence and prevalence for target patient populations of our drug candidates have not been established with precision. If the market opportunities for our drug candidates are smaller than we estimate or if any approval that we obtain is based on a narrower definition of the patient population, our revenue and ability to achieve profitability will be adversely affected, possibly materially.

The precise incidence and prevalence for SM, GIST, HCC and RET-driven NSCLC and MTC are unknown. Our projections of both the number of people who have these diseases, as well as the subset of people with these diseases who have the potential to benefit from treatment with our drug candidates, are based on estimates. We estimate that in the United States, France, Germany, Italy, Spain, the United Kingdom and Japan, or the Major Markets, there are approximately: (i) 4,100 patients with advanced forms of SM, including smoldering SM, who have the KIT D816V mutation; (ii) 500 patients with PDGFRα D842V-driven GIST; (iii) 6,300 second line and third line patients with GIST who have a KIT Exon 17 mutation; (iv) 18,900 first line and approximately 8,000 second line HCC patients with aberrantly active FGFR4 signaling, as indicated by FGF19 overexpression; and (iv) 10,000 patients with RET-driven NSCLC and approximately 600 patients with RET-driven MTC.

The total addressable market opportunity for BLU-285 for the treatment of patients with SM and GIST, BLU-554 for the treatment of patients with HCC and BLU-667 for the treatment of patients with NSCLC and MTC will ultimately depend upon, among other things, the diagnosis criteria included in the final label for each of BLU-285, BLU-554 and BLU-667, if our drug candidates are approved for sale for these indications, acceptance by the medical community and patient access, drug pricing and reimbursement. The number of patients in the Major Markets and elsewhere, including the number of addressable patients in those markets, may turn out to be lower than expected, patients may not be otherwise amenable to treatment with our drugs, or new patients may become increasingly difficult to identify or gain access to, all of which would adversely affect our results of operations and our business.

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

The development and commercialization of new drugs is highly competitive. We face competition with respect to our current drug candidates, and will face competition with respect to any drug candidates that we may seek to develop or commercialize in the future, from major pharmaceutical companies, specialty pharmaceutical companies and biotechnology companies worldwide. There are a number of large pharmaceutical and biotechnology companies that currently market and sell drugs or are pursuing the development of therapies in the field of kinase inhibition for cancer and other diseases. Some of these competitive drugs and therapies are based on scientific approaches that are the same as or similar to our approach, and others are based on entirely different approaches. Potential competitors also include academic institutions, government agencies and other public and private research organizations that conduct research, seek patent protection and establish collaborative arrangements for research, development, manufacturing and commercialization.

Specifically, there are a large number of companies developing or marketing treatments for cancer, including many major pharmaceutical and biotechnology companies. If BLU-285 receives marketing approval for advanced SM, it will face competition from Novartis AG's midostaurin, a multi-kinase inhibitor with KIT D816V inhibitory activity that was recently approved by the FDA for the treatment of advanced SM. In addition, if BLU-285 receives marketing approval for advanced SM, GIST and/or for GIST patients with the PDGFRα D842V mutation, it may face competition from other drug candidates in development for these indications, including drug candidates in development by AB Science S.A., ARIAD Pharmaceuticals, Inc., a wholly-owned subsidiary of Takeda Pharmaceutical Company Limited, AROG Pharmaceuticals, Inc., Celldex Therapeutics, Inc., Deciphera Pharmaceuticals, LLC and Plexxikon Inc., a wholly-owned subsidiary of Daiichi Sankyo Company, Limited. Further, if BLU-554 receives marketing approval for HCC patients with aberrantly active FGFR4 signaling, as indicated by FGF19 overexpression, it will face competition from sorafenib and regorafenib, the only approved systemic medical therapies for HCC. In addition, BLU-554 may face competition from other drug candidates in development by AstraZeneca plc, Bayer AG, Celgene Corporation, Eisai Inc., H3 Biomedicine Inc., Incyte Corporation, Johnson & Johnson, Novartis AG, Sanofi S.A., Taiho Pharmaceutical Co., Ltd., U3 Pharma GmbH, a wholly-owned subsidiary of Daiichi Sankyo Company, Limited, and Xoma Ltd. If BLU-667 receives marketing approval for patients with RET-driven cancers, it may face competition from other drug candidates in development, including drug candidates in development by ARIAD Pharmaceuticals, Inc., a wholly-owned subsidiary of Takeda Pharmaceutical Company Limited, AstraZeneca plc, Eisai Inc., Exelixis, Inc., GlaxoSmithKline plc, Ignyta, Inc., Loxo Oncology, Inc., Mirati Therapeutics, Inc., Novartis AG, Pfizer Inc. and Roche.

Many of the companies against which we are competing or against which we may compete in the future have significantly greater financial resources and expertise in research and development, manufacturing, pre-clinical testing, conducting clinical trials, obtaining regulatory approvals and marketing approved drugs than we do. Mergers and acquisitions in the pharmaceutical, biotechnology and diagnostic industries may result in even more resources being concentrated among a smaller number of our competitors. Smaller or early stage companies may also prove to be significant competitors, particularly through collaborative arrangements with large and established companies. These competitors also compete with us in recruiting and retaining qualified scientific and management personnel and establishing clinical trial sites and patient registration for clinical trials, as well as in acquiring technologies complementary to, or necessary for, our programs.

Our commercial opportunity could be reduced or eliminated if our competitors develop and commercialize drugs that are safer, more effective, have fewer or less severe side effects, are more convenient or are less expensive than any drugs that we or our collaborators may develop. Our competitors also may obtain FDA or other regulatory approval for their drugs more rapidly than we may obtain approval for ours, which could result in our competitors establishing a strong market position before we or our collaborators are able to enter the market. The key competitive factors affecting the success of all of our drug candidates, if approved, are likely to be their efficacy, safety, convenience, price, the effectiveness of any related companion diagnostic tests, the level of generic competition and the availability of reimbursement from government and other third-party payors.

Product liability lawsuits against us could cause us to incur substantial liabilities and could limit commercialization of any drug candidates that we may develop.

We will face an inherent risk of product liability exposure related to the testing of our drug candidates in human clinical trials and will face an even greater risk if we commercially sell any drug candidates that we may develop. If we cannot successfully defend ourselves against claims that our drug candidates caused injuries, we could incur substantial liabilities. Regardless of merit or eventual outcome, liability claims may result in:

- decreased demand for any drug candidates that we may develop;
- injury to our reputation and significant negative media attention;
- withdrawal of clinical trial participants;
- significant costs to defend the related litigation;
- substantial monetary awards to trial participants or patients;
- loss of revenue; and
- the inability to commercialize any drug candidates that we may develop.

Although we maintain product liability insurance coverage, it may not be adequate to cover all liabilities that we may incur. We anticipate that we will need to increase our insurance coverage when we begin later-stage clinical trials and if we successfully commercialize any drug candidate. Insurance coverage is increasingly expensive. We may not be able to maintain insurance coverage at a reasonable cost or in an amount adequate to satisfy any liability that may arise.

If we or our collaborators, including Ventana and Qiagen, are unable to successfully develop and commercialize companion diagnostic tests for our drug candidates, or experience significant delays in doing so we may not realize the full commercial potential of our drug candidates.

Because we are focused on precision medicine, in which predictive biomarkers will be used to identify the right patients for our drug candidates, we believe that our success may depend, in part, on the development and commercialization of companion diagnostic tests. There has been limited success to date industrywide in developing and commercializing these types of companion diagnostic tests. To be successful, we need to address a number of scientific, technical and logistical challenges. We have entered into agreements to develop and commercialize companion diagnostic tests with Ventana for BLU-554 in order to identify HCC patients with aberrantly active FGFR4 signaling as indicated by FGF19 overexpression and with Qiagen for BLU-285 in order to identify GIST patients with the PDGFRα D842V mutation. However, we have not yet initiated commercialization of these companion diagnostic tests or development and commercialization of companion diagnostic tests for any of our other programs. We have little experience in the development and commercialization of companion diagnostic tests and may not be successful in developing and commercializing appropriate companion diagnostic tests to pair with any of our drug candidates that receive marketing approval. Companion diagnostic tests are subject to regulation by the FDA and similar regulatory authorities outside the United States as medical devices and require separate regulatory approval prior to commercialization. Given our limited experience in developing and commercializing companion diagnostic tests, we expect to rely on Ventana and Qiagen to design, manufacture, obtain regulatory approval for and commercialize the companion diagnostic tests for BLU-554 and BLU-285, respectively, and we expect to rely in whole or in part on other third parties to design, manufacture, obtain regulatory approval for and commercialize any other companion diagnostic tests for our drug candidates. We and our collaborators, including Ventana and Qiagen, may encounter difficulties in developing and obtaining approval for the companion diagnostic tests, including issues relating to selectivity/specificity, analytical validation, reproducibility, or clinical validation. In addition, our collaborators for any companion diagnostic test that we may seek to develop, our collaborators, including Ventana and Qiagen:

- may not perform their respective obligations as expected or as required under our agreements with them;

- may not pursue commercialization of a companion diagnostic test even if it receives any required regulatory approvals;
- may elect not to continue the development of a companion diagnostic test based on changes in their or other third parties' strategic focus or available funding, or external factors, such as an acquisition, that divert resources or create competing priorities;
- may not commit sufficient resources to the marketing and distribution of the a companion diagnostic test; and
- may terminate their relationship with us.

Any delay or failure by us or our collaborators, including Ventana and Qiagen, to develop or obtain regulatory approval of the companion diagnostic tests could delay or prevent approval of our drug candidates. If we, or any third parties that we engage to assist us, including Ventana and Qiagen, are unable to successfully develop and commercialize companion diagnostic tests for our drug candidates, or experience delays in doing so:

- the development of our drug candidates may be adversely affected if we are unable to appropriately select patients for enrollment in our clinical trials;
- our drug candidates may not receive marketing approval if safe and effective use of a therapeutic drug candidate depends on an *in vitro* diagnostic; and
- we may not realize the full commercial potential of any drug candidates that receive marketing approval if, among other reasons, we are unable to appropriately select patients who are likely to benefit from treatment with our drugs.

As a result, our business would be harmed, possibly materially.

In addition, third party collaborators, including Ventana and Qiagen, may encounter production difficulties that could constrain the supply of the companion diagnostic tests, and both they and we may have difficulties gaining acceptance of the use of the companion diagnostic tests in the clinical community. If such companion diagnostic tests fail to gain market acceptance, it would have an adverse effect on our ability to derive revenues from sales of our drug candidates, if approved. In addition, the diagnostic company with whom we contract may decide to discontinue selling or manufacturing the companion diagnostic test that we anticipate using in connection with development and commercialization of our drug candidates or our relationship with such diagnostic company may otherwise terminate. We may not be able to enter into arrangements with another diagnostic company to obtain supplies of an alternative diagnostic test for use in connection with the development and commercialization of our drug candidates or do so on commercially reasonable terms, which could adversely affect and/or delay the development or commercialization of our drug candidates.

Even if we are able to commercialize any drug candidates, such drugs may become subject to unfavorable pricing regulations or third-party coverage and reimbursement policies, which would harm our business.

The regulations that govern regulatory approvals, pricing and reimbursement for new drugs vary widely from country to country. Some countries require approval of the sale price of a drug before it can be marketed. In many countries, the pricing review period begins after marketing approval is granted. In some foreign markets, prescription pharmaceutical pricing remains subject to continuing governmental control even after initial approval is granted. As a result, we might obtain marketing approval for a drug candidate in a particular country, but then be subject to price regulations that delay our commercial launch of the drug candidate, possibly for lengthy time periods, and negatively impact the revenues we are able to generate from the sale of the drug candidate in that country. Adverse pricing limitations may hinder our ability to recoup our investment in one or more drug candidates, even if our drug candidates obtain marketing approval.

Our ability to commercialize any drug candidates successfully also will depend in part on the extent to which coverage and reimbursement for these drug candidates and related treatments will be available from government

authorities, private health insurers and other organizations. Government authorities and third-party payors, such as private health insurers and health maintenance organizations, decide which medications they will pay for and establish reimbursement levels. A primary trend in the U.S. healthcare industry and elsewhere is cost containment. Government authorities and third-party payors have attempted to control costs by limiting coverage and the amount of reimbursement for particular drugs. Increasingly, third-party payors are requiring that drug companies provide them with predetermined discounts from list prices and are challenging the prices charged for drugs. We cannot be sure that coverage will be available for any drug candidate that we commercialize and, if coverage is available, the level of reimbursement. Reimbursement may impact the demand for, or the price of, any drug candidate for which we obtain marketing approval. If reimbursement is not available or is available only to limited levels, we may not be able to successfully commercialize any drug candidate for which we obtain marketing approval.

There may be significant delays in obtaining reimbursement for newly approved drugs, and coverage may be more limited than the purposes for which the drug is approved by the FDA or similar regulatory authorities outside the United States. Moreover, eligibility for reimbursement does not imply that any drug will be paid for in all cases or at a rate that covers our costs, including research, development, manufacture, sale and distribution. Interim reimbursement levels for new drugs, if applicable, may also not be sufficient to cover our costs and may not be made permanent. Reimbursement rates may vary according to the use of the drug and the clinical setting in which it is used, may be based on reimbursement levels already set for lower-cost drugs and may be incorporated into existing payments for other services. Net prices for drugs may be reduced by mandatory discounts or rebates required by government healthcare programs or private payors and by any future relaxation of laws that presently restrict imports of drugs from countries where they may be sold at lower prices than in the United States. Third-party payors often rely upon Medicare coverage policy and payment limitations in setting their own reimbursement policies. Our inability to promptly obtain coverage and profitable payment rates from both government-funded and private payors for any approved drugs that we develop could have a material adverse effect on our operating results, our ability to raise capital needed to commercialize drugs and our overall financial condition.

Healthcare legislative reform measures may have a material adverse effect on our business and results of operations.

In the United States, there have been and continue to be a number of legislative initiatives to contain healthcare costs. For example, in March 2010, the Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act, or the Affordable Care Act, was passed, which substantially changes the way health care is financed by both governmental and private insurers, and significantly impacts the U.S. pharmaceutical industry. The Affordable Care Act, among other things, subjects biologic products to potential competition by lower-cost biosimilars, addresses 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, increases the minimum Medicaid rebates owed by manufacturers under the Medicaid Drug Rebate Program and extends the rebate program to individuals enrolled in Medicaid managed care organizations, establishes annual fees and taxes on manufacturers of certain branded prescription drugs, and a new Medicare Part D coverage gap discount program, in which manufacturers must agree to offer 50% point-of-sale discounts off negotiated prices of applicable brand drugs to eligible beneficiaries during their coverage gap period, as a condition for the manufacturer's outpatient drugs to be covered under Medicare Part D.

In addition, other legislative changes have been proposed and adopted in the United States since the Affordable Care Act was enacted. On August 2, 2011, the Budget Control Act of 2011 among other things, created measures for spending reductions by Congress. A Joint Select Committee on Deficit Reduction, tasked with recommending a targeted deficit reduction of at least $1.2 trillion for the years 2013 through 2021, was unable to reach required goals, thereby triggering the legislation's automatic reduction to several government programs. This includes aggregate reductions of Medicare payments to providers of 2% per fiscal year. These reductions went into effect on April 1, 2013 and, due to subsequent legislative amendments to the statute, will remain in effect through 2024 unless additional Congressional action is taken. On January 2, 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.

Moreover, payment methodologies may be subject to changes in healthcare legislation and regulatory initiatives. For example, the Middle Class Tax Relief and Job Creation Act of 2012 required that the Centers for Medicare & Medicaid Services, the agency responsible for administering the Medicare program, or CMS, reduce the Medicare clinical laboratory fee schedule by 2% in 2013, which served as a base for 2014 and subsequent years. In addition, effective January 1, 2014, CMS also began bundling the Medicare payments for certain laboratory tests ordered

while a patient received services in a hospital outpatient setting. We expect that additional state and federal healthcare reform measures will be adopted in the future, any of which could limit the amounts that federal and state governments will pay for healthcare products and services, which could result in reduced demand for our drug candidates or companion diagnostic tests or additional pricing pressures.

In January 2017, Congress voted to adopt a budget resolution for fiscal year 2017, that while not a law, is widely viewed as the first step toward the passage of legislation that would repeal certain aspects of the Affordable Care Act. Further, on January 20, 2017, U.S. President Donald Trump signed an Executive Order directing federal agencies with authorities and responsibilities under the Affordable Care Act to waive, defer, grant exemptions from, or delay the implementation of any provision of the Affordable Care Act that would impose a fiscal burden on states or a cost, fee, tax, penalty or regulatory burden on individuals, healthcare providers, health insurers, or manufacturers of pharmaceuticals or medical devices. Congress also could consider subsequent legislation to replace elements of the Affordable Care Act that are repealed.

Healthcare reforms stemming from the repeal of, and potential replacement for, the Affordable Care Act may result in more rigorous coverage criteria and lower reimbursement among regulated third-party payors, and in additional downward pressure on the prices that we receive for sales of our products, if approved. Any reduction in reimbursement from Medicare or other government-funded federal programs, including the Veterans Health Administration, or state healthcare programs could lead to a similar reduction in payments from private commercial payors. The implementation of cost containment measures or other healthcare reforms may thus prevent us from being able to generate revenue or attain profitability.

We are currently unable to predict what additional legislation or regulation, if any, relating to the health care industry may be enacted in the future or what effect recently enacted federal legislation or any such additional legislation or regulation would have on our business. The pendency or approval of such proposals or reforms could result in a decrease in our stock price or limit our ability to raise capital or to enter into collaboration agreements for the further development and potential commercialization of our products.

If, in the future, we are unable to establish sales and marketing capabilities or enter into agreements with third parties to sell and market our drug candidates, we may not be successful in commercializing our drug candidates if and when they are approved, and we may not be able to generate any revenue.

We do not currently have a sales or marketing infrastructure and have limited experience in the sale, marketing or distribution of drugs. To achieve commercial success for any approved drug candidate for which we retain sales and marketing responsibilities, we must build our sales, marketing, managerial, and other non-technical capabilities or make arrangements with third parties to perform these services. In the future, we may choose to build a focused sales and marketing infrastructure to sell, or participate in sales activities with our collaborators for, some of our drug candidates if and when they are approved.

There are risks involved with both establishing our own sales and marketing capabilities and entering into arrangements with third parties to perform these services. For example, recruiting and training a sales force is expensive and time-consuming and could delay any drug launch. If the commercial launch of a drug candidate for which we recruit a sales force and establish marketing capabilities is delayed or does not occur for any reason, we would have prematurely or unnecessarily incurred these commercialization expenses. This may be costly, 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 drug candidates on our own include:

- our inability to recruit and retain adequate numbers of effective sales and marketing personnel;
- the inability of sales personnel to obtain access to physicians or persuade adequate numbers of physicians to prescribe any future drugs;
- the lack of complementary drugs to be offered by sales personnel, which may put us at a competitive disadvantage relative to companies with more extensive product lines; and

· unforeseen costs and expenses associated with creating an independent sales and marketing organization.

If we enter into arrangements with third parties to perform sales, marketing and distribution services, our drug revenues or the profitability of these drug revenues to us are likely to be lower than if we were to market and sell any drug candidates that we develop ourselves. In addition, we may not be successful in entering into arrangements with third parties to sell and market our drug candidates or may be unable to do so on terms that are favorable to us. We likely will have little control over such third parties, and any of them may fail to devote the necessary resources and attention to sell and market our drug candidates effectively. If we do not establish sales and marketing capabilities successfully, either on our own or in collaboration with third parties, we will not be successful in commercializing our drug candidates. Further, our business, results of operations, financial condition and prospects will be materially adversely affected.

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

Although we do not currently have any drugs on the market, once we begin commercializing our drug candidates, we will be subject to additional healthcare statutory and regulatory requirements and enforcement by the federal government and the states and foreign governments in which we conduct our business. Healthcare providers, physicians and third-party payors play a primary role in the recommendation and prescription of any drug candidates for which we obtain marketing approval. Our future arrangements with third-party payors and customers may expose us to broadly applicable fraud and abuse and other healthcare laws and regulations that may constrain the business or financial arrangements and relationships through which we market, sell and distribute our drug candidates for which we obtain marketing approval. Restrictions under applicable federal and state healthcare laws and regulations include the following:

· the federal Anti-Kickback Statute prohibits, among other things, persons from knowingly and willfully soliciting, offering, receiving or providing remuneration, directly or indirectly, in cash or in kind, to induce or reward either the referral of an individual for, or the purchase, order or recommendation of, any good or service, for which payment may be made under federal and state healthcare programs such as Medicare and Medicaid. 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 federal False Claims Act imposes criminal and civil penalties, including through civil whistleblower or qui tam actions, against individuals or entities for knowingly presenting, or causing to be presented, to the federal government, claims for payment that are false or fraudulent or making a false statement to avoid, decrease or conceal an obligation to pay money to the federal government. In addition, the government may assert that a claim including items and services resulting from a violation of the federal Anti-Kickback Statute constitutes a false or fraudulent claim for purposes of the False Claims Act;

· the federal Health Insurance Portability and Accountability Act of 1996, or HIPAA, imposes criminal and civil liability for executing a scheme to defraud any healthcare benefit program, or knowingly and willfully falsifying, concealing or covering up a material fact or making any materially false statement in connection with the delivery of or payment for healthcare benefits, items or services; similar to the federal Anti-Kickback Statute, a person or entity does not need to have actual knowledge of the statute or specific intent to violate it in order to have committed a violation;

· the federal physician payment transparency requirements, sometimes referred to as the “Sunshine Act” under the Affordable Care Act require manufacturers of drugs, devices, biologics and medical supplies that are reimbursable under Medicare, Medicaid, or the Children’s Health Insurance Program to report to the Department of Health and Human Services information related to physician payments and other transfers of value and the ownership and investment interests of such physicians and their immediate family members;

- HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act of 2009 and its implementing regulations, which also imposes obligations on certain covered entity healthcare providers, health plans, and healthcare clearinghouses as well as their business associates that perform certain services involving the use or disclosure of individually identifiable health information, including mandatory contractual terms, with respect to safeguarding the privacy, security and transmission of individually identifiable health information; and

- analogous state laws and regulations, such as state anti-kickback and false claims laws that may apply to sales or marketing arrangements and claims involving healthcare items or services reimbursed by non-governmental third-party payors, including private insurers; and some state laws require pharmaceutical companies to comply with the pharmaceutical industry's voluntary compliance guidelines and the relevant compliance guidance promulgated by the federal government in addition to requiring drug manufacturers to report information related to payments to physicians and other health care providers or marketing expenditures, 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.

Ensuring that our future business arrangements with third parties comply with applicable healthcare laws and regulations could involve substantial costs. It is possible that governmental authorities will conclude that our business practices do not comply with current or future statutes, regulations or case law involving applicable fraud and abuse or other healthcare laws and regulations. If our operations, including anticipated activities to be conducted by our sales team, were to be found to be in violation of any of these laws or any other governmental regulations that may apply to us, we may be subject to significant civil, criminal and administrative penalties, damages, fines, exclusion from government-funded healthcare programs, such as Medicare and Medicaid, 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 is found to be not in compliance with applicable laws, they may be subject to criminal, civil or administrative sanctions, including exclusions from government-funded healthcare programs.

Our future growth may depend, in part, on our ability to penetrate foreign markets, where we would be subject to additional regulatory burdens and other risks and uncertainties.

Our future profitability may depend, in part, on our ability to commercialize our drug candidates in foreign markets for which we may rely on collaboration with third parties. We are not permitted to market or promote any of our drug candidates before we receive regulatory approval from the applicable regulatory authority in that foreign market, and we may never receive such regulatory approval for any of our drug candidates. To obtain separate regulatory approval in many other countries we must comply with numerous and varying regulatory requirements of such countries regarding safety and efficacy and governing, among other things, clinical trials and commercial sales, pricing and distribution of our drug candidates, and we cannot predict success in these jurisdictions. If we obtain approval of our drug candidates and ultimately commercialize our drug candidates in foreign markets, we would be subject to additional risks and uncertainties, including:

- our customers' ability to obtain reimbursement for our drug candidates in foreign markets;

- our inability to directly control commercial activities because we are relying on third parties;

- the burden of complying with complex and changing foreign regulatory, tax, accounting and legal requirements;

- different medical practices and customs in foreign countries affecting acceptance in the marketplace;

- import or export licensing requirements;

- longer accounts receivable collection times;

- longer lead times for shipping;

- language barriers for technical training;
- reduced protection of intellectual property rights in some foreign countries;
- the existence of additional potentially relevant third-party intellectual property rights;
- foreign currency exchange rate fluctuations; and
- the interpretation of contractual provisions governed by foreign laws in the event of a contract dispute.

Foreign sales of our drug candidates could also be adversely affected by the imposition of governmental controls, political and economic instability, trade restrictions and changes in tariffs.

Governments outside the United States tend to impose strict price controls, which may adversely affect our revenues, if any.

In some countries, particularly countries in the European Union, the pricing of prescription pharmaceuticals is subject to governmental control. In these countries, pricing negotiations with governmental authorities can take considerable time after the receipt of marketing approval for a drug. 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 drug candidate to other available therapies. If reimbursement of our drugs is unavailable or limited in scope or amount, or if pricing is set at unsatisfactory levels, our business could be materially harmed. In addition, the recent United Kingdom referendum on its membership in the European Union resulted in a majority of United Kingdom voters voting to exit the European Union, often referred to as Brexit. Brexit has already and may continue to adversely affect European and/or worldwide regulatory conditions. Brexit could lead to legal uncertainty and potentially divergent national laws and regulations, including those related to the pricing of prescription pharmaceuticals, as the United Kingdom determines which European Union laws to replicate or replace. If the United Kingdom were to significantly alter its regulations affecting the pricing of prescription pharmaceuticals, we could face significant new costs. As a result, Brexit could impair our ability to transact business in the European Union and the United Kingdom.

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 operations involve the use of hazardous and flammable materials, including chemicals and biological and radioactive materials. Our operations also 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. In the event of contamination or injury resulting from our use of hazardous materials, we could be held liable for any resulting damages, and any liability could exceed our resources. We also could incur significant costs associated with civil or criminal fines and penalties.

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, this insurance may not provide adequate coverage against potential liabilities. We do not maintain insurance for environmental liability or toxic tort claims that may be asserted against us in connection with our storage or disposal of biological, hazardous or radioactive materials.

Risks Related to Our Dependence on Third Parties

We may seek to establish additional collaborations, and, if we are not able to establish them on commercially reasonable terms, we may have to alter our development and commercialization plans.

Our drug development programs and the potential commercialization of our drug candidates will require substantial additional cash to fund expenses. For some of our drug candidates, we may decide to collaborate with additional pharmaceutical and biotechnology companies for the development and potential commercialization of those drug candidates.

We face significant competition in seeking appropriate collaborators. Whether we reach a definitive agreement for a collaboration will depend, among other things, upon our assessment of the collaborator's resources and expertise, the terms and conditions of the proposed collaboration and the proposed collaborator's evaluation of a number of factors. Those factors may include the design or results of clinical trials, the likelihood of approval by the FDA or similar regulatory authorities outside the United States, the potential market for the subject drug candidate, the costs and complexities of manufacturing and delivering such drug candidate to patients, the potential of competing drugs, the existence of uncertainty with respect to our ownership of technology, which can exist if there is a challenge to such ownership without regard to the merits of the challenge and industry and market conditions generally. The collaborator may also consider alternative drug 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 for our drug candidate. The terms of any additional collaborations or other arrangements that we may establish may not be favorable to us.

We may also be restricted under existing collaboration agreements from entering into future agreements on certain terms with potential collaborators. Collaborations are complex and time-consuming to negotiate and document. In addition, there have been a significant number of recent business combinations among large pharmaceutical companies that have resulted in a reduced number of potential future collaborators.

We may not be able to negotiate additional 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 drug 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 or 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 our drug candidates or bring them to market and generate drug revenue.

In addition, our collaborations with Alexion and Roche, as well as any future collaborations that we enter into, may not be successful. The success of our collaboration arrangements will depend heavily on the efforts and activities of our collaborators. Collaborators generally have significant discretion in determining the efforts and resources that they will apply to these collaborations. Disagreements between parties to a collaboration arrangement regarding clinical development and commercialization matters can lead to delays in the development process or commercializing the applicable drug candidate and, in some cases, termination of the collaboration arrangement. These disagreements can be difficult to resolve if neither of the parties has final decision-making authority. Collaborations with pharmaceutical or biotechnology companies and other third parties often are terminated or allowed to expire by the other party. Any such termination or expiration would adversely affect us financially and could harm our business reputation.

We rely on third parties to conduct our clinical trials for our drug candidates. If these third parties do not successfully carry out their contractual duties, comply with regulatory requirements or meet expected deadlines, we may not be able to obtain regulatory approval for or commercialize our drug candidates and our business could be substantially harmed.

We do not have the ability to independently conduct clinical trials. We rely on medical institutions, clinical investigators, CROs, contract laboratories and other third parties to conduct or otherwise support clinical trials for our drug candidates. We rely heavily on these parties for execution of clinical trials for our drug candidates and control only certain aspects of their activities. Nevertheless, we are responsible for ensuring that each of our clinical trials is conducted in accordance with the applicable protocol, legal and regulatory requirements and scientific standards, and our reliance on CROs will not relieve us of our regulatory responsibilities. For any violations of laws and regulations during the conduct of our clinical trials, we could be subject to warning letters or enforcement action that may include civil penalties up to and including criminal prosecution.

We and our CROs are required to comply with regulations, including GCPs, for conducting, monitoring, recording and reporting the results of clinical trials to ensure that the data and results are scientifically credible and accurate, and that the trial patients are adequately informed of the potential risks of participating in clinical trials and their rights are protected. These regulations are enforced by the FDA, the Competent Authorities of the Member States of the European Economic Area and comparable foreign regulatory authorities for any drugs in clinical development. The FDA enforces GCP regulations through periodic inspections of clinical trial sponsors, principal investigators and

trial sites. If we or our CROs fail to comply with applicable 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 clinical trials before approving our marketing applications. We cannot assure you that, upon inspection, the FDA will determine that our current or future clinical trials comply with GCPs. In addition, our clinical trials must be conducted with drug candidates produced under cGMPs regulations. Our failure or the failure of our CROs to comply with these regulations may require us to repeat clinical trials, which would delay the regulatory approval process and could also subject us to enforcement action. We also are required to register ongoing clinical trials and post the results of completed clinical trials on a government-sponsored database, ClinicalTrials.gov, within certain timeframes. Failure to do so can result in fines, adverse publicity and civil and criminal sanctions.

Although we intend to design the clinical trials for our drug candidates, CROs will conduct all of the clinical trials. As a result, many important aspects of our development programs, including their conduct and timing, will be outside of our direct control. Our reliance on third parties to conduct current or future clinical trials will also result in less direct control over the management of data developed through clinical trials than would be the case if we were relying entirely upon our own staff. Communicating with outside parties can also be challenging, potentially leading to mistakes as well as difficulties in coordinating activities. Outside parties may:

- have staffing difficulties;
- fail to comply with contractual obligations;
- experience regulatory compliance issues;
- undergo changes in priorities or become financially distressed; or
- form relationships with other entities, some of which may be our competitors.

These factors may materially adversely affect the willingness or ability of third parties to conduct our clinical trials and may subject us to unexpected cost increases that are beyond our control. If the CROs do not perform clinical trials in a satisfactory manner, breach their obligations to us or fail to comply with regulatory requirements, the development, regulatory approval and commercialization of our drug candidates may be delayed, we may not be able to obtain regulatory approval and commercialize our drug candidates, or our development program materially and irreversibly harmed. If we are unable to rely on clinical data collected by our CROs, we could be required to repeat, extend the duration of, or increase the size of any clinical trials we conduct and this could significantly delay commercialization and require significantly greater expenditures.

If any of our relationships with these third-party CROs terminate, we may not be able to enter into arrangements with alternative CROs. If CROs 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 clinical protocols, regulatory requirements or for other reasons, any clinical trials such CROs are associated with may be extended, delayed or terminated, and we may not be able to obtain regulatory approval for or successfully commercialize our drug candidates. As a result, we believe that our financial results and the commercial prospects for our drug candidates in the subject indication would be harmed, our costs could increase and our ability to generate revenue could be delayed.

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

We do not currently own or operate, nor do we have any plans to establish in the future, any manufacturing facilities or personnel. We rely, and expect to continue to rely, on third parties for the manufacture of our drug candidates for pre-clinical development and clinical testing, as well as for the commercial manufacture of our drugs if any of our drug candidates receive marketing approval. This reliance on third parties increases the risk that we will not have sufficient quantities of our drug candidates or drugs or such quantities at an acceptable cost or quality, which could delay, prevent or impair our development or commercialization efforts.

The facilities used by our contract manufacturers to manufacture our drug candidates must be approved by the FDA pursuant to inspections that will be conducted after we submit our marketing applications to the FDA. We do not control the manufacturing process of, and will be completely dependent on, our contract manufacturers for compliance with cGMPs in connection with the manufacture of our drug candidates. If our contract manufacturers cannot successfully manufacture material that conforms to our specifications and the strict regulatory requirements of the FDA or others, they will not be able to secure and/or maintain regulatory approval for their 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 authority does not approve these facilities for the manufacture of our drug candidates or if it withdraws any such approval in the future, we may need to find alternative manufacturing facilities, which would significantly impact our ability to develop, obtain regulatory approval for or market our drug candidates, if approved. Further, our failure, or the failure of our third-party manufacturers, to comply with applicable regulations could result in sanctions being imposed on us, including clinical holds, fines, injunctions, civil penalties, delays, suspension or withdrawal of approvals, license revocation, seizures or recalls of drug candidates or drugs, if approved, operating restrictions and criminal prosecutions, any of which could significantly and adversely affect our business and supplies of our drug candidates.

We may be unable to establish any agreements with third-party manufacturers or to do so on acceptable terms. Even if we are able to establish agreements with third-party manufacturers, reliance on third-party manufacturers entails additional risks, including:

- reliance on the third party for regulatory compliance and quality assurance;
- the possible breach of the manufacturing agreement by the third party;
- the possible misappropriation of our proprietary information, including our trade secrets and know-how; and
- the possible termination or nonrenewal of the agreement by the third party at a time that is costly or inconvenient for us.

Our drug candidates and any drugs that we may develop may compete with other drug candidates and approved drugs for access to manufacturing facilities. There are a limited number of manufacturers that operate under cGMP regulations and that might be capable of manufacturing for us.

Any performance failure on the part of our existing or future manufacturers could delay clinical development or marketing approval. If our current contract manufacturers cannot perform as agreed, we may be required to replace such manufacturers. Although we believe that there are several potential alternative manufacturers who could manufacture our drug candidates, we may incur added costs and delays in identifying and qualifying any such replacement.

Our current and anticipated future dependence upon others for the manufacture of our drug candidates or drugs may adversely affect our future profit margins and our ability to commercialize any drugs that receive marketing approval on a timely and competitive basis.

The third parties upon whom we rely for the supply of the active pharmaceutical ingredient, drug product and drug substance used in our lead drug candidates are our sole source of supply, and the loss of any of these suppliers could significantly harm our business.

The active pharmaceutical ingredients, or API, drug product and drug substance used in our lead drug candidates are supplied to us from single-source suppliers. Our ability to successfully develop our drug candidates, and to ultimately supply our commercial drugs in quantities sufficient to meet the market demand, depends in part on our ability to obtain the API, drug product and drug substance for these drugs in accordance with regulatory requirements and in sufficient quantities for commercialization and clinical testing. We do not currently have arrangements in place for a redundant or second-source supply of any such API, drug product or drug substance in the event any of our current suppliers of such API, drug product and drug substance cease their operations for any reason.

For all of our drug candidates, we intend to identify and qualify additional manufacturers to provide such API, drug product and drug substance prior to submission of an NDA to the FDA and/or an MAA to the EMA. We are not certain, however, that our single-source suppliers will be able to meet our demand for their products, either because of the nature of our agreements with those suppliers, our limited experience with those suppliers or our relative importance as a customer to those suppliers. It may be difficult for us to assess their ability to timely meet our demand in the future based on past performance. While our suppliers have generally met our demand for their products on a timely basis in the past, they may subordinate our needs in the future to their other customers.

Establishing additional or replacement suppliers for the API, drug product and drug substance used in our drug candidates, if required, may not be accomplished quickly. If we are able to find a replacement supplier, such replacement supplier would need to be qualified and may require additional regulatory approval, which could result in further delay. While we seek to maintain adequate inventory of the API, drug product and drug substance used in our drug candidates, any interruption or delay in the supply of components or materials, or our inability to obtain such API, drug product and drug substance from alternate sources at acceptable prices in a timely manner could impede, delay, limit or prevent our development efforts, which could harm our business, results of operations, financial condition and prospects.

Risks Related to Intellectual Property

If we are unable to adequately protect our proprietary technology or obtain and maintain patent protection for our technology and drugs or if the scope of the patent protection obtained is not sufficiently broad, our competitors could develop and commercialize technology and drugs similar or identical to ours, and our ability to successfully commercialize our technology and drugs may be impaired.

Our commercial success depends in part on our ability to obtain and maintain proprietary or intellectual property protection in the United States and other countries for our drug candidates, including BLU-285, BLU-554 and BLU-667, and our core technologies, including our novel target discovery engine and our proprietary compound library and other know-how. We seek to protect our proprietary and intellectual property position by, among other methods, filing patent applications in the United States and abroad related to our proprietary technology, inventions and improvements that are important to the development and implementation of our business. We also rely on trade secrets, know-how and continuing technological innovation to develop and maintain our proprietary and intellectual property position.

We own patents and patent applications that relate to BLU-285 and BLU-554 as composition of matter. We also own applications relating to composition of matter for KIT inhibitors with multiple compound families, composition of matter for FGFR4 inhibitors with multiple compound families and composition of matter for inhibitors of the predicted RET resistant mutants with multiple compound families, as well as methods of use for these novel compounds. The issued patent directed to BLU-554 composition of matter has a statutory expiration date in 2034, the issued patent directed to BLU-285 composition of matter has a statutory expiration date in 2034 and any patents issuing from our pending patent applications are projected to expire between 2034 and 2037.

As of April 30, 2017, we owned three issued U.S. patents, six pending U.S. non-provisional patent applications, one pending U.S. provisional patent application, 28 foreign patent applications in a number of jurisdictions, including Australia, Argentina, Brazil, Bolivia, Canada, China, the European Union, Hong Kong, Israel, India, Iraq, Japan, Lebanon, Mexico, New Zealand, Pakistan, Paraguay, Philippines, Russia, Singapore, South Africa, South Korea, Taiwan, Uruguay and Venezuela, and one pending Patent Cooperation Treaty, or PCT, patent application directed to our KIT program, including BLU-285. Any U.S. or ex-U.S. patents issuing from the pending applications covering BLU-285 will have a statutory expiration date of October 2034. Patent term adjustments or patent term extensions could result in later expiration dates.

As of April 30, 2017, we owned five issued U.S. patents, two pending U.S. non-provisional patent applications, three pending U.S. provisional patent applications, one issued foreign patent and 44 pending foreign patent applications in a number of jurisdictions, including Argentina, Australia, Bolivia, Brazil, Canada, China, Egypt, the European Union, Hong Kong, Israel, India, Indonesia, Iraq, Japan, South Korea, Lebanon, Mexico New Zealand, Pakistan, Paraguay, Philippines, Russia, Singapore, South Africa, Taiwan, Thailand, Uruguay and Venezuela, directed to our FGFR4 program, including BLU-554. Any U.S. or ex-U.S. patent issuing from the pending applications covering BLU-554 will

have a statutory expiration date of July 2033, December 2033, October 2034 or September 2037. Patent term adjustments or patent term extensions could result in later expiration dates.

As of April 30, 2017, we owned two pending U.S. non-provisional patent applications, three pending PCT applications, six pending foreign patent applications filed in Argentina, Lebanon, Uruguay and Taiwan, and two pending U.S. provisional patent applications directed to our RET program, which, if issued, will have statutory expiration dates of 2036 or 2037. Patent term adjustments or patent term extensions could result in later expiration dates.

The intellectual property portfolio directed to our platform includes patent applications directed to novel gene fusions and the uses of these fusions for detecting and treating conditions implicated with these fusions. As of April 30, 2017, we owned nine U.S. patent applications, nine European Union patent applications and one pending PCT patent application directed to this technology, which, if issued, will have statutory expiration dates ranging from 2034 to 2035.

The patent position of biotechnology and pharmaceutical companies generally is highly uncertain, involves complex legal and factual questions and has in recent years been the subject of much litigation.

The degree of patent protection we require to successfully commercialize our drug candidates may be unavailable or severely limited in some cases and may not adequately protect our rights or permit us to gain or keep any competitive advantage. We cannot provide any assurances that any of our patents have, or that any of our pending patent applications that mature into issued patents will include, claims with a scope sufficient to protect BLU-285, BLU-554 or our other drug candidates. In addition, the laws of foreign countries may not protect our rights to the same extent as the laws of the United States. Furthermore, patents have a limited lifespan. In the United States, the natural expiration of a patent is generally twenty years after it is filed. Various extensions may be available; however, the life of a patent, and the protection it affords, is limited. Given the amount of time required for the development, testing and regulatory review of new drug 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 adequate and continuing patent protection sufficient to exclude others from commercializing drugs similar or identical to our drug candidates, including generic versions of such drugs.

Other parties have developed technologies that may be related or competitive to our own, and such parties may have filed or may file patent applications, or may have received or may receive patents, claiming inventions that may overlap or conflict with those claimed in our own patent applications or issued patents, with respect to either the same methods or formulations or the same subject matter, in either case, that we may rely upon to dominate our patent position in the market. Publications of discoveries in the scientific literature often lag behind the actual discoveries, and patent applications in the United States and other jurisdictions are typically not published until 18 months after filing, or in some cases not at all. Therefore, we cannot know with certainty whether we were the first to make the inventions claimed in our owned or licensed patents or pending patent applications, or that we were the first-to-file for patent protection of such inventions. As a result, the issuance, scope, validity, enforceability and commercial value of our patent rights cannot be predicted with any certainty. For example, we are aware of a U.S. patent owned by a third party that has generic composition of matter claims that cover BLU-554. If the claims of this third-party patent are asserted against us, we do not believe BLU-554 or our proposed activities related to BLU-554 would be found to infringe any valid claim of this patent. While we may decide to initiate proceedings to challenge the validity of this patent in the future, we may be unsuccessful, and courts or patent offices in the United States and abroad could uphold the validity of any such patent. If we were to challenge the validity of any issued United States patent in court, we would need to overcome a statutory presumption of validity that attaches to every United States patent. This means that in order to prevail, we would have to present clear and convincing evidence as to the invalidity of the patent's claims.

In addition, the patent prosecution process is expensive and time-consuming, and we may not be able to file and prosecute all necessary or desirable patent applications at a reasonable cost or in a timely manner. Further, with respect to most of the pending patent applications covering our drug candidates, prosecution has yet to commence. Patent prosecution is a lengthy process, during which the scope of the claims initially submitted for examination by the U.S. Patent and Trademark Office, or USPTO, have been significantly narrowed by the time they issue, if at all. It is also possible that we will fail to identify patentable aspects of our research and development output before it is too late to obtain patent protection. Moreover, in some circumstances, we do 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 third parties.

Therefore, these patents and applications may not be prosecuted and enforced in a manner consistent with the best interests of our business.

Even if we acquire patent protection that we expect should enable us to maintain such competitive advantage, third parties may challenge the validity, enforceability or scope thereof, which may result in such patents being narrowed, invalidated or held unenforceable. The issuance of a patent is not conclusive as to its inventorship, scope, validity or enforceability, and our owned and licensed patents may be challenged in the courts or patent offices in the United States and abroad. For example, we may be subject to a third-party submission of prior art to the USPTO challenging the priority of an invention claimed within one of our patents, which submissions may also be made prior to a patent's issuance, precluding the granting of any of our pending patent applications. We may become involved in opposition, derivation, reexamination, inter partes review, post-grant review or interference proceedings challenging our patent rights or the patent rights of others from whom we have obtained licenses to such rights. Competitors may claim that they invented the inventions claimed in our issued patents or patent applications prior to us, or may file patent applications before we do. Competitors may also claim that we are infringing on their patents and that we therefore cannot practice our technology as claimed under our patents, if issued. Competitors may also contest our patents, if issued, by showing the patent examiner that the invention was not original, was not novel or was obvious. In litigation, a competitor could claim that our patents, if issued, are not valid for a number of reasons. If a court agrees, we would lose our rights to those challenged patents.

In addition, we may in the future be subject to claims by our former employees or consultants asserting an ownership right in our patents or patent applications, as a result of the work they performed on our behalf. Although we generally require all of our employees, consultants and advisors and any other third parties who have access to our proprietary know-how, information or technology to assign or grant similar rights to their inventions to us, we cannot be certain that we have executed such agreements with all parties who may have contributed to our intellectual property, nor can we be certain that our agreements with such parties will be upheld in the face of a potential challenge, or that they will not be breached, for which we may not have an adequate remedy.

An adverse determination in any such submission or proceeding may result in loss of exclusivity or freedom to operate or in patent claims being narrowed, invalidated or held unenforceable, in whole or in part, which could limit our ability to stop others from using or commercializing similar or identical technology and drugs, without payment to us, or could limit the duration of the patent protection covering our technology and drug candidates. Such challenges may also result in our inability to manufacture or commercialize our drug candidates without infringing third-party patent rights. 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 drug candidates.

Even if they are unchallenged, our issued patents and our pending patents, if issued, may not provide us with any meaningful protection or prevent competitors from designing around our patent claims to circumvent our owned or licensed patents by developing similar or alternative technologies or drugs in a non-infringing manner. For example, a third party may develop a competitive drug that provides benefits similar to one or more of our drug candidates but that has a different composition that falls outside the scope of our patent protection. If the patent protection provided by the patents and patent applications we hold or pursue with respect to our drug candidates is not sufficiently broad to impede such competition, our ability to successfully commercialize our drug candidates could be negatively affected, which would harm our business.

Third parties may initiate legal proceedings alleging that we are infringing their intellectual property rights, the outcome of which would be uncertain and could have a material adverse effect on the success of our business.

Our commercial success depends upon our ability and the ability of our collaborators to develop, manufacture, market and sell our drug candidates and use our proprietary technologies without infringing the proprietary rights and intellectual property of third parties. The biotechnology and pharmaceutical industries are characterized by extensive and frequent litigation regarding patents and other intellectual property rights. We may in the future become party to, or threatened with, adversarial proceedings or litigation regarding intellectual property rights with respect to our drug candidates and technology, including interference proceedings before the USPTO. Our competitors or other third parties may assert infringement claims against us, alleging that our drugs are covered by their patents. Given the vast number of patents in our field of technology, we cannot be certain that we do not infringe existing patents or that we will not infringe patents that may be granted in the future. Many companies have filed, and continue to file, patent applications

related to kinase inhibitors. Some of these patent applications have already been allowed or issued, and others may issue in the future. For example, we are aware of a U.S. patent owned by a third party that has generic composition of matter claims that cover BLU-554. If the claims of this third-party patent are asserted against us, we do not believe BLU-554 or our proposed activities related to BLU-554 would be found to infringe any valid claim of this patent. While we may decide to initiate proceedings to challenge the validity of this patent in the future, we may be unsuccessful, and courts or patent offices in the United States and abroad could uphold the validity of any such patent. If we were to challenge the validity of any issued United States patent in court, we would need to overcome a statutory presumption of validity that attaches to every United States patent. This means that in order to prevail, we would have to present clear and convincing evidence as to the invalidity of the patent's claims.

Since this area is competitive and of strong interest to pharmaceutical and biotechnology companies, there will likely be additional patent applications filed and additional patents granted in the future, as well as additional research and development programs expected in the future. Furthermore, because patent applications can take many years to issue and may be confidential for 18 months or more after filing, and because pending patent claims can be revised before issuance, there may be applications now pending which may later result in issued patents that may be infringed by the manufacture, use or sale of our drug candidates. If a patent holder believes our drug or drug candidate infringes on its patent, the patent holder may sue us even if we have received patent protection for our technology. Moreover, we may face patent infringement claims from non-practicing entities that have no relevant drug revenue and against whom our own patent portfolio may thus have no deterrent effect.

If we are found to infringe a third party's intellectual property rights, we could be required to obtain a license from such third party to continue developing and marketing our drug candidates and technology. However, we may not be able to obtain any required license on commercially reasonable terms or at all. Even if we were able to obtain such a license, it could be granted on non-exclusive terms, thereby providing our competitors and other third parties access to the same technologies licensed to us. Without such a license, we could be forced, including by court order, to cease developing and commercializing the infringing technology or drug candidates. In addition, we could be found liable for monetary damages, including treble damages and attorneys' fees if we are found to have willfully infringed such third-party patent rights. A finding of infringement could prevent us from commercializing our drug candidates or force us to cease some of our business operations, which could materially harm our business.

We may become involved in lawsuits to protect or enforce our patents and other intellectual property rights, which could be expensive, time-consuming and unsuccessful.

Competitors and other third parties may infringe, misappropriate or otherwise violate our patents and other intellectual property rights. To counter infringement or unauthorized use, we may be required to file infringement claims. A court may disagree with our allegations, however, and may refuse to stop the other party from using the technology at issue on the grounds that our patents do not cover the third-party technology in question. Further, such third parties could counterclaim that we infringe their intellectual property or that a patent we have asserted against them is invalid or unenforceable. In patent litigation in the United States, defendant counterclaims challenging the validity, enforceability or scope of asserted patents are commonplace. In addition, third parties may initiate legal proceedings against us to assert such challenges to our intellectual property rights. The outcome of any such proceeding is generally unpredictable. Grounds for a validity challenge could be an alleged failure to meet any of several statutory requirements, including lack of novelty, obviousness or non-enablement. Patents may be unenforceable if someone connected with prosecution of the patent withheld relevant information from the USPTO or made a misleading statement during prosecution. It is possible that prior art of which we and the patent examiner were unaware during prosecution exists, which could render our patents invalid. Moreover, it is also possible that prior art may exist that we are aware of but do not believe is relevant to our current or future patents, but that could nevertheless be determined to render our patents invalid.

An adverse result in any litigation proceeding could put one or more of our patents at risk of being invalidated or interpreted narrowly. If a defendant were to prevail on a legal assertion of invalidity or unenforceability of our patents covering one of our drug candidates, we would lose at least part, and perhaps all, of the patent protection covering such drug candidate. Competing drugs may also be sold in other countries in which our patent coverage might not exist or be as strong. If we lose a foreign patent lawsuit, alleging our infringement of a competitor's patents, we could be prevented from marketing our drugs in one or more foreign countries. Any of these outcomes would have a materially adverse effect on our business.

Intellectual property litigation could cause us to spend substantial resources and distract our personnel from their normal responsibilities.

Litigation or other legal proceedings relating to intellectual property claims, with or without merit, is unpredictable and generally expensive and time-consuming and is likely to divert significant resources from our core business, including distracting our technical and management personnel from their normal responsibilities. 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 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. Such litigation or proceedings could substantially increase our operating losses and reduce the resources available for development activities or any future sales, marketing or distribution 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 greater financial resources and more mature and developed intellectual property portfolios. Accordingly, despite our efforts, we may not be able to prevent third parties from infringing upon or misappropriating or from successfully challenging our intellectual property rights. Uncertainties resulting from the initiation and continuation of patent litigation or other proceedings could have a material adverse effect on our ability to compete in the marketplace.

Obtaining and maintaining 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.

The USPTO and various foreign governmental patent agencies require compliance with a number of procedural, documentary, fee payment and other similar provisions during the patent application process. In addition, periodic maintenance fees on issued patents often must be paid to the USPTO and foreign patent agencies over the lifetime of the patent. While an unintentional lapse can in many cases be cured by payment of a late fee or by other means in accordance with the applicable rules, there are situations in which noncompliance can result in abandonment or lapse of the patent or patent application, resulting in partial or complete loss of patent rights in the relevant jurisdiction. Non-compliance events that could result in abandonment or lapse of a patent or patent application include, but are not limited to, failure to respond to official actions within prescribed time limits, non-payment of fees and failure to properly legalize and submit formal documents. If we fail to maintain the patents and patent applications covering our drugs or procedures, we may not be able to stop a competitor from marketing drugs that are the same as or similar to our drug candidates, which would have a material adverse effect on our business.

We may not be able to effectively enforce our intellectual property rights throughout the world.

Filing, prosecuting and defending patents on our drug candidates in all countries throughout the world would be prohibitively expensive. The requirements for patentability may differ in certain countries, particularly in developing countries. Moreover, our ability to protect and enforce our intellectual property rights may be adversely affected by unforeseen changes in foreign intellectual property laws. In addition, the patent laws of some foreign countries do not afford intellectual property protection to the same extent as the laws of the United States. Many companies have encountered significant problems in protecting and defending intellectual property rights in certain foreign jurisdictions. The legal systems of some countries, particularly developing countries, do not favor the enforcement of patents and other intellectual property rights. This could make it difficult for us to stop the infringement of our patents or the misappropriation of our other intellectual property rights. For example, many foreign countries have compulsory licensing laws under which a patent owner must grant licenses to third parties. Consequently, we may not be able to prevent third parties from practicing our inventions in all countries outside the United States. Competitors may use our technologies in jurisdictions where we have not obtained patent protection to develop their own drugs and, further, may export otherwise infringing drugs to territories where we have patent protection, if our ability to enforce our patents to stop infringing activities is inadequate. These drugs may compete with our drug candidates, and our patents or other intellectual property rights may not be effective or sufficient to prevent them from competing.

Proceedings to enforce our patent rights in foreign jurisdictions, whether or not successful, could result in substantial costs and divert our efforts and resources from other aspects of our business. Furthermore, while we intend to

protect our intellectual property rights in the major markets for our drug candidates, we cannot ensure that we will be able to initiate or maintain similar efforts in all jurisdictions in which we may wish to market our drug candidates. Accordingly, our efforts to protect our intellectual property rights in such countries may be inadequate.

Changes to the patent law in the United States and other jurisdictions could diminish the value of patents in general, thereby impairing our ability to protect our drug candidates.

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. Recent patent reform legislation in the United States and other countries, including the Leahy-Smith America Invents Act, or Leahy-Smith Act, signed into law on September 16, 2011, could increase those uncertainties and costs. The Leahy-Smith Act includes a number of significant changes to U.S. patent law. These include provisions that affect the way patent applications are prosecuted, redefine prior art and provide more efficient and cost-effective avenues for competitors to challenge the validity of patents. In addition, the Leahy-Smith Act has transformed the U.S. patent system into a "first-to-file" system. The first-to-file provisions, however, only became effective on March 16, 2013. Accordingly, it is not yet clear what, if any, impact the Leahy-Smith Act will have on the operation of our business. However, the Leahy-Smith Act and its implementation could make it more difficult to obtain patent protection for our inventions and 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 harm our business, results of operations and financial condition.

The U.S. Supreme Court has ruled on several patent cases in recent years, either narrowing the scope of patent protection available in certain circumstances or weakening the rights of patent owners in certain situations. In addition, there have been recent proposals for additional changes to the patent laws of the United States and other countries that, if adopted, could impact our ability to obtain patent protection for our proprietary technology or our ability to enforce our proprietary technology. Depending on future actions by the U.S. Congress, the U.S. courts, the USPTO and the relevant law-making bodies in other countries, 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.

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

In addition to the protection afforded by patents, we rely upon unpatented trade secret protection, unpatented know-how and continuing technological innovation to develop and maintain our competitive position. With respect to the building of our proprietary compound library, we consider trade secrets and know-how to be our primary intellectual property. We seek to protect our proprietary technology and processes, in part, by entering into confidentiality agreements with our collaborators, scientific advisors, employees and consultants, and invention assignment agreements with our consultants and employees. We may not be able to prevent the unauthorized disclosure or use of our technical know-how or other trade secrets by the parties to these agreements, however, despite the existence generally of confidentiality agreements and other contractual restrictions. Monitoring unauthorized uses and disclosures is difficult, and we do not know whether the steps we have taken to protect our proprietary technologies will be effective. If any of the collaborators, scientific advisors, employees and consultants who are parties to these agreements breaches or violates the terms of any of these agreements, we may not have adequate remedies for any such breach or violation, and we could lose our trade secrets as a result. Enforcing a claim that a third party illegally obtained and is using our trade secrets, like patent litigation, is expensive and time-consuming, and the outcome is unpredictable. In addition, courts outside the United States are sometimes less willing to protect trade secrets.

Our trade secrets could otherwise become known or be independently discovered by our competitors. Competitors could purchase our drug candidates and attempt to replicate some or all of the competitive advantages we derive from our development efforts, willfully infringe our intellectual property rights, design around our protected technology or develop their own competitive technologies that fall outside of our intellectual property rights. If any of our trade secrets were to be lawfully obtained or independently developed by a competitor, we would have no right to prevent them, or those to whom they communicate it, from using that technology or information to compete with us. If our trade secrets are not adequately protected so as to protect our market against competitors' drugs, our competitive position could be adversely affected, as could our business.

We may be subject to damages resulting from claims that we or our employees have wrongfully used or disclosed alleged trade secrets of our competitors or are in breach of non-competition or non-solicitation agreements with our competitors.

We could in the future be subject to claims that we or our employees have inadvertently or otherwise used or disclosed alleged trade secrets or other proprietary information of former employers or competitors. Although we try to ensure that our employees and consultants do not use the intellectual property, proprietary information, know-how or trade secrets of others in their work for us, we may in the future be subject to claims that we caused an employee to breach the terms of his or her non-competition or non-solicitation agreement, or that we or these individuals have, inadvertently or otherwise, used or disclosed the alleged trade secrets or other proprietary information of a former employer or competitor. Litigation may be necessary to defend against these claims. Even if we are successful in defending against these claims, litigation could result in substantial costs and could be a distraction to management. If our defenses to these claims fail, in addition to requiring us to pay monetary damages, a court could prohibit us from using technologies or features that are essential to our drug candidates, if such technologies or features are found to incorporate or be derived from the trade secrets or other proprietary information of the former employers. An inability to incorporate such technologies or features would have a material adverse effect on our business, and may prevent us from successfully commercializing our drug candidates. In addition, we may lose valuable intellectual property rights or personnel as a result of such claims. Moreover, any such litigation or the threat thereof may adversely affect our ability to hire employees or contract with independent sales representatives. A loss of key personnel or their work product could hamper or prevent our ability to commercialize our drug candidates, which would have an adverse effect on our business, results of operations and financial condition.

Risks Related to Employee Matters, Managing Growth and Other Risks Related to Our Business

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

We are highly dependent on the research and development, clinical, business development, financial and legal expertise of Jeffrey W. Albers, our President and Chief Executive Officer, Anthony L. Boral, our Chief Medical Officer, Marion Dorsch, our Chief Scientific Officer, Kathryn Haviland, our Chief Business Officer, Michael Landsittel, our Vice President of Finance, and Tracey McCain, our Chief Legal Officer, as well as the other principal members of our management, scientific and clinical team. Although we have entered into employment agreements with our executive officers, other than Mr. Landsittel, each of our executive officers may terminate their employment with us at any time. We do not maintain “key person” insurance for any of our executives or other employees. In addition, we rely on consultants and advisors, including scientific and clinical advisors, to assist us in formulating our research and development and commercialization strategy. Our consultants and advisors may be employed by employers other than us and may have commitments under consulting or advisory contracts with other entities that may limit their availability to us. If we are unable to continue to attract and retain high quality personnel, our ability to pursue our growth strategy will be limited.

We expect to continue hiring qualified development personnel. Recruiting and retaining qualified scientific, clinical, manufacturing and sales and marketing personnel will be critical to our success. The loss of the services of our executive officers or other key employees could impede the achievement of our research, development and commercialization objectives and seriously harm our ability to successfully implement our business strategy. Furthermore, replacing key employees and executive officers may be difficult and may take an extended period of time because of the limited number of individuals in our industry with the breadth of skills and experience required to successfully develop, gain regulatory approval of and commercialize drugs. Competition to hire from this limited pool is intense, and we may be unable to hire, train, retain or motivate these key personnel on acceptable terms given the competition among numerous pharmaceutical and biotechnology companies for similar personnel. We also experience competition for the hiring of scientific and clinical personnel from universities and research institutions. Failure to succeed in clinical trials may make it more challenging to recruit and retain qualified scientific personnel.

We will need to develop and expand our company, and we may encounter difficulties in managing this development and expansion, which could disrupt our operations.

As of April 30, 2017, we had 114 full-time employees, and in connection with operating as a public company, we expect to increase our number of employees and the scope of our operations. To manage our anticipated development and expansion, we must continue to implement and improve our managerial, operational and financial systems, expand our facilities and continue to recruit and train additional qualified personnel. Also, our management may need to divert a disproportionate amount of its attention away from its day-to-day activities and devote a substantial amount of time to managing these development activities. Due to our limited resources, we may not be able to effectively manage the expansion of our operations or recruit and train additional qualified personnel. This may result in weaknesses in our infrastructure, give rise to operational mistakes, loss of business opportunities, loss of employees and reduced productivity among remaining employees. The physical expansion of our operations may lead to significant costs and may divert financial resources from other projects, such as the development of our drug candidates. If our management is unable to effectively manage our expected development and expansion, our expenses may increase more than expected, our ability to generate or increase our revenue could be reduced and we may not be able to implement our business strategy. Our future financial performance and our ability to commercialize our drug candidates, if approved, and compete effectively will depend, in part, on our ability to effectively manage the future development and expansion of our company.

Unfavorable global economic conditions could adversely affect our business, financial condition or results of operations.

Our results of operations could be adversely affected by general conditions in the global economy and in the global financial markets. For example, the global financial crisis caused extreme volatility and disruptions in the capital and credit markets. A severe or prolonged economic downturn, such as the global financial crisis, could result in a variety of risks to our business, including, weakened demand for our drug candidates and our ability to raise additional capital when needed on acceptable terms, if at all. A weak or declining economy could also strain our suppliers, possibly resulting in supply disruption, or cause our customers to delay making payments for our services. In addition, Brexit has already and may continue to adversely affect European and/or worldwide economic or market, political or regulatory conditions and may contribute to instability in the global financial markets, political institutions and regulatory agencies. The long-term impact of Brexit, including on our business and our industry, will depend on the terms that are negotiated in relation to the United Kingdom's future relationship with the European Union. Any of the foregoing could harm our business and we cannot anticipate all of the ways in which the current economic climate and financial market conditions could adversely impact our business.

We or the third parties upon whom we depend may be adversely affected by earthquakes or other natural disasters and our business continuity and disaster recovery plans may not adequately protect us from a serious disaster.

Earthquakes or other natural disasters could severely disrupt our operations, and have a material adverse effect on our business, results of operations, financial condition and prospects. If a natural disaster, power outage or other event occurred that prevented us from using all or a significant portion of our headquarters, that damaged critical infrastructure, such as the manufacturing facilities of our third-party contract manufacturers, or that otherwise disrupted operations, it may be difficult or, in certain cases, impossible for us to continue our business for a substantial period of time. The disaster recovery and business continuity plans we have in place may prove inadequate in the event of a serious disaster or similar event. We may incur substantial expenses as a result of the limited nature of our disaster recovery and business continuity plans, which, could have a material adverse effect on our business.

Our internal computer systems, or those of our third-party CROs or other contractors or consultants, may fail or suffer security breaches, which could result in a material disruption of our drug candidates' development programs.

Despite the implementation of security measures, our internal computer systems and those of our third-party CROs and other contractors and consultants are vulnerable to damage from computer viruses, unauthorized access, natural disasters, terrorism, war and telecommunication and electrical failures. While we have not experienced any such system failure, accident, 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 programs. For example, the loss of clinical trial data for our drug candidates could result in delays in our regulatory approval efforts and significantly increase our costs to recover or

reproduce the data. To the extent that any disruption or security breach results in a loss of or damage to our data or applications or other data or applications relating to our technology or drug candidates, or inappropriate disclosure of confidential or proprietary information, we could incur liabilities and the further development of our drug candidates could be delayed.

Our employees, 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, 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 other 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 pre-clinical studies or clinical trials, which could result in regulatory sanctions and cause serious harm to our reputation. We have adopted a code of conduct applicable to all of our employees, but 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. In addition, 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 civil, criminal and administrative penalties, damages, monetary fines, possible exclusion from participation in Medicare, Medicaid and other federal healthcare programs, 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 and our results of operations.

We may acquire businesses or drugs, or form strategic alliances, in the future, and we may not realize the benefits of such acquisitions.

We may acquire additional businesses or drugs, form strategic alliances or create joint ventures with third parties that we believe will complement or augment our existing business. If we acquire businesses with promising markets or technologies, we may not be able to realize the benefit of acquiring such businesses if we are unable to successfully integrate them with our existing operations and company culture. We may encounter numerous difficulties in developing, manufacturing and marketing any new drugs resulting from a strategic alliance or acquisition that delay or prevent us from realizing their expected benefits or enhancing our business. We cannot assure you that, following any such acquisition, we will achieve the expected synergies to justify the transaction.

We may be subject to adverse legislative or regulatory tax changes that could negatively impact our financial condition.

The rules dealing with U.S. federal, state and local income taxation are constantly under review by persons involved in the legislative process and by the IRS and the U.S. Treasury Department. Changes to tax laws (which changes may have retroactive application) could adversely affect our stockholders or us. In recent years, many such changes have been made and changes are likely to continue to occur in the future. We cannot predict whether, when, in what form, or with what effective dates, tax laws, regulations and rulings may be enacted, promulgated or decided, which could result in an increase in our, or our stockholders', tax liability or require changes in the manner in which we operate in order to minimize increases in our tax liability.

Risks Related to Our Common Stock

We have incurred and will continue to incur increased costs as a result of operating as a public company, and our management is required to devote substantial time to new compliance initiatives.

As a public company, we have incurred and expect to continue to incur, particularly after we are no longer an "emerging growth company," significant legal, accounting and other expenses that we did not incur as a private company. In addition, the Sarbanes-Oxley Act of 2002 and rules subsequently implemented by the Securities and Exchange Commission, or SEC, and NASDAQ have imposed 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, these rules and regulations will increase our legal and financial compliance costs and 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.

Pursuant to Section 404 of the Sarbanes-Oxley Act of 2002, or Section 404, we will be required to furnish a report by our management on our internal control over financial reporting, including an attestation report on internal control over financial reporting issued by our independent registered public accounting firm. However, while we remain an emerging growth company, we will not be required to include an attestation report on internal control over financial reporting issued by our independent registered public accounting firm. To achieve compliance with Section 404 within the prescribed period, we will be engaged in a process to document and evaluate our internal control over financial reporting, which is both costly and challenging. In this regard, we will need to continue to dedicate internal resources, potentially engage outside consultants and adopt a detailed work plan to assess and document the adequacy of internal control over financial reporting, continue steps to improve control processes as appropriate, validate through testing that controls are functioning as documented and implement a continuous reporting and improvement process for internal control over financial reporting. Despite our efforts, there is a risk that neither we nor our independent registered public accounting firm will be able to conclude within the prescribed timeframe that our internal control over financial reporting is effective as required by Section 404. This could result in an adverse reaction in the financial markets due to a loss of confidence in the reliability of our financial statements.

The price of our common stock has been and may in the future be volatile and fluctuate substantially.

Our stock price has been and in the future may be subject to substantial volatility. In addition, the stock market in general, and NASDAQ listed and biopharmaceutical companies in particular, have experienced extreme price and volume fluctuations that have often been unrelated or disproportionate to the operating performance of these companies. For example, our stock traded within a range of a high price of $47.40 and a low price of $13.04 per share for the period beginning on April 30, 2015, our first day of trading on The NASDAQ Global Select Market, through April 30, 2017. As a result of this volatility, our stockholders could incur substantial losses. In addition, the market price for our common stock may be influenced by many factors, including:

- the success of competitive drugs or technologies;
- results of clinical trials of our drug candidates or those 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 any of our drug candidates or clinical development programs;
- the results of our efforts to discover, develop, acquire or in-license additional drug candidates or drugs;
- actual or anticipated changes in estimates as to financial results, development timelines or recommendations by securities analysts;

· variations in our financial results or those of companies that are perceived to be similar to us;

· changes in the structure of healthcare payment systems;

· market conditions in the pharmaceutical and biotechnology sectors;

· general economic, industry and market conditions; and

· the other factors described in this "Risk Factors" section.

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 limit or prevent investors from readily selling their shares of common stock and may otherwise negatively affect the liquidity of our common stock. In the past, when the market price of a stock has been volatile, holders of that stock have instituted securities class action litigation against the company that issued the stock. If any of our stockholders brought a lawsuit against us, we could incur substantial costs defending the lawsuit. Such a lawsuit could also divert the time and attention of our management.

An active trading market for our common stock may not be sustained, and investors may not be able to resell their shares at or above the price they paid.

Although we have listed our common stock on The NASDAQ Global Select Market, an active trading market for our shares may not be sustained. In the absence of an active trading market for our common stock, investors may not be able to sell their common stock at or above the price at which they acquired their shares or at the time that they would like to sell. 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 acquire other companies or technologies by using our shares as consideration.

If equity research analysts do not publish research or reports about our business or if they publish negative evaluations of or downgrade our common stock, the price of our common stock could decline.

The trading market for our common stock relies in part on the research and reports that equity research analysts publish about us or our business. We do not control these analysts. We may never obtain research coverage by industry or financial analysts. If no or few analysts commence coverage of us, the trading price of our stock would likely decrease. Even if we do obtain analyst coverage, if one or more of the analysts covering our business downgrade their evaluations of our common stock, the price of our common stock could decline. If one or more of these analysts cease to cover our common stock, we could lose visibility in the market for our common stock, which in turn could cause our common stock price to decline.

Our executive officers, directors, principal stockholders and their affiliates maintain the ability to exercise significant influence over our company and all matters submitted to stockholders for approval.

As of March 31, 2017, our executive officers, directors and stockholders who own more than 5% of our outstanding common stock, together with their affiliates and related persons, beneficially owned shares of common stock representing a significant percentage of our capital stock. As a result, if these stockholders were to choose to act together, they would be able to influence 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. This concentration of voting power could delay or prevent an acquisition of our company on terms that other stockholders may desire. 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 us;

· impeding a merger, consolidation, takeover or other business combination involving us; or

· discouraging a potential acquirer from making a tender offer or otherwise attempting to obtain control of us.

Anti-takeover provisions in our 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 amended and restated bylaws may delay or prevent an acquisition of us or a change in our management. These provisions include a classified board of directors, a prohibition on actions by written consent of our stockholders and the ability of our board of directors to issue preferred stock without stockholder approval. In addition, because we are incorporated in Delaware, we are governed by the provisions of Section 203 of the Delaware General Corporation Law, which limits the ability of stockholders owning in excess of 15% of our outstanding voting stock to merge or combine with us. Although we believe these provisions collectively provide for an opportunity to obtain greater value for stockholders by requiring potential acquirors to negotiate with our board of directors, they would apply even if an offer rejected by our board were considered beneficial by some stockholders. In addition, 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, which is responsible for appointing the members of our management.

Future sales of our common stock, including by us or our directors and executive officers or shares issued upon the exercise of currently outstanding options, could cause our stock price to decline.

A substantial portion of our outstanding common stock can be traded without restriction at any time. In addition, a portion of our outstanding common stock is currently restricted as a result of federal securities laws, but can be sold at any time subject to applicable volume limitations. As such, sales of a substantial number of shares of our common stock in the public market could occur at any time. These sales, or the perception in the market that the holders of a large number of shares intend to sell shares, by us or others, could reduce the market price of our common stock or impair our ability to raise adequate capital through the sale of additional equity securities. In addition, we have a significant number of shares that are subject to outstanding options. The exercise of these options and the subsequent sale of the underlying common stock could cause a further decline in our stock price. These sales also might make it difficult for us to sell equity securities in the future at a time and at a price that we deem appropriate. We cannot predict the number, timing or size of future issuances or the effect, if any, that any future issuances may have on the market price for our common stock.

We are an "emerging growth company," and the reduced disclosure requirements applicable to emerging growth companies may make our common stock 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. We will remain an emerging growth company until the earlier of (i) December 31, 2020; (ii) the last day of the fiscal year in which we have total annual gross revenues of $1.07 billion or more; (iii) the date on which we have issued more than $1.0 billion in nonconvertible debt during the previous three years; or (iv) the date on which we are deemed to be a large accelerated filer under the rules of the SEC, which means the market value of our common stock that is held by non-affiliates exceeds $700 million as of the prior June 30th. For so long as we remain an emerging growth company, we are permitted and intend to rely on exemptions from certain disclosure requirements that are applicable to other public companies that are not emerging growth companies. These exemptions include:

- not being required to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act of 2002;
- not being required to comply with any requirement that may be adopted by the Public Company Accounting Oversight Board regarding mandatory audit firm rotation or a supplement to the auditor's report providing additional information about the audit and the financial statements;
- reduced disclosure obligations regarding executive compensation; and
- exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and shareholder approval of any golden parachute payments not previously approved.

We cannot predict whether investors will find our common stock less attractive if we rely on these exemptions. If some investors find our common stock less attractive as a result, there may be a less active trading market for our common stock and our stock price may be more volatile.

In addition, the JOBS Act provides that an emerging growth company can take advantage of an extended transition period for complying with new or revised accounting standards. This allows an emerging growth company to delay the adoption of certain accounting standards until those standards would otherwise apply to private companies. We have irrevocably elected not to avail ourselves of this exemption from new or revised accounting standards and, therefore, we will be subject to the same new or revised accounting standards as other public companies that are not emerging growth companies.

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

We have never declared or paid cash dividends on our capital stock. We currently intend to retain all of our future earnings, if any, to finance the growth and development of our business. In addition, under the loan and security agreement with Silicon Valley Bank, we are currently restricted from paying cash dividends, and we expect these restrictions to continue in the future. In addition, the terms of any future debt agreements may preclude us from paying dividends. As a result, capital appreciation, if any, of our common stock will be the sole source of gain for our stockholders for the foreseeable future.

Our ability to utilize our net operating loss carryforwards and certain other tax attributes may be limited.

Under Section 382 of the Internal Revenue Code of 1986, as amended, if a corporation undergoes an "ownership change" (generally defined as a greater than 50% change (by value) in the ownership of its equity over a three year period), the corporation's ability to use its pre-change net operating loss carryforwards and certain other pre-change tax attributes to offset its post-change income may be limited. We may have experienced such ownership changes in the past, and we may experience ownership changes in the future as a result of shifts in our stock ownership, some of which are outside our control. As of December 31, 2016, we had federal net operating loss carryforwards of approximately $179.8 million, and our ability to utilize those net operating loss carryforwards could be limited by an "ownership change" as described above, which could result in increased tax liability to us.

Item 2. Unregistered Sales of Equity Securities and Use of Proceeds

Use of Proceeds from Initial Public Offering of Common Stock

On May 5, 2015, we completed an IPO of our common stock, which resulted in the sale of 9,367,708 shares, including 1,221,874 shares sold by us pursuant to the exercise in full by the underwriters of their option to purchase additional shares in connection with the offering, at a price to the public of $18.00 per share. The offer and sale of all of the shares in our IPO was registered under the Securities Act of 1933, as amended, or Securities Act, pursuant to a registration statement on Form S-1 (File No. 333-202938), which was declared effective by the SEC on April 29, 2015. Following the sale of the shares in connection with the closing of our IPO, the offering terminated. The offering did not terminate until the sale of all of the shares offered. Goldman, Sachs & Co. and Cowen and Company acted as joint book-running managers for the offering. JMP Securities acted as a co-manager for the offering. Wedbush PacGrow also acted as a co-manager for the offering.

We received approximately $154.8 million in net proceeds after deducting underwriting discounts and commissions and offering expenses paid by us. As of March 31, 2017, we estimate that we have used approximately $151.7 million of the net proceeds from the offering as follows: approximately $41.1 million of external costs to fund our Phase 1 clinical trials for BLU-285, BLU-554 and BLU-667; approximately $36.9 million of external costs for new and ongoing research activities; approximately $29.6 million of internal research and development costs; and approximately $44.1 million for working capital and other general corporate purposes. None of the offering expenses consisted of direct or indirect payments made by us to directors, officers or persons owning 10% or more of our common stock or to their associates, or to our affiliates, and we have not used any of the net proceeds from the offering to make payments, directly or indirectly, to any such persons. There has been no material change in the planned use of the net proceeds from our IPO as described in our final prospectus filed with the SEC on April 30, 2015 pursuant to Rule

424(b)(4) under the Securities Act. We have invested the unused proceeds from the offering in cash equivalents and investments in accordance with our investment policy.

Item 5. Other Information

On April 28, 2017, we entered into a lease agreement with UP 45/75 Sidney Street, LLC, as the landlord, pursuant to which we will lease approximately 99,833 rentable square feet of office and laboratory space located at 45 Sidney Street, Cambridge, Massachusetts 02139, which we refer to as the new premises, and will relocate our corporate headquarters to the new premises. We currently anticipate relocating our corporate headquarters in the first quarter of 2018. The date on which we will become responsible for paying rent under the lease agreement, or the commencement date, will be the earlier of (i) the date upon which we first occupy the new premises for business purposes or (ii) the later of October 1, 2017 and 120 days after the landlord delivers the new premises to us with the current tenant vacated and certain agreed upon work substantially completed by the landlord. We currently anticipate the commencement date will be approximately October 1, 2017. The initial term of the lease agreement will be for a 146 month period beginning on the commencement date, unless terminated sooner. The lease agreement also provides us with an option to extend the lease agreement for two consecutive five-year periods at the then fair market annual rent, as defined in the lease agreement, as well as a right of first offer with respect to leasing additional space adjacent to the new premises. During the initial term of the lease agreement, our monthly base rent for the new premises will start at approximately $641,000 beginning on the commencement date through the 14 month anniversary of the commencement date. Our monthly base rent will increase by 3.0% on the 14 month anniversary of the commencement date and will increase by an additional 3.0% on an annual basis for the remainder of the initial term up to a maximum monthly base rent of approximately $887,000. Pursuant to the lease agreement, we will also be obligated to pay certain taxes and operating costs associated with the new premises during the term of the lease agreement. The landlord has also agreed to provide us with a tenant improvement allowance of approximately $14.2 million for improvements to be made to the new premises. We will be obligated to maintain a security deposit with the landlord in the amount of $3.5 million, which is subject to reduction by up to $1.0 million during the term of the lease agreement, subject to the satisfaction of specified terms and conditions.

The foregoing description of the lease agreement is qualified in its entirety by reference to the complete text of such agreement, a copy of which is attached as Exhibit 10.1 to this Quarterly Report on Form 10-Q and is incorporated herein by reference.

Item 6. Exhibits

The exhibits filed as part of this Quarterly Report on Form 10-Q are set forth on the Exhibit Index, which is incorporated herein by reference.

SIGNATURES

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

BLUEPRINT MEDICINES CORPORATION

Date: May 3, 2017

By: /s/ Jeffrey W. Albers
Jeffrey W. Albers
President, Chief Executive Officer and Director (Principal Executive Officer)

Date: May 3, 2017

By: /s/ Michael Landsittel
Michael Landsittel
Vice President of Finance
(Principal Financial and Accounting Officer)

EXHIBIT INDEX

Exhibit Number	Description of Exhibit
10.1*	Lease Agreement, dated April 28, 2017, by and between the Registrant and UP 45/75 Sidney Street, LLC
31.1*	Certification of Principal Executive Officer pursuant to Rule 13a-14(a) or Rule 15d-14(a) of the Exchange Act, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
31.2*	Certification of Principal Financial Officer pursuant to Rule 13a-14(a) or Rule 15d-14(a) of the Exchange Act, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
32.1+	Certifications 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*	XBRL Instance Document
101.SCH*	XBRL Taxonomy Extension Schema Document
101.CAL*	XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF*	XBRL Taxonomy Extension Definition Linkbase Document
101.LAB*	XBRL Taxonomy Extension Label Linkbase Document
101.PRE*	XBRL Taxonomy Extension Presentation Linkbase Document

* Filed herewith.

\+ The certifications furnished in Exhibit 32.1 hereto are deemed to be furnished with this Quarterly Report on Form 10-Q and will not be deemed to be "filed" for purposes of Section 18 of the Exchange Act. Such certifications will not be deemed to be incorporated by reference into any filing under the Securities Act or the Exchange Act, except to the extent that the Registrant specifically incorporates it by reference.

Exhibit 10.1

LEASE FOR

45 SIDNEY STREET

Cambridge, Massachusetts

LANDLORD

UP 45/75 SIDNEY STREET, LLC
a Delaware limited liability company

TENANT

BLUEPRINT MEDICINES CORPORATION
a Delaware corporation

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LEASE

ARTICLE I

RECITALS AND DEFINITIONS

Section 1.1 - Recitals.

This Lease (the "Lease") is entered into as of April 27, 2017, by and between UP 45/75 SIDNEY STREET, LLC, a Delaware limited liability company (the "Landlord") and BLUEPRINT MEDICINES CORPORATION, a Delaware corporation (“Tenant").

In consideration of the mutual covenants herein set forth, the Landlord and the Tenant do hereby agree to the terms and conditions set forth in this Lease.

Section 1.2 - Definitions.

The following terms shall have the meanings indicated or referred to below:

"Additional Rent" means all charges payable by the Tenant pursuant to this Lease other than Annual Fixed Rent, including without implied limitation the Tenant's parking charges as provided in Section 2.4; the Tenant's Tax Expense Allocable to the Premises as provided in Section 3.2; the Tenant's Operating Expenses Allocable to the Premises in accordance with Section 3.3; amounts payable for special services pursuant to Section 3.5; the Landlord's share of any sublease or assignment proceeds pursuant to Section 6.8.

"Annual Fixed Rent" - See Exhibit A, and Section 3.1.

"Building" means the building located at 45/75 Sidney Street, Cambridge, Massachusetts in which the Premises are located.

"Commencement Date" - See Section 2.5.

"Common Building Areas" means those portions of the Building which are not part of the Premises and to which the Tenant has appurtenant rights pursuant to Section 2.2.

"External Causes" means collectively, (i) Acts of God, war, civil commotion, fire, flood or other casualty, strikes or other extraordinary labor difficulties, shortages of labor or materials or equipment in the ordinary course of trade, government order or regulations or other cause not reasonably within the Landlord's or Tenant's control and not due to the fault or neglect of the Landlord or Tenant.

"Lease Year" means each period of one year during the Term commencing on the Commencement Date or on any anniversary thereof.

"Permitted Uses" - See Exhibit A.

"Premises" means approximately 99,833 rentable square feet representing approximately 8,753 rsf and 276 rsf of storage space on the first floor of the Building, 30,816 rsf on the third floor of the Building, 30,101 rsf on the fourth (4th) floor of the Building, and 29,887 rsf on the fifth (5th) floor of the Building, as defined in Exhibit A. See Exhibit A, Exhibit B and Section 2.1.

"Property" means, collectively, the Building and the parcel of land on which the Building sits.

"Term" - See Exhibit A.

"University Park" means the area in Cambridge, Massachusetts, bounded on the North side by Massachusetts Avenue and Green Street, on the East side by Landsdowne, Cross and Purrington Streets, on the South side by Pacific Street and on the West side by Brookline Street.

ARTICLE II

PREMISES, PARKING AND OTHER RIGHTS

Section 2.1 - Premises.

Landlord hereby leases to the Tenant, and the Tenant hereby leases from the Landlord, for the Term, the Premises. The Premises shall exclude the entry and main lobby of the Building, first floor elevator lobby, first floor mail room, the common stairways and stairwells, elevators and elevator wells, boiler room, sprinklers, sprinkler rooms, elevator rooms, mechanical rooms, loading and receiving areas, electric and telephone closets, janitor closets, loading docks and bays, rooftop mechanical penthouses to the extent they house Building equipment, and pipes, ducts, conduits, wires and appurtenant fixtures and equipment serving exclusively or in common other parts of the Building. If the Premises at any time includes less than the entire rentable floor area of any floor of the Building, the Premises shall also exclude the common corridors, vestibules, elevator lobby and toilets located on such floor. The Tenant acknowledges that, except as expressly set forth in this Lease, there have been no representations or warranties made by or on behalf of the Landlord with respect to the Premises, the Building or the Property or with respect to the suitability of any of them for the conduct of the Tenant's business. Tenant acknowledges that, except as expressly set forth in this Lease, it is accepting the Premises in its present "as-is" condition with no expectation that Landlord will or should perform or contribute toward the cost of any leasehold improvements required to prepare the Premises for Tenant's occupancy, except as provided otherwise herein. Provided, however, prior to the Commencement Date, Landlord shall be responsible, at its sole cost and expense, to (i) complete the items designated as Landlord's responsibility in the Responsibility Matrix set forth in Exhibit E-1; (ii) deliver the base building mechanical systems (HVAC, electrical, life safety, plumbing) and the laboratory systems that service the third (3rd), fourth (4th) and fifth (5th) floors of the Premises (specifically the central vacuum, compressed air, RODI and acid neutralization systems) (collectively, the "Laboratory Systems"), and the 600KW emergency generator that currently serves the fifth (5th) floor vivarium, the 500 KW emergency generator that currently serves the 8,753 rsf on the first (1st) floor, and the 600 KW emergency generator that serves the entire building, for which tenant will receive its proportionate share, (the "Emergency Generators") in good operating condition and repair; (iii) deliver the first (1st) floor Premises in shell condition with exterior windows restored; (iv)

decommission the Premises in accordance with the same requirements applicable to Tenant pursuant to Section 11.10, and (v) provide HVAC infrastructure that will accommodate Tenant's needs for 12-15 air changes per hour for all lab spaces currently located in the Premises. All of Landlord's obligation in this Section 2.1 shall be referred to collectively as the "Landlord's Work." Concurrent with the construction of Tenant's leasehold improvements, Landlord, at its expense, shall demise and modify the Building's PH neutralization system so that it serves only the Premises. Landlord shall renovate the main building entrance and lobby. This lobby work shall be completed by the end of calendar year 2017. Landlord and Tenant agree to work cooperatively as some of the Landlord's Work and Tenant's leasehold improvements may occur in a parallel timeframe.

Section 2.2 - Appurtenant Rights.

Tenant shall have, as appurtenant to the Premises, the nonexclusive right to use in common with others, subject to reasonable rules of general applicability to occupants of the Building from time to time made by the Landlord of which the Tenant is given notice: (i) the entry, vestibules and main lobby of the Building, first floor mailroom, the common stairways, elevators, elevator wells, boiler room, elevator rooms, sprinkler rooms, mechanical rooms, electric and telephone closets, janitor closets, loading docks and bays, rooftop mechanical penthouses and shafts to the extent they house Building equipment, and the pipes, sprinklers, ducts, conduits, wires and appurtenant fixtures and equipment serving the Premises in common with others, (ii) common walkways and driveways necessary or reasonably convenient for access to the Building, (iii) access to loading area and freight elevator subject to Rules and Regulations then in effect, and (iv) if the Premises at any time include less than the entire rentable floor area of any floor, the common toilets, corridors, vestibules, and elevator lobby of such floor. Tenant shall have 24 hour, seven day per week access to the Premises, freight loading docks and freight elevators, subject to the provisions of this Lease and interruption for External Causes, casualty and condemnation. Landlord shall provide Tenant with access cards for after-hours access.

Additionally, Tenant shall have, as appurtenant to the Premises (and exclusively for use in connection with the occupancy of the Premises), the nonexclusive right of access to and proportionate use of the roof for the purpose of installing and maintaining mechanical equipment, antennae and dishes which, in each case, have been pre-approved by the Landlord, subject however, to reasonable rules of general applicability to occupants of the Building from time to time made by the Landlord of which the Tenant is given notice, but only to the extent that the Tenant has assumed responsibility for maintenance and repair thereof. Tenant shall be allocated its proportionate share of available roof and penthouse area for its equipment. Tenant shall be responsible for all costs relating to the installation, maintenance, and removal of said rooftop and penthouse equipment at the expiration or earlier termination of the Term.

Section 2.3 - Landlord's Reservations.

(a) Landlord reserves the right from time to time, without unreasonable interference with the Tenant's use and with written notice to Tenant, except in emergencies (including the specialized needs of Tenant's operations which Landlord hereby acknowledges): (i) to install, use, maintain, repair, replace and relocate for service to the Premises and other parts of the Building, or either, pipes, ducts, conduits, wires and appurtenant fixtures and equipment, wherever located

in the Premises or the Building, provided that the usable area of the Premises is not materially reduced, and (ii) to alter or relocate any other common facility, provided that substitutions are substantially equivalent or better for Tenant's use of the Premises consistent with the Permitted Uses.

(b) Tenant acknowledges that the Park is comprised of several buildings, including the Building and both life science/office buildings ("Commercial Buildings") and residential buildings ("Residential Buildings"), together with common and publicly accessible landscaped areas, service drives, and sidewalks. Landlord has established a common scheme for the operation and maintenance of the Park to which this Lease and the other leases of space in the Park are subject pursuant to a legal instrument entitled the "Declaration of Covenants," provided, however, that the terms and conditions of the Declaration of Covenants shall not diminish in any material and adverse manner any of Tenant's rights and benefits with respect to the Premises, or materially and adversely increase any of Tenant's obligations. Each Commercial Building, and certain of the Residential Buildings, are subject to the Declaration of Covenants, and contribute to the costs and expenses to be shared thereunder. However, Landlord and Tenant recognize that Residential Buildings may not contribute to such costs and expenses, and therefore, it is agreed that allocation of costs and expenses payable under the Declaration of Covenants among the building owners, the Building's allocable share of which are Operating Expenses under this Lease, shall be based on an aggregation of all such costs and expenses, less whatever contributions can be collected from the Residential Buildings, and allocated to the Building based on a numerator comprised of the total rentable area of the Building, and the denominator of which is the total rentable area of all of the Commercial Buildings in existence from time to time, or by such other method as Landlord may reasonably determine.

Section 2.4 - Parking.

Landlord shall provide and the Tenant shall pay for parking privileges for use by the Tenant's employees, business invitees and visitors in accordance with Exhibit A. The Landlord shall operate, or cause to be operated, a parking garage known as the 30 Pilgrim Street Garage (the "Garage") to serve the Building and other buildings in University Park. The Tenant's parking privileges shall be located in the Garage and shall be on a nonexclusive basis (i.e., no reserved spaces); provided, however, Landlord agrees that the Garage shall be operated so as to maintain therein sufficient spaces to accommodate Tenant's parking privileges described in Exhibit A. However, in the event the Garage requires maintenance, Landlord reserves the right to temporarily relocate some or all of Tenant's parking spaces to Landlord's parking facilities located at 55 Franklin Street, or 80 Landsdowne Street, both in Cambridge, Massachusetts, upon reasonable prior notice to Tenant from Landlord until such reasonable period of time as the maintenance or repairs are complete. Landlord shall diligently and timely perform the maintenance and repairs in a reasonable manner. All monthly users will have unlimited access to the Garage twenty-four (24) hours per day, seven days per week. Additional parking passes may be provided to Tenant on a month-to-month basis, as available.

Tenant agrees that it and all persons claiming by, through and under it, shall at all times abide by the reasonable rules and regulations promulgated by the Landlord, of which Tenant is given notice, with respect to the use of the parking facilities provided by the Landlord pursuant to this Lease. If there are any conflicts between the provisions of such rules and regulations and any provisions of this Lease, the provisions of this Lease shall govern.

Charges for Tenant's parking privileges hereunder shall be at current monthly parking rates (which rates shall be consistent with market parking rates in parking facilities of comparable quality at mixed use office/research parks in East Cambridge/Kendall Square/Cambridgeport and shall constitute Additional Rent and shall be payable monthly to Landlord at the time and in the fashion in which Annual Fixed Rent under this Lease is payable.

At any time during the Term Landlord shall have the right to assign Landlord's obligations to provide parking, as herein set forth, together with Landlord's right to receive Additional Rent for such parking spaces as herein provided, to a separate entity created for the purpose of providing the parking privileges set forth herein. In such event, Landlord and Tenant agree to execute and deliver appropriate documentation, including documentation with the new entity, reasonably necessary to provide for the new entity to assume Landlord's obligations to provide the parking privileges to Tenant as specified herein and for the Tenant to pay the Additional Rent attributable to the parking privileges directly to the new entity. Landlord shall, however, remain primarily liable for the provision of Tenant's parking privileges.

Section 2.5 - Commencement Date; Rent Commencement Date.

"Commencement Date" as defined in Exhibit A. The "Rent Commencement Date" as defined in Exhibit A; provided, however, that the Rent Commencement Date shall be delayed on a day for day basis for every day from and after June 1, 2017 that the Premises have not been delivered after such date with Landlord's Work complete, with the exception of the separation of the Building's PH neutralization system, which shall be performed concurrently with Tenant's Work and the renovation of the main building entrance and lobby, which shall be completed by the end of calendar year 2017.

Section 2.6 - Extension Option. .

Provided that there has been no Event of Default which is uncured and continuing on the part of the Tenant, and that Tenant is, as of the date of exercise of its rights under this Section 2.6, in occupancy of at least sixty-five percent (65%) of the Premises for its own business purposes, the Tenant shall have the right to extend the Term hereof for two (2) periods of five (5) years each (the "Extension Term") on the following terms and conditions:

(a) Such right to extend the Term shall be exercised by the giving of notice by Tenant to Landlord at least eighteen (18) months prior to the expiration of the Initial Term or the first Extension Term (the "Extension Notice Deadline Date"). Upon the giving of such notice on or before the Extension Notice Deadline Date, this Lease and the Term hereof shall be extended for the additional term, as specified above, without the necessity for the execution of any additional documents except a document memorializing the Annual Fixed Rent for the applicable Extension Term to be determined as set forth below; provided, however, that failure of the parties to execute such a document shall not invalidate the exercise of the extension option. Time shall be of the essence with respect to the Tenant's giving notice to extend the Term on or before the Extension Notice Deadline Date. In no event may the Tenant extend the Term under this Section 2.6 for more than ten (10) years after the expiration of the Initial Term, unless Landlord and Tenant shall mutually agree to such an extension.

(b) The Extension Term shall be upon all the terms, conditions and provisions of this Lease, except the Annual Fixed Rent during such Extension Term shall be the then Extension Rental Value of the Premises for such Extension Term, to be determined under this Section 2.6.

(c) For purposes of the Extension Term described in this Section 2.6, the Extension Fair Rental Value of the Premises shall mean the then current fair market annual rent for leases of other space in the Kendall Square/East Cambridge/Cambridgeport submarkets of a comparable nature and quality similarly improved, taking into account the condition to which such premises have been improved (excluding Removable Alterations) and the economic terms and conditions specified in this Lease that will be applicable thereto, including the savings, if any, due to the absence or reduction of brokerage commissions. The Landlord and Tenant shall endeavor to agree upon the Extension Fair Rental Value of the Premises within thirty (30) days after the Tenant has exercised the option for the Extension Term. If the Extension Fair Rental Value of the Premises is not agreed upon by the Landlord and the Tenant within this time frame, each of the Landlord and the Tenant shall retain a real estate professional with at least ten (10) years continuous experience in the business of appraising or marketing similar commercial real estate in the Cambridge, Massachusetts area who shall, within thirty (30) days of his or her selection, prepare a written report summarizing his or her conclusion as to the Extension Fair Rental Value. The Landlord and the Tenant shall simultaneously exchange such reports; provided, however, if either party has not obtained such a report as of the last day of the thirty (30) day period referred to above in this Section 2.6, then the determination set forth in the other party's report shall be final and binding upon the parties. If both parties receive reports within such time and the lower determination is within ten percent (10%) of the higher determination, then the average of these determinations shall be deemed to be the Extension Fair Rental Value for the Premises. If these determinations differ by more than ten percent (10%), then the Landlord and the Tenant shall mutually select a person with the qualifications stated above (the "Final Professional") to resolve the dispute as to the Extension Fair Rental Value for the Premises. If the Landlord and the Tenant cannot agree upon the designation of the Final Professional within ten (10) days of the exchange of the first valuation reports, either party may apply to the American Arbitration Association, the Greater Boston Real Estate Board, or any successor thereto, for the designation of a Final Professional. Within ten (10) days of the selection of the Final Professional, the Landlord and the Tenant shall each submit to the Final Professional a copy of their respective real estate professional's determination of the Extension Fair Rental Value for the Premises. The Final Professional shall then, within thirty (30) days of his or her selection, prepare a written report summarizing his or her conclusion as to the Extension Fair Rental Value (the "Final Professional's Valuation"), which shall be a selection of either Landlord's or Tenant's determination and shall not be a separate valuation. The Final Professional shall give notice of the Final Professional's Valuation to the Landlord and the Tenant and such decision shall be final and binding upon the Landlord and the Tenant. In the event that the commencement of the Extension Term occurs prior to a final determination of the Extension Fair Rental Value therefor (the "Extension Rent Determination Date"), then the Tenant shall pay the Annual Fixed Rental at the greater of (i) the rate specified by the Landlord in its proposed Extension Fair Rental Value or (ii) the then applicable Fixed Rental Rate (such greater amount being referred to as the "Interim Rent"). If the Annual Fixed Rent as finally determined for such Extension Term is determined to be greater than the Interim Rent, then the Tenant shall pay to the Landlord the amount of the underpayment for the period from the end of the Initial Term of this Lease until the Extension Rent Determination

Date within thirty (30) days of the Extension Rent Determination Date. If the Annual Fixed Rent as finally determined for the Extension Term is determined to be less than the Interim Rent, then the Landlord shall credit the amount of such overpayment against the monthly installments of Annual Fixed Rent coming due after the Extension Rent Determination Date.

Section 2.7 - Right of First Offer.

Subject to the provisions of this Section 2.7, Tenant shall have a continuing right of first offer for all or any portion of the Building known as 45 Sidney Street that may hereafter become vacant and available (the "Option Space"). Prior to entering into any lease for all or any portion of the Option Space, Landlord shall notify Tenant, in writing ("Landlord's ROFO Notice") that the Option Space is available for lease and the terms and conditions upon which the Option Space is available, which terms and conditions shall be at fair market value, which may or may not include a leasehold improvements allowance.

Provided that at the time of Landlord's ROFO Notice (i) no Event of Default by Tenant exists under the Lease which is uncured and continuing on the part of Tenant; and (ii) Tenant, or any entity which succeeds to Tenant's rights hereunder pursuant to a Permitted Transfer, is in occupancy of at least sixty five percent (65%) of the Premises for its own business purposes, Tenant may, by giving written notice to Landlord within ten (10) business days after Tenant's receipt of Landlord's ROFO Notice, elect to (a) reject Landlord's ROFO Notice or (b) accept Landlord's offer to lease the Option Space upon the terms and conditions set forth in Landlord's ROFO Notice. If Landlord's ROFO Notice is rejected by Tenant, by Tenant giving Landlord written notice within the aforementioned ten (10) business day period, the parties agree to negotiate in good faith for a five (5) day period following such rejection to reach an agreement on the terms and conditions for the Option Space. If, despite such good faith efforts, the parties are unable to come to an agreement within said five (5) day period, subject to the provisions of paragraph 3 of this Section 2.7, such rejection shall be deemed final. If Tenant fails to timely respond to Landlord's ROFO Notice, such failure shall be deemed Tenant's rejection of Landlord's ROFO Notice. Without limitation, if said option is timely exercised, Landlord and Tenant agree to enter into an amendment to the Lease confirming the inclusion of the Option Space within the Premises and the adjustment to Annual Fixed Rent and all other charges payable under the Lease in accordance with the terms and conditions of Landlord's ROFO Notice; provided that all other provisions of this Lease shall remain in full force and effect without modification. The Option Space shall be offered to Tenant in "as-is" condition (or as otherwise set forth in Landlord's ROFO Notice).

If Landlord's ROFO Notice is rejected by Tenant (or deemed rejected for failure to timely respond to Landlord's ROFO Notice), then Landlord may enter into a lease for the Option Space providing for an effective Annual Fixed Rent equal to or less than five percent (5%) less than that specified in Landlord's ROFO Notice. For clarity, in the event that the Landlord proposes to enter into a lease for the Option Space providing for an effective Annual Fixed Rent greater than five percent (5%) less than that specified in Landlord's ROFO Notice, Landlord shall notify Tenant of such terms by sending an additional Landlord's ROFO Notice that will be subject to the terms of the preceding paragraph. Subject to the foregoing provisions of this paragraph, Tenant shall have no further option to lease the Option Space, and all obligations of Landlord with respect to the Option Space under this Section shall terminate and be of no further force and effect if Landlord's

ROFO Notice is rejected by Tenant (or deemed rejected for failure to timely respond to Landlord's ROFO Notice). For clarity, if Landlord's ROFO Notice is rejected by Tenant (or deemed rejected for failure to timely respond to Landlord's ROFO Notice), Tenant shall be entitled to a continuing right of first offer for all or any portion of the Option Space for which Landlord subsequently enters into a lease agreement and that becomes vacant and available during the Term, subject to any superior rights set forth in the lease agreement with the subsequent lessee(s) of the Option Space. For clarity, Landlord shall have the right to extend the lease term of any such subsequent lessee(s) of the Option Space other than Novartis (as defined below), whether or not such subsequent lessee(s) have an option to extend, without an obligation to provide a ROFO Notice to Tenant with respect to such extension.

Reference is made to that certain Lease by and between Landlord and Novartis Institute of BioMedical Research, Inc. ("Novartis") pursuant to which Novartis leases from Landlord an aggregate of 39,383 rsf of the Building (consisting of 9,346 rsf on the first floor of the Building and 30,037 rsf on the second floor of the Building) (the "Novartis Lease"). Landlord represents and warrants that the Novartis Lease shall expire on February 28, 2019, unless terminated earlier in accordance with its terms. Landlord further represents and warrants there are no superior encumbrances to the first floor or second floor of the Building, including all or any portion thereof that is subject to the Novartis Lease.

Notwithstanding anything to the contrary set forth herein or in the Novartis Lease, Landlord hereby acknowledges and agrees that Tenant's right of first offer pursuant to this Section 2.7 shall be superior to Landlord's ability to offer Novartis any extension of the lease term with respect to all or any portion of the Building that is subject to the Novartis Lease. Landlord further agrees that it will not send Tenant a ROFO Notice with respect to the Novartis space until the earlier of (i) the date that Landlord has entered into a signed letter of intent with Novartis regarding the early termination of such space or (ii) March 1, 2018, which is twelve (12) months prior to the scheduled expiration date of the Novartis Lease.

ARTICLE III

RENT AND OTHER PAYMENTS

Section 3.1 - Annual Fixed Rent.

From and after the Rent Commencement Date (as defined in Exhibit A), the Tenant shall pay, without notice or demand, monthly installments of one-twelfth (1/12th) of the Annual Fixed Rent in effect and applicable to the Premises in advance for each full calendar month of the Term following the Rent Commencement Date and of the corresponding fraction of said one-twelfth (1/12th) for any fraction of a calendar month at the Rent Commencement Date or end of the Term. The Annual Fixed Rent applicable to the Premises during the Term shall be as set forth in Exhibit A.

On the day that is sixty (60) days following the first anniversary of the Rent Commencement Date, and on each anniversary of that date thereafter, Annual Fixed Rent for the Premises shall increase to an amount equal to one hundred three percent (103%) of the Annual Fixed Rent immediately preceding such anniversary.

Section 3.2 - Real Estate Taxes.

From and after the Rent Commencement Date, during the Term, the Tenant shall pay to the Landlord, as Additional Rent, the Tenant's Tax Expenses Allocable to the Premises (as such term is hereinafter defined) in accordance with this Section 3.2. The terms used in this Section 3.2 are defined as follows:

(a) "Tax Year" means the 12-month period beginning July 1 each year or if the appropriate governmental tax fiscal period shall begin on any date other than July l, such other date.

(b) "The Tenant's Tax Expense Allocable to the Premises" means that portion of the Landlord's Tax Expenses for a Tax Year which bears the same proportion thereto as the Rentable Floor Area of the Premises bears to the Total Rentable Floor Area of the Building, provided that, in the event that the Premises are improved to a standard which is higher than other portions of the Property and the Property is re-assessed at a higher value as a result, as expressly indicated in the documentation from the assessor, Tenant shall also be responsible to pay such portion of the Real Estate Taxes on the Property with respect to any Tax Year as is appropriate so that the Tenant bears the portion of the Real Estate Taxes which are properly allocable to the Premises, as reasonably determined by Landlord using good faith commercially reasonable judgment based on assessment values and other information with respect to the Premises and the Building made available by the assessing authorities (Landlord’s determination of such allocation shall take into account the rate of appreciation, if any, of real property in the City of Cambridge from the date of the prior assessment to the date of the new assessment, and the portion of any increased assessment on the Property which is allocable to any such general increase in the value of the real property in the City of Cambridge shall not be allocated disproportionately to Tenant).

(c) "The Landlord's Tax Expenses" with respect to any Tax Year means the aggregate Real Estate Taxes on the Property with respect to that Tax Year, reduced by any abatement receipts with respect to that Tax Year.

(d) "Real Estate Taxes" means (i) all real property taxes and special assessments of every kind and nature assessed by any governmental authority on the applicable property, but excluding any income taxes payable by Landlord as a result of payments made to Landlord by Tenant or any other tenant at the Property; and (ii) reasonable expenses of any proceedings for abatement of such taxes or special assessments. Any special assessments to be included within the definition of "Real Estate Taxes" shall be limited to the amount of the installment (plus any interest thereon) of such special tax or special assessment (which shall be payable over the longest period permitted by law) required to be paid during the Tax Year in respect of which such taxes are being determined. There shall be excluded from such taxes all income, estate, succession, inheritance, excess profit, franchise and transfer taxes; provided, however, that if at any time during the Term the present system of ad valorem taxation of real property shall be changed so that in lieu of the whole or

any part of the ad valorem tax on real property, there shall be assessed on the 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) 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 based, shall be deemed to be included within the term "Real Estate Taxes."

Payments by the Tenant on account of the Tenant's Tax Expenses Allocable to the Premises shall be made monthly at the time and in the fashion herein provided for the payment of Annual Fixed Rent and shall be in an amount of the greater of (i) one-twelfth (1/12th) of the Tenant's Tax Expenses Allocable to the Premises for the current Tax Year as reasonably estimated by the Landlord, or (ii) an amount reasonably estimated by any ground lessor of the Land or holder of a first mortgage on the Property, to be sufficient, if paid monthly, to pay the Landlord's Tax Expenses on the dates due to the taxing authority.

Not later than ninety (90) days after the Landlord's Tax Expenses are determinable for the first Tax Year of the Term or fraction thereof and for each succeeding Tax Year or fraction thereof during the Term, the Landlord shall render the Tenant a statement in reasonable detail showing for the preceding year or fraction thereof, as the case may be, real estate taxes on the Property, and any abatements or refunds of such taxes. Expenses incurred in obtaining any tax abatement or refund may be charged against such tax abatement or refund before the adjustments are made for the Tax Year. If at the time such statement is rendered it is determined with respect to any Tax Year, that the Tenant has paid (i) less than the Tenant's Tax Expenses Allocable to the Premises or (ii) more than the Tenant's Tax Expenses Allocable to the Premises, then, in the case of (i) the Tenant shall pay to the Landlord, as Additional Rent, within thirty (30) days of such statement the amount of such underpayment and, in the case of (ii) the Landlord shall credit the amount of such overpayment against the monthly installments of the Tenant's Tax Expenses Allocable to the Premises next thereafter coming due (or refund such overpayment within thirty (30) days if the Term has expired and the Tenant has no further obligation to the Landlord).

To the extent that real estate taxes shall be payable to the taxing authority in installments with respect to periods less than a Tax Year, the statement to be furnished by the Landlord shall be rendered and payments made on account of such installments. Notwithstanding the foregoing provisions, no decrease in Landlord's Tax Expenses with respect to any Tax Year shall result in a reduction of the amount otherwise payable by Tenant if and to the extent said decrease is attributable to vacancies in the Building, rather than to a reduction in the assessed value of the Property as a whole or a reduction in the tax rate. Landlord shall, upon Tenant's request therefor, provide Tenant with copies of all applicable tax bills, statements, records and the like, as well as copies of Landlord's calculations and all other relevant information.

Section 3.3 - Operating Expenses.

From and after the date that is sixty (60) days following the Rent Commencement Date, during the Term the Tenant shall pay to the Landlord, as Additional Rent, the Tenant's Operating

Expenses Allocable to the Premises, as hereinafter defined, in accordance with this Section 3.3. The terms used in this Section 3.3 are defined as follows:

(a) "The Tenant's Operating Expenses Allocable to the Premises" means that portion of the Operating Expenses for the Property which bears the same proportion thereto as the Rentable Floor Area of the Premises bears to the Total Rentable Floor Area of the Building.

(b) "Operating Expenses for the Property" means Landlord's reasonable cost of operating, cleaning, maintaining and repairing the Property, and shall include without limitation, the cost of services on Exhibit C (provided such costs of services shall be subject to an appropriate reduction in the event Tenant provides its own cleaning, janitorial or rubbish or trash removal services); premiums for insurance carried pursuant to Section 7.4; the amount deductible from any insurance claim actually made by Landlord during the time period in question (which amount is currently $50,000.00, and which amount may be increased during the Term and any Extension Term provided such increase is reasonable and customary); reasonable compensation and all fringe benefits, worker's compensation insurance premiums and payroll taxes paid to, for or with respect to all persons (University Park/Building general manager and below, provided that such charges shall be prorated to reflect the percentage of rentable square feet of the Building as compared to all of the commercial rentable square feet at University Park) directly engaged in the operating, maintaining or cleaning of the Property; interior landscaping and maintenance; steam, water, sewer, gas, oil, electricity, telephone and other utility charges (excluding such utility charges either separately metered or separately chargeable to tenants for additional or special services and those charges related to the cost of operating base Building equipment not used by Tenant, cost of providing conditioned water for HVAC services; cost of building and cleaning supplies; the costs of routine environmental management programs operated by Landlord; market rental costs for equipment used in the operating, cleaning, maintaining or repairing of the Property, or the applicable fair market rental charges in the case of equipment owned by the Landlord; cost of cleaning; cost of maintenance, repairs and replacements; cost of snow removal; cost of landscape maintenance; security services; payments under service contracts with independent contractors; management fees at market rates; the cost of any capital improvement either required by law or regulation first in effect after the Commencement Date of this Lease or which reduces the Operating Expenses for the Property or which improves the management and operation of the Property in a manner acceptable to Tenant, which cost shall be amortized in accordance with generally accepted accounting principles over the useful life of such item, together with interest on the unamortized balance calculated at the rate from time to time announced by Bank of America, N.A. as its prime rate; charges reasonably allocated to the Building for the operating, cleaning, maintaining and repairing of University Park common areas and amenities; and all other reasonable and necessary expenses paid in connection with the operation, cleaning, maintenance and repair of the Property. If, for any reason portions of the Rentable Area of the Building not included in the Premises were not occupied by tenants or the Landlord

was not supplying all tenants with the services being supplied under the Lease or any tenants in the Building were supplied with a lesser level of standard services than those supplied to the Tenant under this Lease, Landlord's Operating Expenses for the Property shall include the amounts reasonably determined by Landlord which would have been incurred if ninety-five percent (95%) of the rentable area in the Building were occupied and were supplied with the same level of standard services as supplied to the Tenant under this Lease.

Operating Expenses for the Property shall not include the following: the Landlord's Tax Expense; cost of repairs or replacements (i) resulting from eminent domain takings, (ii) to the extent reimbursed by insurance, or (iii) required, above and beyond ordinary periodic maintenance, to maintain in serviceable condition the major structural elements of the Building, including the roof, exterior walls and floor slabs; replacement or contingency reserves; ground lease rents or payment of debt obligations; costs incurred due to negligent acts or omissions of Landlord, Landlord's agents, contractors or employees, or any other tenant of the Building; legal and other professional fees for matters not relating to the normal administration and operation of the Property; promotional, advertising, public relations or brokerage fees and commissions paid in connection with services rendered for securing or renewing leases; lease up and tenant improvement costs for space other than the Premises in the Building; costs of capital improvements not permitted hereinabove; expenses incurred in the maintenance, repair and operation of the Garage; legal expenses relating to other tenants; interest and all other payments made upon loans to Landlord or secured by a mortgage or deed of trust covering the Property or a portion thereof; salaries of employees and officers of Landlord above the level of general manager or comparable; depreciation; specific costs incurred for the account of, or separately billed to and paid by specific tenants of University Park; the cost of any work or services performed for any other property other than University Park; any cost included in Operating Expenses representing an amount paid to a person, firm, corporation or other entity related to Landlord which is in excess of the amount which would have been paid on an arms-length basis in the absence of such relationship; costs and expenses to clean up or remediate Hazardous Materials; and separately metered or sub metered utilities for other tenants in the Building. The Landlord's Operating Expenses shall be reduced by the amount of any proceeds, payments, credits or reimbursements which the Landlord receives from sources other than tenants and which are applicable to such Operating Expenses for the Property.

Payments by the Tenant for its share of the Operating Expenses for the Property shall be made in monthly installments of one-twelfth (1/12th) of Tenant's share of Operating Expenses. The amount so to be paid to the Landlord shall be an amount from time to time reasonably estimated by the Landlord to be sufficient to aggregate a sum equal to the Tenant's share of the Operating Expenses for the Property for each calendar year.

Not later than ninety (90) days after the end of each calendar year or fraction thereof during the Term or fraction thereof at the end of the Term, the Landlord shall render the Tenant a statement in reasonable detail and according to usual accounting practices certified by a representative of the Landlord, showing for the preceding calendar year or fraction thereof, as the case may be, the Operating Expenses for the Property and the Tenant's Operating Expenses Allocable to the Premises. Said statement to be rendered to the Tenant also shall show for the preceding calendar year or fraction thereof, as the case may be, the amounts of Operating Expenses already paid by

the Tenant. If at the time such statement is rendered it is determined with respect to any calendar year, that the Tenant has paid (i) less than the Tenant's Operating Expenses Allocable to the Premises or (ii) more than the Tenant's Operating Expenses Allocable to the Premises, then, in the case of (i) the Tenant shall pay to the Landlord, as Additional Rent, within thirty (30) days of such statement the amounts of such underpayment and, in the case of (ii) the Landlord shall credit the amount of such overpayment against the monthly installments of the Tenant's Operating Expenses Allocable to the Premises next thereafter coming due (or refund such overpayment within thirty (30) days if the Term has expired and the Tenant has no further obligation to the Landlord).

Tenant may, after ten (10) days' prior written notice to Landlord given within one hundred twenty (120) days of Landlord's delivery to Tenant of a statement of Operating Expenses for the Property, during Landlord's regular business hours and at Tenant's sole cost and expense, inspect Landlord's books and records relating to Operating Expenses for the Property. Such books and records shall be made available at the Property unless such books and records are regularly kept at Landlord's corporate offices in Cleveland, Ohio, in which case they will be made available for Tenant's inspection in Cleveland, Ohio. Tenant shall keep all information relating to Operating Expenses for the Property strictly confidential and shall in no event, whatsoever, disclose such information to any third party other than to Tenant's attorneys and accountants in connection with proceedings concerning this Lease. Landlord's statement shall by notice of Tenant to Landlord given within thirty (30) days of the expiration of the aforesaid one hundred twenty (120) day period, be subject to Expedited Dispute Resolution, as set forth on Exhibit H hereto. If it is determined that Landlord's statement has overstated the Operating Expenses for the Property for any calendar year by more than five percent (5%) then Landlord shall reimburse Tenant for its reasonable audit costs incurred in connection with this paragraph. If Landlord's statement is determined not to have overstated Operating Expenses for the Property, Tenant shall reimburse Landlord for its reasonable audit costs incurred in connection with this paragraph.

Section 3.4 - Utility Charges.

During the Term, the Tenant shall pay directly to the provider of the service all separately metered charges for steam, heat, gas electricity, fuel and other services and utilities furnished to the Premises. If at any time during the Term, any utility service to the Premises is not separately metered and paid directly to the service provider by Tenant, Tenant's usage and billing shall depend upon Landlord's reading of the check meters (or, if not check metered, upon the reasonable estimate of Tenant's usage as determined by Landlord's engineer) for such service or if Tenant's usage is non-determinable, based on the proportion of Tenant's rentable square footage compared to other tenants having use of the same utility service. In such event, the utility service shall be invoiced by Landlord to Tenant monthly, based upon the actual billing from the utility company and the check meter reading or reasonable allocation as aforesaid, and shall be paid by Tenant within thirty (30) days after invoice from Landlord.

Section 3.5 - Above-standard Services.

If the Tenant requests and the Landlord elects to provide any services to the Tenant in addition to those described in Exhibit C, the Tenant shall pay to the Landlord, as Additional Rent, the amount billed by Landlord for such services at Landlord's standard rates as from time to time in effect. If the Tenant has requested that such services be provided on a regular basis, the Tenant

shall, if requested by the Landlord, pay for such services at the time and in the fashion in which Annual Fixed Rent under this Lease is payable. Otherwise, the Tenant shall pay for such additional services within thirty (30) days after receipt of an invoice from the Landlord. Landlord shall have the right from time to time to inspect Tenant's utility meters and to install timers thereon at Tenant's expense for purposes of monitoring above-standard service usage. Tenant shall pay for such work within thirty (30) days after receipt of an invoice from Landlord.

Section 3.6 - No Offsets.

Annual Fixed Rent and Additional Rent shall be paid by the Tenant without offset, abatement or deduction except as provided herein.

Section 3.7 - Net Lease.

It is understood and agreed that this Lease is a net lease and that the Annual Fixed Rent is absolutely net to the Landlord excepting only the Landlord's obligations to pay any debt service or ground rent on the Property, to provide the Landlord's services, and to pay the real estate taxes and operating expenses which the Tenant is not required to pay under this Lease.

ARTICLE IV

ALTERATIONS

Section 4.1 - Consent Required for Tenant's Alterations.

Tenant shall not make alterations or additions to the Premises except in accordance with (i) reasonable construction rules and regulations from time to time promulgated by Landlord and applicable to Tenants in the Building (a current copy of which is attached hereto as Exhibit F), and (ii) plans and specifications therefor first approved by the Landlord, which approval shall not be unreasonably withheld, conditioned or delayed. In addition, Tenant may make non-structural alterations affecting only the interior of the Premises, and not adversely affecting building systems, costing less than $100,000.00 in any one instance (or in the aggregate with respect to related alterations) without Landlord’s prior written consent, but subject to the other terms of this Lease and provided that Tenant provides notice of such alterations within a reasonable time after the completion of the same. Landlord shall not be deemed unreasonable for withholding approval of any alterations or additions which (i) will affect any structural or exterior element of the Building, any area or element outside of the Premises, or any facility serving any area of the Building outside of the Premises or any publicly accessible major interior features of the Building, (ii) constitute non-standard office/laboratory improvements and will require significant expense to readapt the Premises to substantially the same condition of the Premises as of the date hereof unless the Tenant first gives assurance acceptable to the Landlord that such readaptation will be made prior to such termination without expense to the Landlord, or (iii) which would not be compatible with existing mechanical or electrical, plumbing, HVAC or other systems in the Building, in each case, as reasonably determined by the Landlord. Landlord will not charge Tenant any coordination, overhead or contractor supervision fees. However, Landlord shall be reimbursed for any third-party, out-of-pocket expenses incurred by Landlord in connection with the review and approval of Tenant’s plans, specifications, improvements and construction.

Section 4.2 - Ownership of Alterations.

All alterations and additions shall be part of the Building and owned by the Landlord. With respect to alterations and additions requiring prior notice to Landlord and the consent of Landlord, if Tenant fails to inform Landlord (as and to the extent required under this Lease) at least ten (10) days prior to the installation of the alteration or addition, thereby preventing Landlord from making a determination as to whether it will want such addition or alteration removed from the Premises prior to its installation, then Landlord may require such removal without exception. Otherwise, additions and alterations made by Tenant may be surrendered upon the expiration of the Term unless Landlord requires removal by notice to Tenant at the time Landlord approves such additions and alterations. All movable trade fixtures and furnishings not attached to the Premises shall remain the property of the Tenant and shall be removed by the Tenant upon termination or expiration of this Lease. The Tenant shall repair any damage caused by the removal of any alterations, additions or personal property from the Premises, including the Removable Equipment (as defined below). Landlord and Tenant agree that prior to the Rent Commencement Date, Tenant shall provide a list to Landlord of equipment that Tenant has attached to the walls or floors of the Premises, and/or hard-wired or plumbed to the electrical, plumbing or mechanical systems of the Premises, together with evidence indicating that such equipment was not purchased with the Leasehold Improvements Allowance (the "Removable Equipment"). Notwithstanding the foregoing provisions of this Section 4.2, Tenant shall be permitted to remove the Removable Equipment from the Premises at the end of the Term, provided that such Removable Equipment shall be removed by Tenant with reasonable care and diligence, including the capping off of all utility connections behind the adjacent interior finish, and the restoration of such interior finish to the extent necessary so that the Premises are left with complete wall, ceiling and floor finishes. Notwithstanding anything to the contrary contained in this Section 4.2, all Tenant Improvements funded by the Leasehold Improvements Allowance (the "Landlord Funded Alterations") shall be part of the Building and owned by Landlord, and all Tenant Improvements, alterations and additions which are necessary for the use of the Premises as an operational biotechnology laboratory (the "Base Laboratory Alterations"), regardless of who funded their acquisition and installation, shall be owned by Landlord, may not be removed by Tenant, and shall, in no event, constitute Removable Equipment.

Section 4.3 - Construction Requirements for Alterations.

All construction work by the Tenant shall be done in a good and workmanlike manner employing only first-class materials and in compliance with Landlord's reasonable construction rules and regulations and with all applicable laws and all lawful ordinances, regulations and orders of Governmental authority and insurers of the Building. The Landlord or Landlord's authorized agent may (but without any implied obligation to do so) inspect the work of the Tenant at reasonable times with prior notice to Tenant and shall give notice of observed defects. All of the Tenant's alterations and additions and installation of furnishings shall be coordinated with any work being performed by the Landlord and in such manner as to maintain harmonious labor relations and not to damage the Building or interfere with Building construction or operation and, except for installation of furnishings, shall be performed by contractors or workmen first approved by the Landlord, which approval the Landlord agrees not to unreasonably withhold, condition or delay (Landlord shall provide its written consent or written notice of its reason for withholding consent within ten (10) days of any request for consent from Tenant). The Tenant, before starting

any work, shall receive and comply with Landlord's construction rules and regulations applicable to all tenants in the Building and shall cause Tenant's contractors to comply therewith, shall secure all licenses and permits necessary therefor and shall deliver to the Landlord a statement of the names of all its contractors and subcontractors performing work with a value in excess of $50,000 and the estimated cost of all labor and material to be furnished by them and security satisfactory to the Landlord protecting the Landlord against liens arising out of the furnishing of such labor and material; and cause each contractor engaged to perform work to carry worker's compensation insurance in statutory amounts covering all the contractors' and subcontractors' employees and comprehensive general public liability insurance with limits of $1,000,000 (individual)/$3,000,000 (occurrence), or in such lesser amounts as Landlord may accept, covering personal injury and death and property damage (all such insurance to be written in companies approved reasonably by the Landlord and insuring the Landlord, such individuals and entities affiliated with the Landlord as the Landlord may designate, and the Tenant as well as the contractors and to contain a requirement for at least thirty (30) days' notice to the Landlord prior to cancellation, nonrenewal or material change), and to deliver to the Landlord certificates of all such insurance.

Section 4.4 - Payment for Tenant Alterations.

Except as otherwise set forth herein, Tenant agrees to pay promptly when due the entire cost of any work done on the Premises by the Tenant, its agents, employees or independent contractors, and not to cause or permit any liens for labor or materials performed or furnished in connection therewith to attach to the Premises or the Property and promptly to discharge any such liens which may so attach. If any such lien shall be filed against the Premises or the Property and the Tenant shall fail to cause such lien to be discharged within ten (10) business days after the filing thereof, the Landlord may cause such lien to be discharged by payment, bond or otherwise without investigation as to the validity thereof or as to any offsets or defenses which the Tenant may have with respect to the amount claimed. The Tenant shall reimburse the Landlord, as Additional Rent, for any cost so incurred and shall indemnify and hold harmless the Landlord from and against any and all claims, costs, damages, liabilities and expenses (including reasonable attorneys' fees) which may be incurred or suffered by the Landlord by reason of any such lien or its discharge.

Section 4.5 - Leasehold Improvements Allowance.

In connection with Tenant’s execution of this Lease, Tenant shall perform certain improvements to the Premises, as mutually agreed upon by Landlord and Tenant (the “Improvements”). Tenant acknowledges and agrees that the Improvements shall include (but shall not be limited to) the creation of laboratory space with supporting office space. Landlord shall provide to Tenant the Leasehold Improvements Allowance set forth in Exhibit A, which shall be paid and used in accordance with the provisions of the Work Letter attached to this Lease as Exhibit E.

ARTICLE V

RESPONSIBILITY FOR CONDITION OF BUILDING AND PREMISES

Section 5.1 - Maintenance of Building and Common Areas by Landlord.

Except as otherwise provided in Article VIII, the Landlord shall make such repairs to the major structural elements of the Building, including, without limitation, the roof, exterior walls and floor slabs as may be necessary to keep and maintain the same in good condition and maintain and make such repairs to the Common Building Areas as may be necessary to keep them in good order, condition and repair, including without limitation, the glass in the exterior walls of the Building, and all mechanical systems and equipment serving the Building and not exclusively serving the Premises. The Landlord shall further perform the services on Exhibit C hereto. The Landlord shall in no event be responsible to the Tenant for any condition in the Premises or the Building caused by an act or neglect of the Tenant, or any invitee or contractor of the Tenant. Provided that Tenant performs the maintenance obligations set forth in Section 5.2 below, Landlord shall be responsible for any capital replacements. Landlord's costs in performing such services and the expense associated with such capital replacements shall be reimbursed by the Tenant to the extent provided in Section 3.3. Except as specifically set forth herein, Tenant accepts the Premises in its as-is condition.

Section 5.2 - Maintenance of Premises by Tenant.

Tenant shall keep neat and clean and maintain in good order, condition and repair the Premises and every part thereof and all Building and mechanical equipment exclusively serving the Premises, reasonable wear and tear excepted and further excepting those repairs for which the Landlord is responsible pursuant to Section 5.1 and damage by fire or other casualty and as a consequence of the exercise of the power of eminent domain, and shall surrender the Premises and all alterations and additions thereto, at the end of the Term, in such condition, first removing all goods and effects of the Tenant and, to the extent specified by the Landlord by notice to the Tenant, all alterations and additions made by the Tenant, which Tenant has not elected to retain in accordance with the terms of Sections 4.2 and 5.2, and repairing any damage caused by such removal and restoring the Premises and leaving them clean and neat. The Tenant shall not permit or commit any waste, and the Tenant shall be responsible for the cost of repairs which may be made necessary by reason of damages to common areas in the Building by the Tenant, or any of the contractors or invitees of the Tenant. Mechanical, HVAC, the Laboratory Systems and the Emergency Generators shall be maintained in good order, condition and repair. Tenant shall, upon request, provide evidence reasonably satisfactory to Landlord that it has available the necessary expertise to properly conduct and carry out this responsibility, either through persons employed by the Tenant or through contracts with independent service organizations, or a combination thereof. All charges incurred by Landlord in connection with such work, whether by independent organizations or in accordance with reasonable rates assigned to employees of Landlord or Landlord's affiliates, shall be promptly reimbursed by Tenant as Additional Rent.

Section 5.3 - Delays in Landlord's Services.

Landlord shall not be liable to the Tenant for any compensation or reduction of rent by reason of inconvenience or annoyance or for loss of business arising from the necessity of the Landlord or its agents entering the Premises for any purposes authorized in this Lease, or for repairing the Premises or any portion of the Building. In case the Landlord is prevented or delayed from making any repairs, alterations or improvements, or furnishing any services or performing any other covenant or duty to be performed on the Landlord's part, by reason of any External Cause, the Landlord shall not be liable to the Tenant therefor, nor, except as expressly otherwise provided in this Lease, shall the Tenant be entitled to any abatement or reduction of rent by reason thereof, nor shall the same give rise to a claim in the Tenant's favor that such failure constitutes actual or constructive, total or partial, eviction from the Premises.

Landlord reserves the right to stop any service or utility system when necessary by reason of accident or emergency, until necessary repairs have been completed; provided, however, that in each instance of stoppage, the Landlord shall exercise reasonable diligence to eliminate the cause thereof. Except in case of emergency repairs, the Landlord will give the Tenant reasonable advance written notice of any contemplated stoppage and will use reasonable efforts to avoid unnecessary inconvenience to the Tenant by reason thereof. In no event shall the Landlord have any liability to the Tenant for the unavailability of heat, light or any utility or service to be provided by the Landlord to the extent that such unavailability is caused by External Causes, provided, however, that the Landlord is obligated to exercise reasonable efforts to restore such services or utility systems' operation as soon as possible.

Notwithstanding anything contained herein to the contrary, in the event Landlord shall fail to provide the services it is required to provide to Tenant hereunder for any reason other than due to Tenant's acts or omissions, and as a result thereof, Tenant is reasonably unable to use or conduct its operations on part or all of the Premises, Tenant shall be entitled to (i) proportionate abatement of rent (including but not limited to abatement of Tenant’s Tax Expenses and Tenant’s Operating Expenses) for the period Tenant is reasonably unable to use or conduct its operations on part or all of the Premises, or (ii) terminate this Lease if Landlord is unable to restore such services within three (3) months from the date of interruption. Tenant shall have the right to terminate this Lease as aforesaid by written notice to Landlord at any time after the expiration of such three (3) month period, and such termination shall be effective as of the date of the interruption in service. To the extent any such unavailability is caused primarily by the action or inaction of Landlord, it’s servants, agents, employees, contractors, licensees, invitees or any persons claiming by, through or under Landlord, and (i) Landlord fails to commence commercially reasonable corrective action within ten (10) days after Tenant notifies Landlord of such unavailability, or (ii) Landlord, upon commencing commercially reasonable corrective action within ten (10) days after Tenant notifies Landlord of such unavailability, fails to restore the services within thirty (30) days after Tenant notifies Landlord of such unavailability, Tenant shall have the right to restore such service at Landlord’s cost and expense.

ARTICLE VI

TENANT COVENANTS

Tenant covenants during the Term and for such further time as the Tenant occupies any part of the Premises:

Section 6.1 - Permitted Uses.

Tenant shall occupy the Premises only for the Permitted Uses, which include, but are not limited to, general business and administrative offices, laboratory and biotechnology research and development, animal experimentation and related activities thereto. The Tenant shall not injure or deface the Premises or the Property, nor permit in the Premises any auction sale. The Tenant shall give written notice to the Landlord of any materials on OSHA's right to know list or which are subject to regulation by any other federal, state, municipal or other governmental authority and which the Tenant intends to have present at the Premises. The Tenant shall comply with all requirements of public authorities and of the Board of Fire Underwriters in connection with methods of storage, use and disposal thereof. The Tenant shall not permit in the Premises any nuisance, or the emission from the Premises of any objectionable noise, odor or vibration, nor use or devote the Premises or any part thereof for any purpose which is contrary to law or ordinance or liable to invalidate or increase premiums for any insurance on the Building or its contents or liable to render necessary any alteration or addition to the Building, nor commit or permit any waste in or with respect to the Premises, nor generate, store or dispose of any oil, toxic substances, hazardous wastes, or hazardous materials (each a, "Hazardous Material"), or permit the same in or on the Premises or any parking areas provided for under this Lease, unless first giving Landlord notice thereof. The Tenant shall not dump, flush or in any way introduce any Hazardous Materials into septic, sewage or other waste disposal systems serving the Premises or any parking areas provided for under this Lease, except as specifically permitted by government license or permit. The Tenant will indemnify the Landlord and its successors and assigns against all claims, loss, cost, and expenses including attorneys' fees, incurred as a result of any contamination of the Building or any other portion of University Park with Hazardous Materials by the Tenant or Tenant's contractors, licensees, invitees, agents, servants or employees. Tenant shall provide to Landlord herewith copies of all licenses and permits Tenant has been required to obtain prior to handling any such Hazardous Materials. Tenant shall further provide to Landlord evidence satisfactory to Landlord from Tenant's consultant preparing any regulatory filings for licensing or permitting to handle Hazardous Materials setting forth in reasonable detail all licenses and/or permits that Tenant is required to obtain or will obtain prior to the Commencement Date and that such licenses and/or permits are valid and in full force and effect. Tenant shall have received all such licenses and/or permits prior to commencement of its operations in the Premises. From time to time hereafter upon thirty (30) days advance notice from Landlord, Tenant will provide Landlord with such updated provisions of Sections 6.1 and 6.2 as the Landlord may reasonably request. Upon request by the Landlord, Tenant shall immediately remove any material or substances which are not in compliance with this Section 6.1. The Landlord represents and warrants to the Tenant that, to the best of Landlord’s knowledge, the Permitted Uses are in compliance with all current land use and zoning restrictions applicable to the Premises, subject to the terms and conditions thereof. Tenant shall have no liability for any environmental condition or

violation of law that exists in the Premises as of the date of this Lease unless such liability is due to Tenant's act or omission.

Section 6.2 - Laws and Regulations.

Tenant shall comply with all federal, state and local laws, regulations, ordinances, executive orders, federal guidelines, and similar requirements in effect from time to time, including, without limitation, City of Cambridge ordinances numbered 1005, 1053, 1086 and any subsequently adopted ordinance for employment and animal experimentation with respect to animal experiments and hazardous waste and any such requirements pertaining to employment opportunity, anti-discrimination and affirmative action. Tenant shall have the right to contest any notice of violation for any of the foregoing by appropriate proceedings diligently conducted in good faith. Landlord represents and warrants that the Premises are in compliance with applicable laws. Landlord shall cause the common areas of the Building and the Property to comply with all applicable legal requirements, including, without limitation the Americans with Disabilities Act. Notwithstanding the foregoing or any other provision of this Lease, however, Tenant shall not be responsible for compliance with any such laws, regulations, or the like requiring (a) structural repairs or modifications; or (b) repairs or modifications to the utility or building service equipment; or (c) installation of new building service equipment, such as fire detection or suppression equipment, unless such repairs, modifications, or installations shall (i) be due to Tenant's particular manner of use of the Premises (as opposed to the Permitted Uses generally), or (ii) be due to the gross negligence or willful misconduct of Tenant or any agent, employee, or contractor of Tenant

Section 6.3 - Rules and Regulations.

Tenant shall not obstruct in any manner any portion of the Property not hereby leased; shall not permit the placing of any signs, curtains, blinds, shades, awnings, aerials or flagpoles, or the like, visible from outside the Premises; and shall comply with all reasonable rules and regulations of uniform application to all occupants of the Building now or hereafter made by the Landlord, of which the Tenant has been given notice, for the care and use of the Property and the parking facilities relating thereto. The Landlord shall not be liable to the Tenant for the failure of other occupants of the Building to conform to any such rules and regulations, however Landlord shall uniformly enforce the Rules and Regulations. Notwithstanding anything contained in this Lease (including all exhibits) to the contrary, Tenant shall have the right, at Tenant's expense, to install a sign or signs with its corporate logo at the entrance to the Premises on each level of the Building occupied, in part or in full, by Tenant, and, at Landlord's expense, shall have its name listed in the Building directory located in the Building's main lobby, subject to the prior approval of such sign by Landlord, which approval shall not be unreasonably withheld or delayed. Tenant, at its expense, shall also have the right to prominent exterior signage in one location on the Building's façade, subject to local ordinances, approval from the City of Cambridge and Landlord's consent, which consent shall not be unreasonably withheld, delayed or conditioned. Tenant may use the Leasehold Improvements Allowance to pay for signage.

Section 6.4 - Safety Compliance.

Tenant shall keep the Premises equipped with all safety appliances required by law or ordinance or any other regulations of any public authority because of any non-office use made by

the Tenant and to procure all licenses and permits so required because of such use and, if requested by the Landlord, do any work so required because of such use, it being understood that the foregoing provisions shall not be construed to broaden in any way the Tenant's Permitted Uses. Tenant shall conduct such periodic tests, evaluations or certifications of safety appliances and laboratory equipment as are required or recommended in accordance with generally accepted standards for good laboratory practice to ensure that such safety appliances and equipment remain in good working order, and shall provide to Landlord copies of such reports, evaluations and certifications as they are periodically obtained by Tenant or upon ten (10) days advance notice from Landlord (but only to the extent that Tenant has failed to previously provide any such reports).

Section 6.5 - Landlord's Entry.

Tenant shall permit the Landlord and its agents (which agents shall be identified to Tenant and reasonably approved by Tenant for entry), after 48 hours prior notice and at times reasonably acceptable to Tenant, except in the case of emergencies, to enter the Premises at all reasonable hours for the purpose of inspecting or of making repairs to the same, monitoring Tenant's compliance with the requirements and restrictions set forth in this Lease, and for the purpose of showing the Premises to prospective purchasers and mortgagees at all reasonable times and to prospective tenants (during the last nine (9) months of the Term or after notice of termination by the Tenant has been received by Landlord) provided that in connection with such entry, Tenant may provide procedures reasonably designed so as not to jeopardize Tenant's trade secrets, proprietary technology or critical business operations.

Section 6.6 - Floor Load.

Tenant shall not place a load upon any floor in the Premises exceeding the floor load per square foot of area which such floor was designed to carry and which is allowed by law. Further, Tenant 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 the Landlord shall in each instance authorize. The Tenant's machines and mechanical equipment shall be placed and maintained by the Tenant at the Tenant's expense in settings sufficient to absorb or prevent vibration or noise that may be transmitted to the Building structure or to any other space in the Building.

Section 6.7 - Personal Property Tax.

Tenant shall pay promptly when due all taxes which may be imposed upon personal property (including, without limitation, fixtures and equipment) in the Premises to whomever assessed. Tenant shall have the right to contest the validity or amount of any such taxes by appropriate proceedings diligently conducted in good faith.

Section 6.8 - Assignment and Subleases.

Tenant shall not assign, mortgage, pledge, hypothecate or otherwise transfer this Lease, or sublet (which term, without limitation, shall include granting of concessions, licenses and the like) the whole or any part of the Premises without, in each instance, having first received the consent of the Landlord which consent shall not be unreasonably withheld, conditioned or delayed. Except as specifically permitted herein, any assignment or sublease made without such consent shall be

void. The Landlord shall not be deemed to be unreasonable in withholding its consent to any proposed assignment or subletting by the Tenant based on any of the following factors:

(a) The business of the proposed occupant is not consistent with the image and character which the Landlord desires to promote for the Building.

(b) The proposed assignment, mortgage or pledge would in any way materially diminish Landlord's rights with respect to the Premises.

(c) The proposed occupant is not sufficiently creditworthy in the reasonable opinion of Landlord based on a comparison of the creditworthiness of other similarly-situated companies in the same industry as the proposed occupant.

Notwithstanding anything to the contrary contained in this Section, Tenant shall have the right to assign or otherwise transfer this Lease or sublease all or a portion of the Premises without obtaining the prior consent of Landlord, (a) to its parent corporation, to a wholly owned subsidiary, to a corporation which is wholly owned by the same corporation which wholly owns Tenant, to an entity directly or indirectly controlling, controlled by or under common control with Tenant, any entity owning or controlling fifty percent (50%) or more of the outstanding voting interest of Tenant, or any entity of which Tenant owns or controls fifty percent (50%) or more of the voting interests, provided that (i) the transferee shall, prior to the effective date of the transfer, deliver to Landlord instruments evidencing such transfer and its agreement to assume and be bound by all the terms, conditions and covenants of this Lease to be performed by Tenant, all in form reasonably acceptable to Landlord, and (ii) at the time of such transfer there shall not be an uncured Event of Default under this Lease; or (b) to the purchaser of all or substantially all of its assets, any entity resulting from the merger or consolidation of Tenant, any successor entity resulting from a bona fide reorganization or Tenant, or to any entity into which the Tenant may be merged or consolidated (along with all or substantially all of its assets) (the "Acquiring Company"), provided that (i) the net assets of the Acquiring Company at the time of the transfer or merger shall not be less than the greater of (x) the net assets of the Tenant as of the date of this Lease, or (y) the net assets of Tenant immediately prior to such transfer, (ii) the Acquiring Company continues to operate the business conducted in the Premises consistent with the Permitted Uses described in Exhibit A hereto, (iii) the Acquiring Company shall assume in writing, in form reasonably acceptable to Landlord, all of Tenant's obligations under this Lease, (iv) Tenant shall provide to Landlord such additional information regarding the Acquiring Company as Landlord shall reasonably request, and (v) Tenant shall pay Landlord's reasonable expenses incurred in connection therewith (up to a maximum amount of $5,000.00). Unless Landlord shall have objected to such assignment or transfer by Tenant within ten (10) business days following Landlord's receipt of the information or items described in (b)(i) and (iii) above, Landlord shall be deemed to have waived its right to object thereto. The transfers described in this paragraph are referred to hereinafter as "Permitted Transfers." Notwithstanding any other provision of this Lease, any public offering of shares or other ownership interest in Tenant or any private equity financing of Tenant by one or more investors who regularly invest in private companies shall not be deemed an assignment and shall not be subject to Landlord approval.

Whether or not the Landlord consents, or is required to consent, to any assignment or subletting, the Tenant named herein (to the extent that the Tenant continues to exist as a distinct entity separate and apart from the entity to which the Lease is assigned) shall remain fully and primarily liable for the obligations of the tenant hereunder, including, without limitation, the obligation to pay Annual Fixed Rent and Additional Rent provided under this Lease.

Tenant shall give the Landlord notice of any proposed sublease or assignment, whether or not the Landlord's consent is required hereunder, specifying the provisions of the proposed subletting or assignment, including (i) the name and address of the proposed subtenant or assignee, (ii) a copy of the proposed subtenant's or assignee's most recent annual financial statement, (iii) all of the terms and provisions upon which the proposed subletting or assignment is to be made. The Tenant shall reimburse the Landlord promptly for reasonable legal and other expenses incurred by the Landlord in connection with any request by the Tenant for consent to any assignment or subletting, in the aggregate amount of up to $5,000.00. If this Lease is assigned, or if the Premises or any part thereof is sublet or occupied by anyone other than the Tenant, the Landlord may, at any time during the continuance of an Event of Default hereunder without cure, collect rent and other charges from the assignee, sublessee or occupant and apply the net amount collected to the rent and other charges herein reserved, but no such assignment, subletting, occupancy or collection shall be deemed a waiver of the prohibitions contained in this Section 6.8 or the acceptance of the assignee, sublessee or occupant as a tenant, or a release of the Tenant from the further performance by the Tenant of covenants on the part of the Tenant herein contained. After deducting reasonable and ordinary sublease transaction expenses (including, without limitation, any broker’s commission, legal fees, architectural and engineering expenses and leasehold improvements), the Tenant shall pay to the Landlord fifty percent (50%) of any amounts the Tenant receives from any subtenant or assignee as rent, additional rent or other forms of compensation or reimbursement other than those which are less than or equal to the then due and payable proportionate monthly share of Annual Fixed Rent, Additional Rent and all other monies due to Landlord pursuant to this Lease (allocable in the case of a sublease to that portion of the Premises being subleased), provided Tenant shall have no obligation to pay such amounts in connection with any Permitted Transfers. The consent by the Landlord to an assignment or subletting shall not be construed to relieve the Tenant from obtaining the express consent in writing of the Landlord to any further assignment or subletting.

Landlord may elect, prior to approving or disapproving any proposed assignment of the Lease or sublease of all of the Premises or an entire floor of the Premises for the remainder of the Term, to repossess the portion of the Premises that was proposed to be subleased or assigned. Landlord shall provide Tenant with written notice of its election to repossess the portion of the Premises that Tenant proposes to sublease or assign within fifteen (15) business days after receipt of notice from Tenant. Landlord may thereafter lease the Premises in such a manner as the Landlord may in its sole discretion determine. In the event Landlord elects to repossess the Premises (or subleased portion thereof) as provided above, then all of the Tenant's rights and obligations hereunder with respect to the Premises (or subleased portion thereof) shall cease and shall be of no further force and effect. The provisions of this paragraph shall not apply to Permitted Transfers.

ARTICLE VII

INDEMNITY AND INSURANCE

Section 7.1 - Indemnity.

(a) To the maximum extent this agreement may be made effective according to law, the Tenant shall defend the Landlord from and against all claims, proceedings, causes of actions and suits brought by third parties (collectively, "Claims") and shall indemnify and hold harmless the Landlord from and against any resultant costs and expenses (including but not limited to reasonable attorneys' fees), losses or liabilities which the Landlord may be required to pay to third parties to the extent the Claim arises from any breach by Tenant of any obligation of Tenant under this Lease or from any act, failure, omission or negligence of the Tenant, or the Tenant's contractors, licensees, invitees, agents, servants or employees, or arising from any accident, injury or damage whatsoever caused to any person or property, occurring after the date that possession of the Premises is first delivered to the Tenant and until the end of the Term and thereafter, so long as the Tenant is in occupancy of any part of the Premises, in or about the Premises or arising from any accident, injury or damage occurring outside the Premises but within the Building, on the Land, on the access roads and ways, in the parking facilities provided pursuant to the Lease, within University Park or any adjacent area maintained by Landlord or any individual or entity affiliated with Landlord, where such accident, injury or damage results, from the negligence or willful misconduct of the Tenant or the Tenant's agents or employees, licensees, invitees, servants or contractors. Notwithstanding the foregoing, the Tenant's obligations under this Section 7.1(a) shall not apply to the extent such Claims arise or result from a matter for which the Landlord is obligated to indemnify the Tenant as set forth in Section 7.1(b).

(b) To the maximum extent this agreement may be made effective according to law, Landlord shall defend the Tenant from and against all Claims and shall indemnify and hold harmless the Tenant from and against any resultant costs and expenses (including but not limited to reasonable attorneys' fees), losses or liabilities which the Tenant may be required to pay to third parties to the extent due to loss of life, bodily or personal injury or property damage, arising from any act, failure, omission, negligence or willful misconduct of Landlord, its agents, employees or contractors which occur in or about the Premises or arising from any accident, injury or damage occurring outside the Premises but within the Building, on the Land, on the access roads and ways, in the parking facilities provided pursuant to the Lease, within University Park or any adjacent area maintained by Landlord or any individual or entity affiliated with Landlord. Notwithstanding the foregoing, the Landlord's obligations under this Section 7.1(b) shall not apply to the extent such Claims arise or result from a matter for which the Tenant is obligated to indemnify Landlord as set forth in Section 7.1(a).

Section 7.2 - Liability Insurance.

Tenant agrees to maintain in full force from the date upon which the Tenant first enters the Premises for any reason, throughout the Term, and thereafter, so long as the Tenant is in occupancy of any part of the Premises, a policy of commercial general liability insurance under which the Landlord (and any individuals or entities affiliated with the Landlord, any ground lessor and any holder of a mortgage on the Property of whom the Tenant is notified by the Landlord) and the

Tenant are named as additional insureds, and under which the insurer provides a contractual liability endorsement insuring against all cost, expense and liability arising out of or based upon any and all claims, accidents, injuries and damages described in Section 7.1, in the broadest form of such coverage from time to time available. Tenant shall deliver to Landlord a certificate of such insurance. The minimum limits of liability of such insurance as of the Commencement Date shall be Five Million Dollars ($5,000,000.00) in the aggregate for combined bodily injury (or death) and damage to property ($3,000,000.00 per occurrence), and from time to time during the Extension Term such limits of liability shall be increased to reflect such higher limits as are customarily required pursuant to new leases of space in the Boston-Cambridge area with respect to similar properties.

Section 7.3 - Personal Property at Risk.

Tenant agrees that all of the furnishings, fixtures, equipment, effects and property of every kind, nature and description of the Tenant and of all persons claiming by, through or under the Tenant which, during the continuance of this Lease or any occupancy of the Premises by the Tenant or anyone claiming under the Tenant which, during the continuance of this Lease or any occupancy of the Premises by the Tenant or anyone claiming under the Tenant, may be on the Premises or elsewhere in the Building or on the Lot or parking facilities provided hereby, shall be at the sole risk and hazard of the Tenant, and if the whole or any part thereof shall be destroyed or damaged by fire, water or otherwise, or by the leakage or bursting of water pipes, steam pipes, or other pipes, by theft or from any other cause, no part of said loss or damage is to be charged to or be borne by the Landlord, except that the Landlord shall in no event be exonerated from any liability to the Tenant or to any person, for any injury, loss, damage or liability to the extent caused by Landlord's, its agents, employees, licensees, invitees, servants or contractors gross negligence or willful misconduct.

Section 7.4 - Landlord's Insurance.

Landlord shall carry such casualty and liability insurance upon and with respect to operations at the Building, as may from time to time be deemed reasonably prudent by the Landlord or required by any mortgagee holding a mortgage thereon or any ground lessor of the Land, and in any event, special form or all-risk property insurance in an amount equal to the replacement value of the Building, exclusive of foundations, site preparation and other nonrecurring construction costs.

Section 7.5 - Waiver of Subrogation.

Any insurance carried by either party with respect to the Building, Land, Premises, parking facilities or any property therein or occurrences thereon shall, without further request by either party, if it can be so written without additional premium, or with an additional premium which the other party elects to pay, include a clause or endorsement denying to the insurer rights of subrogation against the other party to the extent rights have been waived by the insured prior to occurrence of injury or loss. Each party, notwithstanding any provisions of this Lease to the contrary, hereby waives any rights of recovery against the other for injury or loss, including, without limitation, injury or loss caused by negligence of such other party, due to hazards covered

by insurance containing such clause or endorsement to the extent of the indemnification received thereunder or the amount of insurance required to be carried hereunder, whichever is greater.

ARTICLE VIII

CASUALTY AND EMINENT DOMAIN

Section 8.1 - Restoration Following Casualties.

If, during the Term, the Building or Premises shall be damaged by fire or casualty, subject to the exceptions and limitations provided below, the Landlord shall proceed promptly to exercise reasonable efforts to restore the Building or Premises to substantially the condition thereof at the time of such damage, but the Landlord shall not be responsible for delay in such restoration which may result from any External Cause. The Landlord shall have no obligation to expend in the reconstruction of the Building more than the actual amount of the insurance proceeds made available to the Landlord by its insurer and not retained by the Landlord's mortgagee or ground lessor. Any restoration of the Building or the Premises shall be altered to the extent necessary to comply with then current laws and applicable codes.

Section 8.2 - Landlord's Termination Election.

If the Landlord reasonably determines that the amount of insurance proceeds available to the Landlord is insufficient to cover the cost of restoring the Building or if in the reasonable opinion of the Landlord the Building has been so damaged that it is appropriate for the Landlord to raze or substantially alter the Building, then the Landlord may terminate this Lease by giving notice to the Tenant within sixty (60) days after the date of the casualty, provided that Landlord also terminates the leases of all other affected tenants in the Building. Any such termination shall be effective on the date designated in such notice from the Landlord, but in any event, not later than sixty (60) days after such notice, and if no date is specified, effective upon the date of the Casualty or Taking.

Section 8.3 - Tenant's Termination Election.

Unless the Landlord has earlier advised the Tenant of the Landlord's election to terminate this Lease pursuant to Section 8.2, or to restore the Premises (which restoration Landlord has reasonably estimated in written notice to Tenant will take no more than nine (9) months to complete) and maintain this Lease in effect pursuant to Section 8.1, the Tenant shall have the right after the expiration of ninety (90) days after any casualty which materially impairs a material portion of the Premises to give a written notice to the Landlord requiring the Landlord within ten (10) days thereafter to exercise or waive any right of the Landlord to terminate this Lease pursuant to Section 8.2 as a result of such casualty and if the Landlord fails to give timely notice to the Tenant waiving any right under Section 8.2 to terminate this Lease based on such casualty, or if such notice from Landlord indicates that restoration will require more than nine (9) months to complete, the Tenant shall be entitled, within five (5) business days after the expiration of such ten (10) day period, or receipt of notice of such period of restoration, as applicable, to give notice to the Landlord terminating this Lease. Where the Landlord is obligated to exercise reasonable efforts to restore the Premises, unless such restoration is completed within nine (9) months from

the date of the casualty or taking, such period to be subject, however, to extension where the delay in completion of such work is due to External Causes (but in no event beyond nine (9) months from the date of the casualty or taking), the Tenant shall have the right to terminate this Lease at any time after the expiration of such nine-month (as extended) period until the restoration is substantially completed, such termination to take effect as of the date of the Casualty or Taking.

Section 8.4 - Casualty at Expiration of Lease.

If the Premises shall be damaged by fire or casualty in such a manner that the Premises cannot, in the ordinary course, reasonably be expected to be repaired within one hundred and twenty (120) days from the commencement of repair work and such damage occurs within the last eighteen (18) months of the Term (as the same may have been extended prior to such fire or casualty), either party shall have the right, by giving notice to the other not later than sixty (60) days after such damage, to terminate this Lease, whereupon this Lease shall terminate as of the date of such Casualty.

Section 8.5 - Eminent Domain.

Except as hereinafter provided, if the Premises, or such portion thereof as to render the balance (if reconstructed to the maximum extent practicable in the circumstances) unsuitable for the Tenant's purposes, shall be taken by condemnation or right of eminent domain, the Landlord or the Tenant shall have the right to terminate this Lease by notice to the other of its desire to do so, provided that such notice is given not later than thirty (30) days after the effective date of such taking. If so much of the Building shall be so taken that the Landlord determines that it would be appropriate to raze or substantially alter the Building, the Landlord shall have the right to terminate this Lease by giving notice to the Tenant of the Landlord's desire to do so not later than thirty (30) days after the effective date of such taking.

Should any part of the Premises be so taken or condemned during the Term, and should this Lease be not terminated in accordance with the foregoing provisions, the Landlord agrees to use reasonable efforts to put what may remain of the Premises into proper condition for use and occupation as nearly like the condition of the Premises prior to such taking as shall be practicable, subject, however, to applicable laws and codes then in existence and to the availability of sufficient proceeds from the eminent domain taking not retained by any mortgagee or ground lessor.

Section 8.6 - Rent After Casualty or Taking.

If the Premises shall be damaged by fire or other casualty, except as provided below, the Annual Fixed Rent and Additional Rent shall be justly and equitably abated and reduced according to the nature and extent of the loss of use thereof suffered by the Tenant, from and after the date of the Casualty or Taking until the Premises shall be restored to substantially the same condition as immediately prior to such Casualty or Taking. In the event of a taking which permanently reduces the area of the Premises, a just proportion of the Annual Fixed Rent shall be abated for the remainder of the Term.

Section 8.7 - Taking Award.

Except as otherwise provided in Section 8.7, the Landlord shall have and hereby reserves and accepts, and the Tenant hereby grants and assigns to the Landlord, all rights to recover for damages to the Building and the Land, and the leasehold interest hereby created, and to compensation accrued or hereafter to accrue by reason of such taking, damage or destruction, as aforesaid, and by way of confirming the foregoing, the Tenant hereby grants and assigns to the Landlord, all rights to such damages or compensation. Nothing contained herein shall be construed to prevent the Tenant from prosecuting in any condemnation proceedings a claim for relocation expenses, provided that such action shall not affect the amount of compensation otherwise recoverable by the Landlord from the taking authority pursuant to the preceding sentence.

ARTICLE IX

DEFAULT

Section 9.1 - Tenant's Default.

Each of the following shall constitute an Event of Default:

(a) Failure on the part of the Tenant to pay the Annual Fixed Rent, Additional Rent or other charges for which provision is made herein on or before the date on which the same become due and payable, if such condition continues for five (5) business days after written notice that the same are due; provided, however if Tenant shall fail to pay any of the foregoing (after receipt by Tenant of written notice from Landlord) when due two (2) times in any period of twelve (12) consecutive months, then Landlord shall not be required to give notice to Tenant of any future failure to pay during the remainder of the Term and any extension thereof, and such failure shall thereafter constitute an Event of Default if not cured within five (5) business days after the same are due.

(b) Failure on the part of the Tenant to perform or observe any other term or condition contained in this Lease if the Tenant shall not cure such failure within thirty (30) days after written notice from the Landlord to the Tenant thereof, provided that in the case of breaches of obligations under this Lease which are susceptible to cure but cannot be cured within thirty (30) days through the exercise of due diligence, so long as the Tenant commences such cure within thirty (30) days, such breach remains susceptible to cure, and the Tenant diligently pursues such cure, such breach shall not be deemed to create an Event of Default.

(c) The taking of the estate hereby created on execution or by other process of law; or a judicial declaration that the Tenant is bankrupt or insolvent according to law; or any assignment of the property of the Tenant for the benefit of creditors; or the appointment of a receiver, guardian, conservator, trustee in bankruptcy or other similar officer to take charge of all or any substantial part of the Tenant's property by a court of competent jurisdiction; or the filing of an involuntary petition against the Tenant under any provisions of the bankruptcy act now or hereafter enacted if the same is not dismissed within ninety (90) days; the filing by the Tenant of any

voluntary petition for relief under provisions of any bankruptcy law now or hereafter enacted.

If an Event of Default shall occur and be continuing without cure, then, in any such case, whether or not the Term shall have begun, the Landlord lawfully may, immediately or at any time thereafter, give written notice to the Tenant specifying the Event of Default and this Lease shall come to an end on the date specified therein as fully and completely as if such date were the date herein originally fixed for the expiration of the Lease Term, and the Tenant will then quit and surrender the Premises to the Landlord, but the Tenant shall remain liable as hereinafter provided.

Section 9.2 - Damages.

In the event that this Lease is terminated, the Tenant covenants to pay to the Landlord forthwith on the Landlord's demand, as compensation, an amount (the Lump Sum Payment) equal to the excess, if any, of the discounted present value of the total rent reserved for the remainder of the Term over the then discounted present fair rental value of the Premises for the remainder of the Term. In calculating the rent reserved, there shall be included, in addition to the Annual Fixed Rent and all Additional Rent, the value of all other considerations agreed to be paid or performed by the Tenant over the remainder of the Term. In calculating the amounts to be paid by the Tenant under the foregoing covenant, the Tenant shall be credited with the net proceeds of any rent obtained by reletting the Premises, after deducting all the Landlord's expenses in connection with such reletting, including, without limitation, all repossession costs, brokerage commissions, fees for legal services and expenses of preparing the Premises for such reletting and Landlord shall use commercially reasonable efforts to relet the Premises. The Landlord shall use commercially reasonable efforts to relet the Premises, or any part or parts thereof, for a term or terms which may, at the Landlord's option, exceed or be equal to or less than the period which would otherwise have constituted the balance of the Term, and may grant such concessions and free rent as the Landlord in its reasonable commercial judgment considers advisable or necessary to relet the same and shall make such alterations, repairs and improvements in the Premises as the Landlord in its reasonable commercial judgment considers advisable or necessary to relet the same. No action of the Landlord in accordance with foregoing or failure to relet or to collect rent under reletting shall operate to release or reduce the Tenant's liability except as provided herein. The Landlord shall be entitled to seek to rent other properties of the Landlord prior to reletting the Premises.

Section 9.3 - Cumulative Rights.

The specific remedies to which the Landlord may resort under the terms of this Lease are cumulative and are not intended to be exclusive of any other remedies or means of redress to which it may be lawfully entitled in case of any breach or threatened breach by the Tenant of any provisions of this Lease. In addition to the other remedies provided in this Lease, the Landlord shall be entitled to the restraint by injunction of the violation or attempted or threatened violation of any of the covenants, conditions or provisions of this Lease or to a decree compelling specific performance of any such covenants, conditions or provisions. Nothing contained in this Lease shall limit or prejudice the right of the Landlord to prove for and obtain in proceedings for bankruptcy, insolvency or like proceedings by reason of the termination of this Lease, an amount equal to the maximum allowed by any statute or rule of law in effect at the time when, and

governing the proceedings in which, the damages are to be proved, whether or not the amount be greater, equal to, or less than the amount of the loss or damages referred to above.

Section 9.4 - Landlord's Self-help.

If the Tenant shall at any time default in the performance of any obligation under this Lease, the Landlord shall have the right, but not the obligation, after any applicable cure period and upon reasonable, but in no event more than ten (10) days', notice to the Tenant (except in case of emergency in which case no notice need be given), to perform such obligation. The Landlord may exercise its rights under this Section without waiving any other of its rights or releasing the Tenant from any of its obligations under this Lease.

Section 9.5 - Enforcement Expenses; Litigation.

In the event that either party prevails in litigation commenced to enforce any right or obligation hereunder, such party shall be entitled to recover from the other party all reasonable costs and expenses incurred by such party in connection with the litigation.

If either party hereto be made or becomes a party to any litigation commenced by or against the other party by or against a third party, or incurs costs or expenses related to such litigation, involving any part of the Property and the enforcement of any of the rights, obligations or remedies of such party, then the party becoming involved in any such litigation because of a claim against such other party hereto shall receive from such other party hereto all costs and reasonable attorneys' fees incurred by such party in such litigation.

Section 9.6 - Interest on Overdue Payments.

Any Annual Fixed Rent and Additional Rent not paid within any applicable grace period shall bear interest from the date due to the Landlord until paid at the variable rate (the "Default Interest Rate") equal to the higher of (i) the rate at which interest accrues on amounts not paid when due under the terms of the Landlord's financing for the Building, as from time to time in effect, and (ii) one and one-half percent (1.5%) per month.

Section 9.7 - Landlord's Right to Notice and Cure.

Landlord shall in no event be in default in the performance of any of the Landlord's obligations hereunder unless and until the Landlord shall have failed to perform such obligations within thirty (30) days after notice by the Tenant to the Landlord expressly specifying wherein the Landlord has failed to perform any such obligation, provided that in the case of breaches of obligations under this Lease which are susceptible to cure but cannot be cured within thirty (30) days through the exercise of due diligence, so long as the Landlord commences such cure within thirty (30) days, such breach remains susceptible to cure, and the Landlord diligently pursues such cure, such breach shall not be deemed an event of default under this Agreement. In the event of a breach or default of this Agreement by the Landlord, Tenant shall be afforded any and all rights and remedies afforded at law or in equity.

ARTICLE X

MORTGAGEES' AND GROUND LESSORS' RIGHTS

Section 10.1 - Subordination.

This Lease shall, at the election of the holder of any mortgage or ground lease on the Property, be subject and subordinate to any and all mortgages or ground leases on the Property, so that the lien of any such mortgage or ground lease shall be superior to all rights hereby or hereafter vested in the Tenant. Notwithstanding the foregoing, Tenant's rights under this Lease and use and enjoyment of the Premises shall not be disturbed by any such mortgagee or ground lessor so long as there is no uncured Event of Default, and, as a condition to any obligation to subordinate this Lease, Tenant shall be entitled to receive executed agreements from same to such effect.

Section 10.2 - Prepayment of Rent not to Bind Mortgagee.

No Annual Fixed Rent, Additional Rent, or any other charge payable to the Landlord shall be paid more than thirty (30) days prior to the due date thereof under the terms of this Lease and payments made in violation of this provision shall (except to the extent that such payments are actually received by a mortgagee or ground lessor) be a nullity as against such mortgagee or ground lessor and the Tenant shall be liable for the amount of such payments to such mortgagee or ground lessor.

Section 10.3 - Tenant's Duty to Notify Mortgagee; Mortgagee's Ability to Cure.

No act or failure to act on the part of the Landlord which would entitle the Tenant under the terms of this Lease, or by law, to be relieved of the Tenant's obligations to pay Annual Fixed Rent or Additional Rent hereunder or to terminate this Lease, shall result in a release or termination of such obligations of the Tenant or a termination of this Lease unless (i) the Tenant shall have first given written notice of the Landlord's act or failure to act to the Landlord's mortgagees or ground lessors of record, if any, of whose identity and address the Tenant shall have been given notice, specifying the act or failure to act on the part of the Landlord which would give basis to the Tenant's rights; and (ii) such mortgagees or ground lessors, after receipt of such notice, have failed or refused to correct or cure the condition complained of within a reasonable time thereafter, which shall include a reasonable time for such mortgagee or ground lessors, but in no event more than thirty (30) days after receipt of such notice, to obtain possession of the Property if possession is necessary for the mortgagee or ground lessor to correct or cure the condition and if the mortgagee or ground lessor notifies the Tenant of its intention to take possession of the Property and correct or cure such condition.

Section 10.4 - Estoppel Certificates.

Tenant shall from time to time, upon not less than fifteen (15) days' prior written request by the Landlord, execute, acknowledge and deliver to the Landlord a statement in writing certifying to the Landlord or an independent third party, with a true and correct copy of this Lease attached thereto, to the extent such statements continue to be true and accurate, (i) that this Lease is unmodified and in full force and effect (or, if there have been any modifications, that the same is in full force and effect as modified and stating the modifications); (ii) that the Tenant has no

knowledge of any defenses, offsets or counterclaims against its obligations to pay the Annual Fixed Rent and Additional Rent and to perform its other covenants under this Lease (or if there are any defenses, offsets, or counterclaims, setting them forth in reasonable detail); (iii) that there are no known uncured defaults of the Landlord or the Tenant under this Lease (or if there are known defaults, setting them forth in reasonable detail); (iv) the dates to which the Annual Fixed Rent, Additional Rent and other charges have been paid; (v) that the Tenant has accepted, is satisfied with, and is in full possession of the Premises, including all improvements, additions and alterations thereto required to be made by Landlord under the Lease; (vi) that the Landlord has satisfactorily complied with all of the requirements and conditions precedent to the commencement of the Term of the Lease as specified in the Lease; (vii) that the Tenant has been in occupancy since the Commencement Date and paying rent since the specified dates; (viii) that no monetary or other considerations, including, but not limited to, rental concessions for Landlord, special tenant improvements or Landlord's assumption of prior lease obligations of Tenant have been granted to Tenant by Landlord for entering into Lease, except as specified; (ix) that Tenant has no notice of a prior assignment, hypothecation, or pledge of rents or of the Lease; (x) that the Lease represents the entire agreement between Landlord and Tenant; and (xi) such other statements of fact with respect to the Tenant and this Lease as the Landlord may reasonably request. On the Commencement Date, the Tenant shall, at the request of the Landlord, promptly execute, acknowledge and deliver to the Landlord a statement in writing that the Commencement Date has occurred, that the Annual Fixed Rent has begun to accrue and that the Tenant has taken occupancy of the Premises. Any statement delivered pursuant to this Section may be relied upon by any prospective purchaser, mortgagee or ground lessor of the Premises and shall be binding on the Tenant.

Landlord shall from time to time, upon not less than fifteen (15) days' prior written request by the Tenant, execute, acknowledge and deliver to the Tenant a statement in writing certifying to the Tenant or an independent third party, with a true and correct copy of this Lease attached thereto, to the extent such statements continue to be true and accurate (i) that this Lease is unmodified and in full force and effect (or, if there have been any modifications, that the same is in full force and effect as modified and stating the modifications); (ii) that the Landlord has no knowledge of any defenses, offsets or counterclaims against its obligations to perform its covenants under this Lease (or if there are any defenses, offsets, or counterclaims, setting them forth in reasonable detail); (iii) that there are no known uncured defaults of the Tenant or the Landlord under this Lease (or if there are known defaults, setting them forth in reasonable detail); (iv) the dates to which the Annual Fixed Rent, Additional Rent and other charges have been paid, and (v) that the Tenant is in full possession of the Premises, including all improvements, additions and alterations thereto required to be made by Landlord under the Lease; (vi) that the Tenant has satisfactorily complied with all of the requirements and conditions precedent to the commencement of the Term of the Lease as specified in the Lease; (vii) that the Tenant has been in occupancy since the Commencement Date and paying rent since the specified dates; (viii) that no monetary or other considerations, including, but not limited to, rental concessions for Landlord, special tenant improvements or Landlord’s assumption of prior lease obligations of Tenant have been granted to Tenant by Landlord for entering into the Lease, except as specified; (ix) such other statements of fact with respect to the Tenant and this Lease as the Tenant may reasonably request. Any statement delivered pursuant to this Section may be relied upon by any prospective lender of Tenant, any prospective assignee or subtenant of Tenant or any prospective purchaser of Tenant or Tenant’s assets, and shall be binding on the Landlord.

ARTICLE XI

MISCELLANEOUS

Section 11.1 - Notice of Lease.

Tenant agrees not to record this Lease, but upon request of either party, both parties shall execute and deliver a memorandum of this Lease in form appropriate for recording or registration, an instrument acknowledging the Commencement Date of the Term, and if this Lease is terminated before the Term expires, an instrument in such form acknowledging the date of termination.

Section 11.2 - Notices.

Whenever any notice, approval, consent, request, election, offer or acceptance is given or made pursuant to this Lease, it shall be in writing. Communications and payments shall be addressed, if to the Landlord, at the Landlord's Address for Notices as set forth in Exhibit A or at such other address as may have been specified by prior notice to the Tenant; and if to the Tenant, at the Tenant's Address for Notices or at such other place as may have been specified by prior notice to the Landlord. Any communication so addressed shall be deemed duly given on the earlier of (i) the date received or (ii) on the third business day following the day of mailing if mailed by registered or certified mail, return receipt requested. If the Landlord by notice to the Tenant at any time designates some other person to receive payments or notices, all payments or notices thereafter by the Tenant shall be paid or given to the agent designated until notice to the contrary is received by the Tenant from the Landlord.

Section 11.3 - Authority.

Landlord represents and warrants that the individual executing this Lease on behalf of Landlord is duly authorized to execute and deliver this Lease on behalf of said entity, that said entity is duly authorized to enter into this Lease, and that this Lease is enforceable against said entity in accordance with its terms.

Tenant represents and warrants that the individual executing this Lease on behalf of Tenant is duly authorized to execute and deliver this Lease on behalf of said entity, that said entity is duly authorized to enter into this Lease, and that this Lease is enforceable against said entity in accordance with its terms.

Section 11.4 - Successors and Limitation on Liability on the Landlord.

The obligations of this Lease shall run with the land, and this Lease shall be binding upon and inure to the benefit of the parties hereto and their respective successors and assigns, except that the original Landlord named herein and each successor Landlord shall be liable only for obligations accruing during the period of its ownership. The obligations of the Landlord shall be binding upon the assets of the Landlord consisting of an equity ownership of the Property, including, without limitation, its interest under the Ground Lease (and including any proceeds realized from the sale of such Property) but not upon other assets of the Landlord and neither the Tenant, nor anyone claiming by, under or through the Tenant, shall be entitled to obtain any

judgment creating personal liability on the part of the Landlord or enforcing any obligations of the Landlord against any assets of the Landlord other than an equity ownership of the Property.

Section 11.5 - Waivers by the Landlord.

The failure of the Landlord or the Tenant to seek redress for violation of, or to insist upon strict performance of, any covenant or condition of this Lease, shall not be deemed a waiver of such violation nor prevent a subsequent act, which would have originally constituted a violation, from having all the force and effect of an original violation. The receipt by the Landlord of Annual Fixed Rent or Additional Rent with knowledge of the breach of any covenant of this Lease shall not be deemed a waiver of such breach. In the event of a breach or default of this Agreement by Landlord, any decision not to terminate this Lease shall not be deemed a waiver of such breach by Tenant. No provision of this Lease shall be deemed to have been waived by the Landlord or the Tenant, as the case may be, unless such waiver is in writing signed by the Landlord or the Tenant, as the case may be. No consent or waiver, express or implied, by the Landlord or Tenant to or of any breach of any agreement or duty shall be construed as a waiver or consent to or of any other breach of the same or any other agreement or duty.

Section 11.6 - Acceptance of Partial Payments of Rent.

No acceptance by the Landlord of a lesser sum than the Annual Fixed Rent and Additional Rent then due shall be deemed to be other than a partial installment of such rent due, nor shall any endorsement or statement on any check or any letter accompanying any check or payment as rent be deemed an accord and satisfaction, and the Landlord may accept such check or payment without prejudice to the Landlord's right to recover the balance of such installment or pursue any other remedy in this Lease provided. The delivery of keys to any employee of the Landlord or to the Landlord's agent or any employee thereof shall not operate as a termination of this Lease or a surrender of the Premises.

Section 11.7 - Interpretation and Partial Invalidity.

If any term of this Lease, or the application thereof to any person or circumstances, shall to any extent be invalid or unenforceable, the remainder of this Lease, or the application of such term to persons or circumstances other than those as to which it is invalid or unenforceable, shall not be affected thereby, and each term of this Lease shall be valid and enforceable to the fullest extent permitted by law. The titles of the Articles are for convenience only and not to be considered in construing this Lease. This Lease contains all of the agreements of the parties with respect to the subject matter thereof and supersedes all prior dealings between them with respect to such subject matter.

Section 11.8 - Quiet Enjoyment.

So long as no Event of Default remains uncured, the Tenant shall peaceably and quietly have, hold and enjoy the Premises free of any claims by, through or under the Landlord.

Section 11.9 - Brokerage.

Each party represents and warrants to the other that it has had no dealings with any broker or agent in connection with this Lease other than JLL and Transwestern/RBJ ("Acknowledged Brokers") and shall indemnify and hold harmless the other from claims for any brokerage commission to a broker other than the Acknowledged Brokers arising out of the other party's actions.

Section 11.10 - Surrender of Premises and Holding Over.

(a) The Tenant shall surrender possession of the Premises on the last day of the Term and the Tenant waives the right to any notice of termination or notice to quit. The Tenant covenants that upon the expiration or sooner termination of this Lease, it shall, without notice, deliver up and surrender possession of the Premises in the same condition in which the Tenant has agreed to keep the same during the continuance of this Lease and in accordance with the terms hereof, normal wear and tear and damage by fire or other casualty excepted, first removing therefrom all goods and effects of the Tenant and any leasehold improvements Landlord specified for removal pursuant to Section 4.2, and repairing all damage caused by such removal. Upon the expiration of this Lease or if the Premises should be abandoned by the Tenant, or this Lease should terminate for any cause, and at the time of such expiration, abandonment or termination, the Tenant or Tenant's agents, subtenants or any other person should leave any property of any kind or character on or in the Premises, the fact of such leaving of property on or in the Premises shall be conclusive evidence of intent by the Tenant, and individuals and entities deriving their rights through the Tenant, to abandon such property so left in or upon the Premises, and such leaving shall constitute abandonment of the property. Landlord shall have the right and authority without notice to the Tenant or anyone else, to remove and destroy, or to sell or authorize disposal of such property, or any part thereof, without being in any way liable to the Tenant therefor and the proceeds thereof shall belong to the Landlord as compensation for the removal and disposition of such property.

If the Tenant fails to surrender possession of the Premises upon the expiration or sooner termination of this Lease, the Tenant shall pay to Landlord, as rent for any period after the expiration or sooner termination of this Lease an amount equal to one hundred fifty percent (150%) of the Annual Fixed Rent and the Additional Rent required to be paid under this Lease as applied to any period in which the Tenant shall remain in possession. Acceptance by the Landlord of such payments shall not constitute a consent to a holdover hereunder or result in a renewal or extension of the Tenant's rights of occupancy. Such payments shall be in addition to and shall not affect or limit the Landlord's right of re-entry, Landlord's right to collect such damages as may be available at law, or any other rights of the Landlord under this Lease or as provided by law.

(b) Prior to the expiration of the 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 and plumbing in or serving the Premises, and all exhaust or other ductwork in or serving the Premises, in each case that has carried, released or otherwise been exposed to any Hazardous Material due to Tenant's use or occupancy of the Premises, and shall otherwise clean the Premises so as to permit the report hereinafter called for by this Section 11.10 to be issued. Prior to the expiration of this Lease (or within thirty 30 days after any earlier termination), Tenant, at Tenant's expense, shall obtain for Landlord a report addressed to Landlord (and, at Tenant's election, Tenant) by a reputable licensed

environmental engineer or industrial hygienist that is designated by Tenant and acceptable to Landlord in Landlord's reasonable discretion, which report shall be based on the environmental engineer's or industrial hygienist's inspection of the Premises and shall state, to the Landlord's reasonable satisfaction, that (a) the Hazardous Materials described in the first sentence of this paragraph, to the extent if any, existing prior to such decommissioning, have been removed in accordance with applicable laws; (b) all Hazardous Materials described in the first sentence of this paragraph, if any, have been removed in accordance with applicable laws from the interior surfaces of the Premises (including floors, walls, ceilings, and counters), piping, supply lines, waste lines and plumbing, and all such exhaust or other ductwork in the Premises, may be re-used by a subsequent tenant or disposed of in compliance with applicable laws without incurring special costs or undertaking special procedures for demolition, disposal, investigation, assessment, cleaning or removal of such Hazardous Materials and without giving notice in connection with such Hazardous Materials; and (c) the Premises may be re-occupied for office or laboratory use, demolished or renovated without incurring special costs or undertaking special procedures for disposal, investigation, assessment, cleaning or removal of Hazardous Materials described in the first sentence of this paragraph and without giving notice in connection with Hazardous Materials. Further, for purposes of clauses (b) and (c), "special costs" or "special procedures" shall mean costs or procedures, as the case may be, that would not be incurred but for the nature of the Hazardous Materials as Hazardous Materials instead of non-hazardous materials. The report shall also include reasonable detail concerning the clean-up measures taken, the clean-up locations, the tests run and the analytic results.

If Tenant fails to perform its obligations under this Section 11.10, without limiting any other right or remedy, Landlord may, on five (5) business days' prior written notice to Tenant perform such obligations, at Tenant's expense, and Tenant shall, within ten (10) days of demand, reimburse Landlord for all reasonable out-of-pocket costs and expenses incurred by Landlord in connection with such work. Tenant's obligations under this Section 11.10 shall survive the expiration or earlier termination of this Lease. In addition, at Landlord's election, Landlord may inspect the Premises and/or Property for Hazardous Materials at Landlord's cost and expenses, within sixty (60) days of Tenant's surrender of the Premises at the expiration or earlier termination of this Lease. Tenant shall pay for all such costs and expenses incurred by Landlord in connection with such inspection if such inspection reveals that a release or threat of release of Hazardous Materials exists at the Property or Premises as a result of the acts or omission of Tenant, its officers, employees, contractors, and agents (except to the extent resulting from the acts or omissions of Landlord or Landlord's agents, employees or contractors).

Section 11.11 - Ground Lease.

This Lease is in all respects subject to the ground lease (the "Ground Lease") between the Landlord as lessee and Massachusetts Institute of Technology ("MIT") as lessor dated as of December 15, 1997, as amended. If any provision of the Ground Lease shall be inconsistent with the provisions of this Lease, the provisions of the Ground Lease shall be deemed to limit the provisions hereof, except as are expressly otherwise provided in a written agreement signed by MIT, the Landlord and the Tenant, the form of which is attached hereto as Exhibit I.

Section 11.12 - Security Deposit.

(a) Letter of Credit.

Concurrent with the execution and delivery of this Lease, Tenant has delivered to Landlord as security for the performance of the obligations of Tenant hereunder a cash deposit or a letter of credit in the amount specified in Exhibit A in accordance with this Section (as renewed, replaced, increased and/or reduced pursuant to this Section, the "Letter of Credit"). The Letter of Credit shall be in the form attached as Exhibit G to this Lease or such other form as Landlord may reasonably approve. If there is more than one Letter of Credit so delivered by Tenant, such Letters of Credit shall be collectively hereinafter referred to as the "Letter of Credit". The Letter of Credit (i) shall be irrevocable and shall be issued by a commercial bank reasonably acceptable to Landlord, (ii) shall require only the presentation to the issuer of a certificate of the holder of the Letter of Credit stating either (a) that a default has occurred under this Lease after the expiration of any applicable notice and cure period (or stating that transmittal of a default notice is barred by applicable bankruptcy or other law if such is the case) or (b) stating that Tenant has not delivered to Landlord a new Letter of Credit having a commencement date immediately following the expiration of the existing Letter of Credit in accordance with the requirements of the Lease, (iii) shall be payable to Landlord and its successors in interest as the Landlord and shall be freely transferable without cost to any such successor or any lender holding a collateral assignment of Landlord's interest in the Lease, (iv) shall be for an initial term of not less than one year and contain a provision that such term shall be automatically renewed for successive one-year periods unless the issuer shall, at least thirty (30) days prior to the scheduled expiration date, give Landlord written notice of such nonrenewal, and (v) shall otherwise be in form and substance reasonably acceptable to Landlord. Notwithstanding the foregoing, the term of the Letter of Credit for the final period of the Term shall be for a term ending not earlier then the date sixty (60) days after the last day of the Term.

If Tenant shall be in default under the Lease, after the expiration of any applicable notice or cure period (or if transmittal of a default or other notice is stayed or barred by applicable bankruptcy or other law), Landlord shall be entitled to draw upon the Letter of Credit to the extent reasonably necessary to cure such default. If, not less than thirty (30) days before the scheduled expiration of the Letter of Credit, Tenant has not delivered to Landlord a new Letter of Credit having a commencement date immediately following the expiration of the existing Letter of Credit in accordance with this Section (an "LC Renewal Default"), Landlord shall also have the right to draw upon the full amount of the Letter of Credit without giving any further notice to Tenant and shall hold such amounts as a cash security deposit hereunder. Landlord may, but shall not be obligated to, apply the amount so drawn to the extent necessary to cure Tenant's default under the Lease. Any funds drawn by Landlord on the Letter of Credit and not applied against amounts due hereunder shall be held by Landlord as a cash security deposit, provided that Landlord shall have no fiduciary duty with regard to such amounts, shall have the right to commingle such amounts with other funds of Landlord, and shall pay no interest on such amounts. After any application of the Letter of Credit by Landlord in accordance with this paragraph, Tenant shall reinstate the Letter of Credit to the amount then required to be maintained hereunder, within thirty (30) days of demand (unless Landlord has drawn the full amount of the Letter of Credit for an LC Renewal Default in which case Tenant shall have no obligation to provide a Letter of Credit in addition to such cash security deposit). Within sixty (60) days after the expiration or earlier termination of the Term the Letter of Credit and any cash security deposit then being held by Landlord, to the

extent not applied, shall be returned to the Tenant provided that no Event of Default is then continuing.

If, after the second (2nd) anniversary of the Rent Commencement Date, there has been no Event of Default by Tenant under the Lease in the payment of Annual Fixed Rent or Additional Rent during the previous two (2) year period and no Event of Default by Tenant (for which notice has been given) exists as of such anniversary, then (i) the amount of the Security Deposit shall be reduced by Five Hundred Thousand Dollars ($500,000.00), (ii) Tenant shall provide a substitute Letter of Credit for the reduced amount and (iii) Landlord shall simultaneously return the original Letter of Credit held by Landlord (or Landlord shall pay such reduction amount to Tenant within ten (10) days if Landlord holds a cash security deposit). If, after the sixth (6th) anniversary of the Rent Commencement Date, there has not been more than one (1) Event of Default by Tenant under the Lease in the payment of Annual Fixed Rent or Additional Rent during the first two (2) years of the Term, nor has there been any Event of Default by Tenant under the Lease in the payment of Annual Fixed Rent or Additional Rent during the third (3rd), fourth (4th), fifth (5th) and sixth (6th) years of the Term, and no Event of Default by Tenant (for which notice has been given) exists as of such anniversary, then (a) the amount of the Security Deposit shall be reduced by Five Hundred Thousand Dollars ($500,000.00), (b) Tenant shall provide a substitute Letter of Credit for the reduced amount and (c) Landlord shall simultaneously return the original Letter of Credit held by Landlord (or Landlord shall pay such reduction amount to Tenant within ten (10) days if Landlord holds a cash security deposit).

(b) Pledge.

The Landlord may pledge its right and interest in and to the cash deposit or Letter of Credit to any mortgagee or ground lessor and, in order to perfect such pledge, have such cash deposit or Letter of Credit held in escrow by such mortgagee or ground lessee or grant such mortgagee or ground lessee a security interest therein. In connection with any such pledge or grant of security interest by the Landlord to a mortgagee or ground lessee ("Pledgee"), Tenant covenants and agrees to cooperate as reasonably requested by the Landlord, in order to permit the Landlord to implement the same on terms and conditions reasonably required by such Pledgee.

(c) Transfer of Security Deposit.

In the event of a sale or other transfer of the Building or transfer of this Lease, Landlord shall transfer the cash deposit or Letter of Credit to the transferee, and Landlord shall thereupon be released by Tenant from all liability for the return of such security. The provisions hereof shall apply to every transfer or assignment made of the security to such a transferee. Tenant further covenants that it will not assign or encumber or attempt to assign or encumber the Letter of Credit or the proceeds thereof, and that neither Landlord nor its successors or assigns shall be bound by any assignment, encumbrance, attempted assignment or attempted encumbrance.

Section 11.13 - Financial Reporting.

Tenant shall from time to time (but not more often than annually), upon Landlord's written request, provide Landlord with financial statements of Tenant, together with related statements of Tenant's operations for Tenant's most recent fiscal year then ended, certified by an

independent certified public accounting firm. Such delivery shall be subject to Landlord's execution of Tenant's standard form of confidentiality agreement.

Section 11.14 - Cambridge Employment Plan.

Tenant agrees to sign an agreement with the Employment and Training Agency designated by the City Manager of the City of Cambridge as provided in subsections (a)-(g) of Section 24-4 of Ordinance Number 1005 of the City of Cambridge, adopted April 23, 1984.

Section 11.15 - Parking and Transportation Demand Management.

Tenant covenants and agrees to work cooperatively with Landlord to develop a parking and transportation demand management ("PTDM") program that comprises part of a comprehensive PTDM for University Park, provided that such cooperation shall be at no expense to Tenant. In connection therewith, the use of single occupant vehicle commuting will be discouraged and the use of alternative modes of transportation and/or alternative work hours will be promoted. Without limitation of the foregoing, Tenant agrees that its PTDM program (and Tenant will require in any sublease or occupancy agreement permitting occupancy in the Premises that such occupant's PTDM program) will include offering a subsidized MBTA transit pass, either constituting a full subsidy or a subsidy in an amount equal to the maximum deductible amount therefore allowed under the federal tax code, to any employee working in the Premises requesting one. Tenant agrees to comply with the traffic mitigation measures required by the City of Cambridge, and Tenant shall otherwise comply with all legal requirements of the City of Cambridge pertaining thereto.

Section 11.16 - Solvent Storage; Other Storage.

Landlord shall manage the allocation of solvent storage quantities for tenants in the Building. In addition to Tenant's pro-rata share of the Building's allowable solvent storage quantities as set forth in Exhibit E-l, Tenant shall have the right to store a total of up to four hundred eighty (480) gallons of liquid solvents in the 276 rsf control room area on the first floor of the Premises. Additionally, Tenant shall have the right to build two (2) additional control areas for storage of liquid solvents in the portion of the Premises located on the first floor or third floor of the Building (the "Chemical Storage Rooms"). Tenant shall be responsible for the cost to design and construct the Chemical Storage Rooms which may be paid for with the Leasehold Improvements Allowance. All solvent storage by Tenant shall be subject to Tenant receiving the necessary governmental approvals. Landlord shall make commercially reasonable efforts to assist in Tenant's pursuit of securing such approvals. Additional storage may be available in space adjacent to the loading area or in a caged area on the loading dock.

[Remainder of page intentionally left blank.]

IN WITNESS WHEREOF, this Lease has been executed and delivered as of the date first above written as a sealed instrument.

LANDLORD:

UP 45/75 SIDNEY STREET, LLC
a Delaware limited liability company

By: /s/ Michael Farley
Name: Michael Farley
Title: Vice President

TENANT:

BLUEPRINT MEDICINES CORPORATION,
a Delaware corporation

By: /s/ Jeffrey W. Albers
Name: Jeffrey W. Albers
Title: Chief Executive Officer and President

EXHIBIT A

BASIC LEASE TERMS

Premises:	The Premises shall be comprised of approximately 99,833 rentable square feet as follows: Floor 5: 29,887 rsf Floor 4: 30,101 rsf Floor 3: 30,816 rsf Floor 1: 8,753 rsf Floor 1: 276 rsf (dock storage space)
Commencement Date:	The date Landlord delivers the Premises to Tenant with the current Tenant vacated and the Landlord's Work (as defined in Section 2.1) substantially complete.
Scheduled Commencement Date:	June 1, 2017
Rent Commencement Date:	The earlier to occur of (i) Tenant's occupancy of any part of the Premises for business purposes, or (ii) the later of (A) October 1, 2017, and (B) one hundred twenty (120) days after the Commencement Date.
Annual Fixed Rent for the Term:	$77.00 per rsf as adjusted per the terms of Section 3.1 hereof.
Initial Term:	Commencing on the Rent Commencement Date and expiring 146 months from the first day of the first full month commencing on or after the Rent Commencement Date.
Security Deposit:	$3,500,000.00, subject to reduction as set forth in Section 11.12(a) of the Lease.
Landlord's Address for Notices:	Forest City Commercial Group, Inc. 1360 Terminal Tower 50 Public Square Cleveland, Ohio 44113 Attention: General Counsel With a copy to: Forest City Commercial Management, Inc. 38 Sidney Street Cambridge, Massachusetts 02139-4234 Attention: Asset Manager

Parking Privileges:	Commencing sixty (60) days after the Rent Commencement Date and continuing through the Term, Tenant shall be entitled to use and shall pay for 1.5 parking passes per 1,000 rsf (which shall initially be equal to one hundred fifty (150) parking passes) in accordance with Section 2.4 of the Lease. Subject to availability, Tenant shall have the right to lease additional parking spaces from Landlord; such lease for additional parking spaces shall be on a month-to-month basis at the then-prevailing fair market value for such parking spaces.
Permitted Uses:	General business and administrative offices, laboratory biotechnology research, animal experimentation (and vivarium uses) and customary accessory uses supporting the foregoing, as set forth in Section 6.1 of the Lease.
Tenant's Address for Notices:	Blueprint Medicines Corporation 38 Sidney Street, Suite 200 Cambridge, MA 02139-4234 Attention: Legal Department With a copy to (which shall not constitute notice): Goodwin Procter LLP 100 Northern Avenue Boston, MA 02210 Attention: Kingsley Taft, Esq.
Leasehold Improvements Allowance:	$142.25 per rsf or $14,201,244.25
Total Rentable Floor Area of Building:	277,174 rsf

[Remainder of page intentionally left blank.]

Exhibit B – Floor Plan Showing Premises
Floor 1

45 Sidney Street

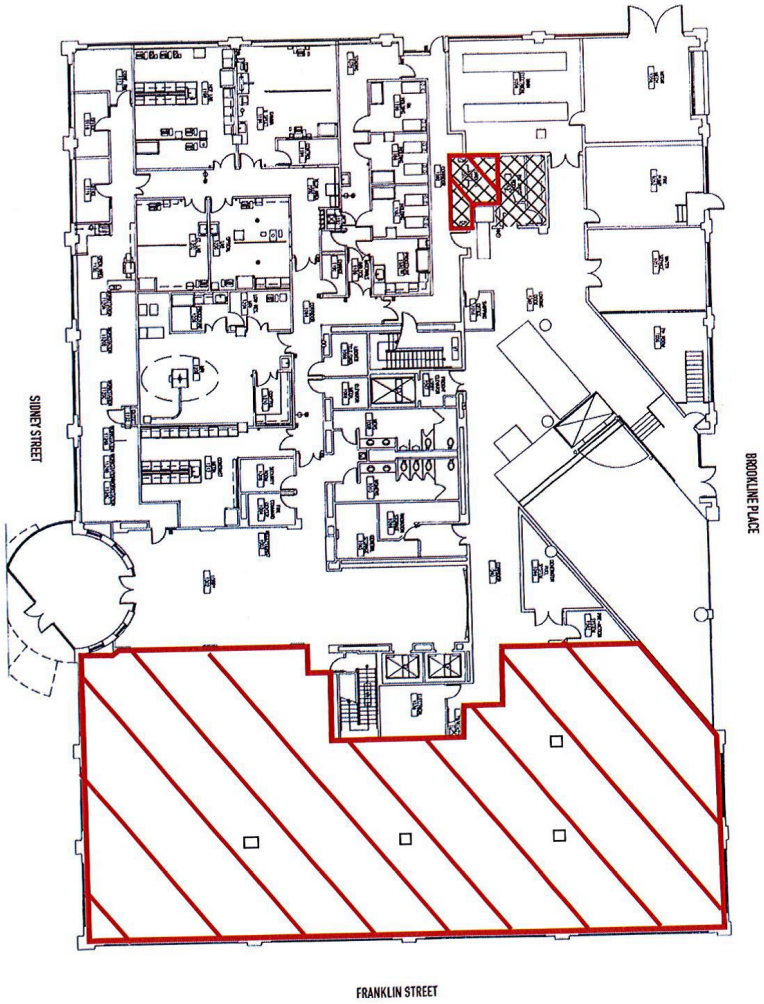


Exhibit B – Floor Plan Showing Premises
Floor 3

45 Sidney Street

Exhibit B – Floor Plan Showing Premises
Floor 4

45 Sidney Street

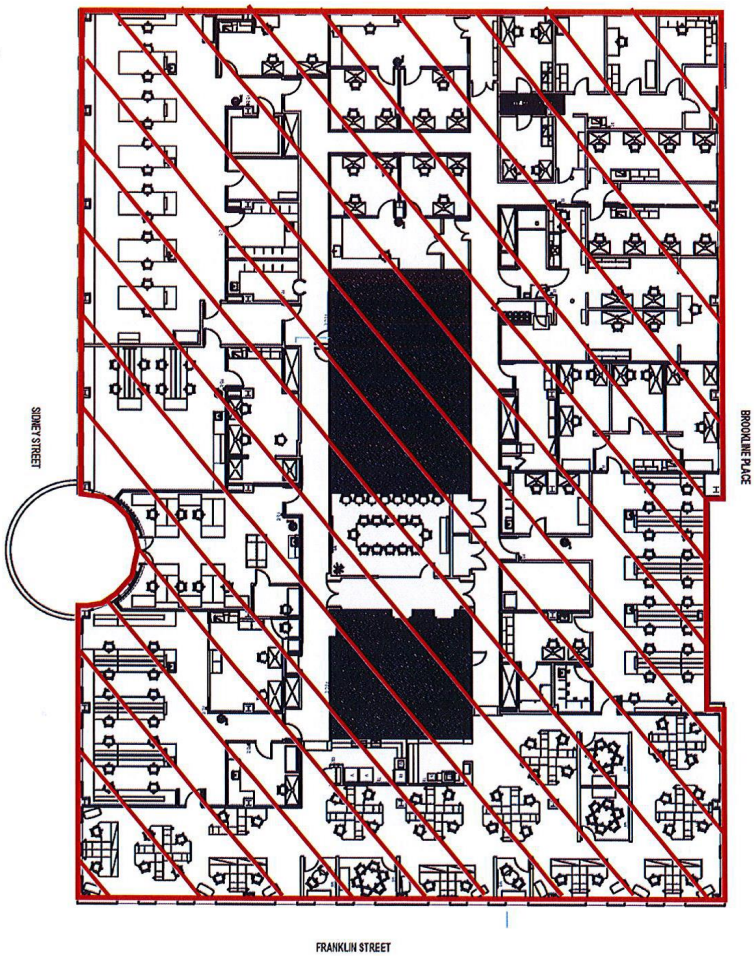
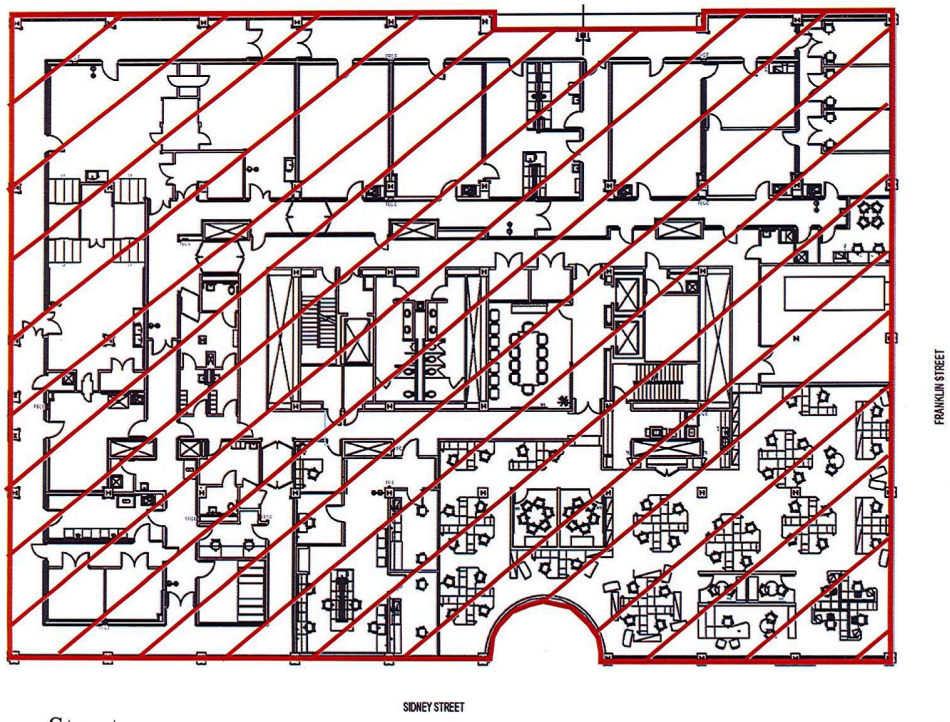


Exhibit B – Floor Plan Showing Premises
Floor 5



45 Sidney Street

EXHIBIT C

STANDARD SERVICES

The building standard services shall be defined by the Landlord and its Management Agent. A listing of services shall be as promulgated from time to time by the Landlord and shall be further described in the Tenant Handbook.

The following services are provided by the Landlord:

A. Regular maintenance of interior, exterior and parking lot landscaping and University Park common areas.

B. Regular maintenance, sweeping and snow removal of building exterior areas such as roadways, driveways, sidewalks, parking areas and courtyard paving.

C. Complete interior and exterior cleaning of all windows two times per year.

D. Daily, weekday maintenance of hallways, passenger elevators, common area bathrooms, lobby areas and vestibules.

E. Periodic cleaning of stairwells, freight elevators, and back of house areas.

F. Daily, weekday rubbish removal of all tenant trash receptacles in the office space only; Landlord shall provide a dumpster and/or compactor at the loading dock for Building tenants' use for the disposal of non-hazardous/non-controlled substances, the cost of which shall be an Operating Expense.

G. Daily, weekday cleaning of Tenant space to building standard, in the office space only.

H. Maintenance and repair of base building surveillance and alarm equipment, mechanical, electrical, plumbing and life safety systems.

I. Building surveillance and alarm system operation and live monitoring service to building standard specifications.

J. Conditioned water for HVAC purposes shall be provided to the Premises from central mechanical equipment.

K. Utilities for all interior common areas and exterior building and parking lighting.

L. Lobby Security station to be staffed during the hours of 7:30am to 6:00pm Monday through Friday. After hours Building access is provided by a CCure card reader access system.

EXHIBIT D

RULES AND REGULATIONS

DEFINITIONS

Wherever in these Rules and Regulations the word "Tenant" is used, it shall be taken to apply to and include the Tenant and its agents, employees, invitees, licensees, contractors, any subtenants and is to be deemed of such number and gender as the circumstances require. The word "Premises" is to be taken to include the space covered by the Lease. The word "Landlord" shall be taken to include the employees and agents of Landlord. Other capitalized terms used but not defined herein shall have the meanings set forth in the Lease.

GENERAL USE OF BUILDING

A. Space for admitting natural light into any public area or tenanted space of the Building shall not be covered or obstructed by Tenant except in a manner approved by Landlord.

B. Toilets, showers and other like apparatus shall be used only for the purpose for which they were constructed. Any and all damage from misuse shall be borne by Tenant. These rooms should be locked at all times.

C. Except as otherwise permitted in the Lease, Landlord reserves the right to determine the number of letters allowed Lessee on any directory it maintains.

D. No sign, advertisement, notice or the like, shall be used in the Building by Tenant (other than at its office and then only as approved by Landlord in accordance with building standards). If Tenant violates the foregoing, Landlord may remove the violation without liability and may charge all costs and expenses incurred in so doing to Tenant.

E. Tenant shall not throw or permit to be thrown anything out of windows or doors or down passages or elsewhere in the Building, or bring or keep any pets therein, or commit or make any indecent or improper acts or noises. In addition, Tenant shall not do or permit anything which will obstruct, injure, annoy or interfere with other tenants or those having business with them, or affect any insurance rate on the Building or violate any provision of any insurance policy on the Building.

F. Unless expressly permitted by the Landlord in writing:

(1) No additional locks or similar devices shall be attached to any door or window and no keys other than those provided by the Landlord shall be made for any door; *provided however*, that Tenant may install and manage its own compatible card reader entry system for entry to and within the Premises. If more than two keys for one lock are desired by the Tenant, the Landlord may provide the same upon payment by the Tenant. Upon termination of this lease or of the Tenant's possession, the Lessee shall

surrender all keys to the Premises and shall explain to the Landlord all combination locks on safes, cabinets and vaults.

(2) In order to insure proper use and care of the Premises Tenant shall not install any shades, blinds, or awnings or any interior window treatment without consent of Landlord. Blinds must be building standard.

(3) All doors to the Premises are to be kept closed at all times except when in actual use for entrance to or exit from such Premises. The Tenant shall be responsible for the locking of doors and the closing of any transoms and windows in and to the Premises. Any damage or loss resulting from violation of this rule shall be paid for by the Tenant.

(4) The Tenant shall not install or operate any steam or internal combustion engine, boiler, machinery in or about the Premises, or carry on any mechanical business therein except as currently utilized at the Premises or in accordance with the terms of the Lease. All equipment of any electrical or mechanical nature shall be placed in settings which absorb and prevent any vibration, noise or annoyance.

G. Landlord shall designate the time when and the method whereby freight, small office equipment, furniture, safes and other like articles may be brought into, moved or removed from the Building or Premises, and to designate the location for temporary disposition of such items.

H. In order to insure proper use and care of the Premises Tenant shall not allow anyone other than Landlord's employees or contractors to clean the Premises without Landlord's permission, provided, however, that Landlord acknowledges and agrees that Tenant shall clean rooms used for Tenant’s work with animals at the Premises.

I. The Premises shall not be defaced in any way. No changes in the HVAC, electrical fixtures or other appurtenances of said Premises shall be made except in accordance with the Terms of this Lease.

J. For the general welfare of all tenants and the security of the Building, Landlord may require all persons entering and/or leaving the Building on weekends and holidays and between the hours of 6:00 p.m. and 8:00 a.m. to register with the Building attendant or custodian by signing his name and writing his destination in the Building, and the time of entry and actual or anticipated departure, or other procedures deemed necessary by Landlord. Landlord may deny entry during such hours to any person who fails to provide satisfactory identification.

K. No animals, birds, pets, and no bicycles or vehicles of any kind shall be brought into or kept in or about said Premises or the lobby or halls of the Building, excepting those animals used for research purposes, by a disabled person, or otherwise within the scope of the Permitted Uses. Tenant shall not cause or permit any unusual or objectionable odors, noises or vibrations to be produced upon or emanate from said Premises.

L. Unless specifically authorized by Landlord, employees or agents of Landlord shall not perform for nor be asked by Tenant to perform work other than their regularly assigned duties.

M. Canvassing, soliciting and peddling in the Building are prohibited and Tenant shall cooperate to prevent the same from occurring.

N. All parking, Building operation, or construction rules and regulations which may be established from time to time by Landlord on a uniform basis shall be obeyed.

O. Tenant shall not place a load on any floor of said Premises exceeding one hundred (100) pounds per square foot. Landlord reserves the right to prescribe the weight and position of all safes and heavy equipment.

P. Tenant shall not install or use any air conditioning or heating device or system other than in accordance with the terms of the Lease, unless previously approved by Landlord.

Q. Landlord shall have the right to make such other and further reasonable rules and regulations as in the judgment of Landlord, may from time to time be needful for the safety, appearance, care and cleanliness of the Building and for the preservation of good order therein, provided that such other and further reasonable rules and regulations shall not interfere with the Permitted Uses. Landlord shall not be responsible to Tenant for any violation of rules and regulations by other tenants, provided that the Landlord shall use diligent efforts to enforce the rules and regulations and shall do so in a uniform manner with respect to all tenants of the Building.

R. The Brookline Place private way and loading areas, parking areas, sidewalks, entrances, lobbies, halls, walkways, elevators, stairways and other common area provided by Landlord shall not be obstructed by Tenant, or used for other purpose than for ingress and egress.

S. In order to insure proper use and care of the Premises Tenant shall not install any call boxes or communications systems or wiring of any kind except in accordance with the terms of the Lease or written consent of Landlord (not to be unreasonably withheld, conditioned or delayed).

T. In order to insure proper use and care of the Premises Tenant shall not manufacture any commodity, or prepare or dispense for sales any foods or beverages, tobacco, flowers, or other commodities or articles, except vending machines for the benefit of employees and invitees of Tenant, without the written consent of Landlord.

U. In order to insure use and care of the Premises Tenant shall not enter any janitors' closets, mechanical or electrical areas, telephone closets, loading areas, roof or Building storage areas (except to the extent completely located within the Premises) without reasonable notice to Landlord.

V. In order to insure proper use and care of the Premises Tenant shall not place door mats in public corridors without consent of Landlord.

[Remainder of page intentionally left blank.]

EXHIBIT E

WORK LETTER

1. Tenant, at its expense, shall be responsible for the preparation of the architectural plans and the mechanical, electrical and plumbing engineering plans and specifications (the "Tenant Plans") necessary for the construction of Tenant's leasehold improvements and Tenant's responsibilities set forth in the Responsibility Matrix in Exhibit E-1 (the "Tenant Work"). The Tenant Plans shall be subject to Landlord's approval, not to be unreasonably withheld or delayed. Tenant may use the Leasehold Improvements Allowance to pay for said Tenant Plans. Tenant may select its own architect and engineers, subject to Landlord's reasonable approval.

2. Subject to Landlord's reasonable approval, Tenant shall have the right, at its expense, to hire and manage a mutually reasonably approved contractor, subcontractors, engineers, architects, and construction manager to perform the Tenant Work. All work to be performed in the Premises shall be subject to Landlord approval which shall not be unreasonably withheld, and performed in accordance with established tenant construction rules and regulations. There shall be no Landlord coordination, overhead or contractor supervision fees. However, Landlord shall be reimbursed, from the Leasehold Improvements Allowance, for any third-party, out-of-pocket expenses incurred by Landlord in the review and approval of Tenant's plans, specifications, improvements and construction. During Tenant's construction, during normal business hours, at no additional cost, Tenant shall have access to the base building infrastructure such as electric power, freight elevator, HVAC and utilization of the available building chases for ducting purposes. Should any of this work affect other building tenants, then the timing of the work will need to be scheduled and approved by Landlord.

3. Landlord shall provide to Tenant the Leasehold Improvements Allowance (the "LIA"), for application to the costs and expenses, more particularly set forth below, incurred by or on behalf of Tenant. If Tenant incurs costs in excess of the Leasehold Improvements Allowance, as applicable, then all such excess costs shall be borne solely by Tenant. The Tenant must apply to Landlord for reimbursement from the Leasehold Improvements Allowance within one (1) year after the Rent Commencement Date. Any portion of such Leasehold Improvements Allowance for which application for reimbursement has not been made within such one (1) year period shall be cancelled and no longer available.

4. The application of the Leasehold Improvements Allowance by Landlord shall be limited to payment of the following costs and expenses incurred by or on behalf of Tenant in connection with the Improvements: (i) the actual documented and verified cost pursuant to Tenant's design and construction contracts, including without limitation the associated contractor's overhead and profit and general conditions, incurred in the construction of the Improvements to the Premises and project management fees, (ii) data/telecom cabling, and (iii) move-related expenses. The Leasehold Improvements Allowance shall not be used for the making of improvements, installation of fixtures or incorporation of other items which are moveable rather than permanent improvements in the nature of trade fixtures, examples of which may include furniture, telephone communications and security equipment, and bench-top laboratory equipment items such as microscopes.

5. The LIA shall be requested by and disbursed to Tenant in the following manner:

(A) Tenant shall periodically (but not more than once per month) request advances on account of the LIA to reimburse Tenant for payments made or to be used to pay any amounts then due to Tenant's contractor, subcontractor, materialmen or other suppliers of materials and services for and with respect to such portion of the Tenant Work which has then been performed. Landlord shall retain seven and one-half percent (7.5%) of such requested advance ("Retainage"). The Retainage shall be funded pursuant to the provisions of subparagraph (C) below. Tenant acknowledges that Landlord will make disbursements of the LIA to Tenant between the twentieth (20th) and twenty-fifth (25th) of each month ("Disbursement Period") and during no other period during any month. Tenant further acknowledges that in order for Landlord to be able to disburse the portion of the LIA requested by Tenant during a given Disbursement Period, such draw request must be submitted to Landlord with all required supporting information no later than the first (1st) of the month during which such Disbursement Period occurs ("Draw Request Submission Deadline" or "DRSD").

(B) Every such request shall be accompanied by a completed AIA Application and Certificate for Payment Form G702 and AIA Continuation Sheet Form G703 from Tenant's contractor to Landlord with partial lien waivers covering partially-completed work (for the first disbursement such lien waivers may be conditional, but for subsequent draws such partial lien waivers shall be unconditional, though partial), together with copies of invoices or receipted bills related to the requested advance. Landlord shall, at its election, make any such advances in an amount equal to Tenant's draw request by check or checks payable to Tenant and checks drawn and delivered to Tenant payable in accordance with the foregoing shall be considered to be advances on account of the LIA made at the time that the check in question is delivered to Tenant. Provided that Tenant submits its draw requests by the DRSD together with the requisite supporting documentation, Landlord agrees to disburse the portion of LIA represented by each request for advance by the Disbursement Period nearest and next following the submission of Tenant's draw request. Tenant further acknowledges, however, that if a draw request is not submitted by the DRSD or within three (3) days thereafter, Landlord shall not be obligated to disburse the requested sum until the Disbursement Period next following the Disbursement Period applicable to the particular DRSD.

(C) Any portion of the LIA not disbursed pursuant to subparagraphs (A) and (B) above shall be disbursed to Tenant at such time as Tenant shall demonstrate, to the reasonable satisfaction of Landlord, that (a) all of the Tenant Work required to be performed is Substantially Complete (as defined below), (b) such work has been paid for in full, the amount paid is not less than such portion of LIA remaining, and that any and all liens therefor or thereon that have been or may be filed have been satisfied and released of record, bonded off or waived; and (c) Tenant has paid all charges then to have been paid by Tenant under applicable provisions of the Lease. For the purposes of this Work Letter, "Substantially Complete" shall mean when the Tenant Work is fully completed in accordance with the approved plans and specifications, including punchlist items.

(D) In the event that there are third-party claims unpaid, work unfinished, or liens filed for such work and labor that have not been bonded or otherwise secured,

Landlord may retain from the LIA, a sum sufficient to pay said claims, unfinished work or liens and all costs resulting therefrom and, subject to Tenant's right to dispute such claims, to pay said claims or liens, if necessary. If the amount owed to Tenant by Landlord shall not be sufficient to pay for said claims or liens and the costs resulting therefrom, Tenant shall forthwith pay said claims or liens or cause the same to be properly discharged as herein provided for.

(E) In the event there is unpaid, past due Rent on Tenant's account (which is not the subject of a good faith dispute for which Tenant has provided notice to Landlord), Landlord shall have the option after the expiration of all applicable notice and cure periods, but shall not be obligated, to apply any portion of the LIA against such unpaid Rent.

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45 Sidney Street
Floors 1, 3, 4, 5 Cambridge, MA

December 13, 2016

Description	Landlord	Tenant
SITEWORK		
Telephone service to main demarcation room from local exchange carrier	X	
Domestic sanitary sewer connection to street	X	
Tenant Dedicated Lab Waste / PH Neutralization Tanks	X	
Lab waste sewer connection to individual tenant pH neutralization system		X
Roof storm drainage	X	
Nstar primary and secondary electrical service	X	
Nstar gas service	X	
Domestic water service to Building	X	
Fire protection water service to Building	X	
STRUCTURE		
Structural enhancements for specific Tenant load requirements		X
Structural framing dunnage above roof for Base Building equipment	X	
Structural framing dunnage above roof for Tenant equipment (subject to Landlord review and approval).		X
Framed openings for Base Building utility risers	X	
Framed openings for Tenant utility risers		X
Miscellaneous metals items and/or concrete pads for Base Building equipment	X	
Tenant shall be able to store 480 gallons of solvents in the 276 rsf Floor 1 Premises which is a Control Area. Additionally, Tenant will be allotted it's pro-rata share of the building Control Area allowable solvent storage quantity of 480 gallons. Tenant's allocated volumes by floor are: Fl. 3 240 gallons of the building total Fl. 4 60 gallons of the building total Fl. 5 44 gallons of the building total The storage is contingent on the tenant's submission and approval of the AHJ. Tenant shall also have the right to develop two additional control areas as part of Tenant's Floor 1 Premises. .		X
Miscellaneous metals items and/or concrete pads for Tenant equipment		X
ROOFING		
Single ply EPDM roofing system with rigid insulation	X	
Roofing penetrations for Base Building equipment/systems	X	
Roofing penetrations for Tenant equipment/systems by LL's roofer to LL Spec		X
Walkway pads to Base Building equipment	X	
Walkway pads to Tenant equipment		X
Roofing alterations due to Tenant changes		X
EXTERIOR		
Building exterior consisting of precast concrete and windows	X	
Main Building entrances	X	

Description	Landlord	Tenant
Loading dock with loading dock elevator and stairwell	X	
Acoustic screening of Base Building rooftop equipment	X	
Acoustic screening of Tenant rooftop equipment (some space may be available within base building screening for Tenant's use with LL's approval)		X
COMMON AREAS		
Accessible main entrance	X	
First floor finished lobby	X	
Core area toilet rooms	X	
Janitor's closets in core areas	X	
Primary demarcation room	X	
Doors, frames, and hardware at common areas	X	
ELEVATORS		
(2) passenger elevators, one (1) service elevator with a capacity of 4,000 lbs.	X	
WINDOW TREATMENT		
Furnish and install Building standard blinds for all windows		X
TENANT AREAS		
Finishes at inside face of exterior walls		X
Finishes at inside face at Tenant side of core partitions		X
Toilet rooms within Tenant Premises in addition to those provided by base building		X
Electrical closets within Tenant Premises		X
Tel/data rooms for interconnection with Tenant tel/data		X
Tenant kitchen areas		X
Modifications to core areas to accommodate Tenant requirements		X
Partitions, ceilings, flooring, painting, finishes, doors, frames, hardware, millwork, casework, equipment, and build out.		X
Fixed or movable casework.		X
Laboratory Equipment including but not limited to biosafety cabinets, autoclaves, glass washers.		X
Chemical Fume Hoods, bench fume hood		X
Shaft enclosures for Base Building systems' risers	X	
Shaft enclosures for Tenant risers (in addition to risers put in place for tenant use)		X
FIRE PROTECTION		
Fire service entrance including fire department connection, alarm valve, and flow protection,	X	
Core area distribution piping and sprinkler heads	X	
Stair distribution piping and sprinkler heads	X	
All run outs, drop heads, and related equipment within Tenant Premises		X
Modification of sprinkler piping and head locations to suit Tenant layout and hazard		X

Description	Landlord	Tenant
Specialized extinguishing systems or containment for tenant program areas		X
Preaction dry-pipe systems		X
Fire extinguisher cabinets at core common areas	X	
Fire extinguisher cabinets in Tenant Premises		X
PLUMBING		
Domestic water service with backflow prevention and Base Building risers	X	
Domestic water distribution within Tenant Premises		X
Core restroom plumbing fixtures compliant with accessibility requirements and anticipated lab/office occupancy of 1 person/300sf.	X	
Tenant restroom plumbing fixtures compliant with accessibility requirements (in addition to those provided by the Base Building)		X
Wall hydrants in common core areas (where required by code)	X	
Tenant metering and sub-metering at Tenant connection		X
Storm drainage system	X	
Main sanitary waste and vent stacks as existing	X	
Delivery of Tenant Premises' PH neutralization system (individual Tenant system)	X	
Delivery of Tenant Premises' lab waste and vent risers to pH Neutralization room	X	
Operation, maintenance and regulatory responsibility of the Tenant Premises dedicated PH neutralization system		X
Lab waste and vent pipe distribution		X
Hot water generation for core restrooms	X	
Non-potable Hot water generation for Tenant use		X
Central lab air compressor and piping risers for 3rd, 4th and 5th Floors	X	
Compressed air pipe distribution in Tenant Premises for specific points of use		X
Central lab vacuum system and pipe risers for 3rd, 4th and 5th Floors	X	
Lab vacuum pipe distribution in Tenant Premises for specific points of use		X
Tepid water generator and pipe risers for 3rd,4th and 5th Floors	X	
Tepid water pipe distribution in Tenant Premises		X
RO/DI water generator and pipe risers for 3rd, 4th, and 5th Floors.	X	
RO/DI water pipe distribution in Tenant Premises for specific points of use		X
Lab gas manifolds, piping, and other requirements including cylinders, not specifically mentioned above		X
NATURAL GAS		
Natural gas service to Building and piping to Base Building boilers and Base Building generator	X	

Description	Landlord	Tenant
Natural gas service, pressure regulator and meter for Tenant equipment		X
Natural gas piping from Tenant meter to Tenant Premises or Tenant equipment area.		X
Natural gas pipe distribution within Tenant Premises		X
Natural gas pressure regulator vent pipe riser from valve location through roof		X
HEATING, VENTILATION, AIR CONDITIONING		
Building Management System (BMS) for common core area and Landlord infrastructure	X	
BMS (compatible with Landlord's system) within Tenant Premises and Tenant infrastructure		X
Once-through supply air handling units with 30% prefilters, 85% final filters, with corresponding heating and cooling. Units are sized for approximately 1.5 cfm per square foot of lab space. 60%/40% lab/office ratio.	X	
Boiler capacity for hot water reheats at 60% lab/ 40 % office space	X	
Hot water reheat distribution to reheat coils		X
Vertical supply air duct distribution from existing Base Bldg. AHUs	X	
Tenant Space Supply air duct distribution, VAV terminals, equipment connections, insulation, air terminals, dampers, hangers,		X
Existing Roof mounted laboratory exhaust fans. Units are sized for approximately 1.5 cfm per square foot of lab space. 60%/40% lab/office ratio.	X	
Existing vertical exhaust air duct risers for general lab exhaust	X	
Roof mounted laboratory exhaust fans for specialty exhaust systems.		X
Vertical exhaust air duct risers for dedicated fume hood or specialty exhaust systems		X
Exhaust air duct distribution, exhaust air valves, equipment connections, insulation, air terminals, dampers, hangers, etc.		X
General Exhaust for Tenant Spaces from Risers		X
Restroom exhaust for core area restrooms	X	
Restroom exhaust for additional restrooms if required by Tenant		X
Electric room ventilation system for Base Building electrical closets	X	
Electric room ventilation system for electrical closets within Tenant premises		X
Sound attenuation for Tenant equipment to comply with Cambridge Noise Ordinance		X
Additional/ dedicated cooling for Tenant requirements.		X

Description	Landlord	Tenant
ELECTRICAL		
Electrical utility service to switchgear in main electrical vault	X	
Premises currently provides the following normal electric power services @ 480V – 3 PH Fl. 1 (1) 1200 amp service Fl. 3 (2)200,(2)400,(1)100, amp services Fl. 4 (1)400,(3)200,(1)100 amp services Fl. 5 (1)400,(2)200 amp services		X
Premises will have its allocated share of the Building's 600 KW emergency power generator service for the following floors @ 480V – 3PH Fl. 3 225 amp. TSP Fl. 4 225 amp. TSP Fl. 5 225 amp. TSP		X
Dedicated 600KW emergency power generator that currently serves the fifth floor vivarium and the fourth floor BSLlab.		X
Dedicated 500KW emergency power generator that currently serves the Floor 1 Premises (8,753 r.s.f. space)		X
Standby power distribution within Tenant Premises		X
Lighting and power distribution for core areas		X
Lighting and power distribution for Tenant Premises	X	
Tenant Sub /Check Meter (s) for Tenant Connected Loads		X
Common area life safety emergency lighting/signage	X	
Tenant Premises life safety emergency lighting/signage	X	
Tenant panels, transformers, etc. in addition to Base Building		X
Tenant UPS system, battery backup, and associated equipment/distribution		X
FIRE ALARM		
Base Building fire alarm system with devices in core areas	X	
Fire alarm sub panels and devices for Tenant Premises with integration into Base Building system	X	
Alteration to fire alarm system to facilitate Tenant program		X
TELEPHONE/DATA		
Underground local exchange carrier service to primary demarcation room in basement	X	
Tel Data Riser Conduit from demark to each floor	X	
Tenant tel/data rooms	X	
Pathways from demarcation room directly into Tenant tel/data rooms		X
Tel/Data cabling from demarcation room Tenant tel/data room.		X
Fiber optic service for Tenant use		X

Description	Landlord	Tenant
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		X
Station cabling from Tenant tel/data room to all Tenant locations, within the suite and exterior to the suite, if needed		X
SECURITY		
Card access at Building entries	X	
Card access into or within Tenant Premises on separate Tenant installed and managed system		X

EXHIBIT F

TENANT CONSTRUCTION WORK AT UNIVERSITY PARK

The tenant construction work procedure at University Park is designed to provide efficient scheduling of work while protecting other tenants from unnecessary noise and inconvenience. The attached document explains the procedure and has been prepared in keeping with the standard lease at University Park. It contains detailed information to assist you in planning construction projects. Please review it carefully before design begins.

SUMMARY

1. Contact the Property Manager as the first step. The Property Manager will be happy to assist you in completing your project efficiently.

2. Incorporate the provisions of the attached document and the “Indoor Air Quality Guidelines for Tenant Improvement Work” into all of your agreements and contracts. You will need written approval from Forest City Commercial Management before contracting any work.

3. At least four weeks before construction provide four sets of drawings and plans to the Property Manager for approval. The Property Manager must also approve your list of contractors and subcontractors.

4. At least two weeks before construction, submit to the Property Manager detailed schedules; addresses and telephone numbers of supervisors, contractors and subcontractors; copies of permits; proof of current insurance; Payment, Performance and Lien bonds; and notice of any contractor's involvement in a labor dispute.

5. We will generally require that you conduct noisy, disruptive or odor and dust producing work, as well as the delivery of construction materials, outside of regular business hours.

6. We expect all contractors to maintain safe and orderly conditions, labor harmony and proper handling of any hazardous materials. We may stop any work that does not meet the conditions outlined in the attached document.

7. Before occupying the completed space, submit a signed copy of the permit card or the final certificate of occupancy and any other approvals to the Property Manager. We also require an air balancing report signed by a professional engineer. A complete set of "as built" sepia drawings as well as electronic "as-built" drawings in AutoCAD Release 12, DXF format must be hand delivered to the Property Manager.

Please note that this summary highlights key aspects of the attached document (entitled Rules and Regulations for Design and Construction of Tenant Work) for your convenience and does not supersede it in any way.

1. DEFINITIONS

1.1	Buildings:	University Park at MIT: 38 Sidney, 45 Sidney, 75 Sidney, 64 Sidney, 88 Sidney, 26 Landsdowne, 35 Landsdowne, 40 Landsdowne, 65 Landsdowne and 350 Mass. Ave
1.2	Property Manager:	Jay Kiely, or such other individual as Landlord may designate, from time to time.
1.3	INTENTIONALLY OMITTED	
1.4	Consultants:	Any architectural, engineering, or design consultant engaged by a Tenant in connection with Tenant Work.
1.5	Contractor:	Any Contractor engaged by a Tenant of the Building for the performance of any Tenant Work, and any Subcontractor, employed by any such Contractor.
1.6	Plans:	All architectural, electrical and mechanical construction drawings and specifications required for the proper construction of the Tenant Work.
1.7	Regular Business Hours:	Monday through Friday, 7:30 A.M. through 5:30 P.M., excluding holidays.
1.8	Tenant:	Any occupant of the Building.
1.9	Tenant Work:	Any alternations, improvements, additions, repairs or installations in the Building performed by or on behalf of any Tenant.
1.10	Tradesperson:	Any employee (including, without limitation, any mechanic, laborer, or Tradesperson) employed by a Contractor performing Tenant Work.

2.0 GENERAL

2.1 All Tenant Work shall be performed in accordance with these rules and regulations and the applicable provisions of the Lease.

2.2 The provisions of these rules and regulations shall be incorporated in all agreements governing the performance of all Tenant Work, including, without limitation, any agreements governing services to be rendered by each Contractor and Consultant.

2.3 Except as otherwise provided in these Rules and Regulations, all inquiries, submissions and approvals in connection with any Tenant Work shall be processed through the Property Manager.

3. PLANS

3.1 Review and Approval:

Any Tenant wishing to perform Tenant Work must first obtain the Landlord's written approval of its plans for such Tenant Work. Landlord will allow the Tenant the right to choose its own space planner (s) and architect for the design of the tenant work, provided, however, Tenant shall be required to retain under separate contract Landlord's mechanical, electrical, plumbing and structural engineers (s) with respect to such Tenant work to ensure operating consistency of the Premises with the building. Under no circumstances will any Tenant Work be permitted prior to such approval. Such approval shall be obtained prior to the execution of any agreement with any Contractor for the performance of such Tenant Work.

3.2 Submission Requirements:

a. Any Tenant performing Tenant Work shall, at the earliest possible time but at least four weeks before any Tenant Work is to begin, furnish to the Property Manager four full sets of plans and specifications describing such Tenant Work.

b. Intentionally Omitted.

c. The design manifested in the Plans will be reviewed by the Landlord and shall comply with his requirements so as to avoid aesthetic or other conflicts with the design and function of the Tenant's premises and of the Building as a whole.

4. PRECONSTRUCTION NOTIFICATION AND APPROVALS

4.1 Approval to Commence Work

a. Tenant shall submit to Property Manager, for the approval of Property Manager, the names of all prospective Contractors prior to issuing any bid packages to such Contractors.

b. No Tenant Work shall be undertaken by any Contractor or Tradesperson unless and until all the matters set forth in Article 4.2 below have been received for the Tenant Work in question and unless Property Manager has approved the matters set forth in Article 4.2 below.

4.2 No Tenant Work shall be performed unless, at least two weeks before any Tenant Work is to begin, all of the following has been provided to the Property Manager and approved. In the event that Tenant proposes to change any of the following, the Property Manager shall be immediately notified of such change and such change shall be subject to the approval of the Property Manager:

a. Schedule for the work, indicating start and completion dates, any phasing and special working hours, and also a list of anticipated shutdowns of building systems.

b. List of all Contractors and Subcontractors, including addresses, telephone numbers, trades employed, and the union affiliation, if any, of each Contractor and Subcontractor.

c. Names and telephone numbers of the supervisors of the work.

d. Copies of all necessary governmental permits, licenses and approvals.

e. Proof of current insurance, to the limits set out in Exhibit A to these Rules and Regulations, naming Landlord as an additional insured party.

f. Notice of the involvement of any Contractor in any ongoing or threatened labor dispute.

g. Payment, Performance and Lien Bonds from sureties acceptable to Landlord, in form acceptable to Landlord, naming Landlord as an additional obligee.

h. Evidence that Tenant has made provision for either written waivers of lien from all Contractors and suppliers of material, or other appropriate protective measures approved by Landlord.

4.3 Reporting Incidents

All accidents, disturbances, labor disputes or threats thereof, and other noteworthy events pertaining to the Building or the Tenant's property shall be reported immediately to the Property Manager. A written report must follow within 24 hours.

5. CONSTRUCTION SCHEDULE

5.1 Coordination

a. All Tenant Work shall be carried out expeditiously and with minimum disturbance and disruption to the operation of the Building and without causing discomfort, inconvenience, or annoyance to any of the other tenants or occupants of the Building or the public at large.

b. All schedules for the performance of construction, including materials deliveries, must be coordinated through the Property Manager. The Property Manager shall have the right, without incurring any liability to any Tenant, to stop activities and/or to require rescheduling of Tenant Work based upon adverse impact on the tenants or occupants of the Building or on the maintenance or operation of the Building.

c. If any tenant Work requires the shutdown of risers and mains for electrical, mechanical, sprinklers and plumbing work, such work shall be supervised by a representative of Landlord. No Tenant Work will be performed in the Building's mechanical or electrical equipment rooms without both Landlord's prior approval and the supervision of a representative of Landlord, the cost of which shall be reimbursed by the Tenants.

5.2 Time Restrictions

a. Subject to Paragraph 5.1 of these rules and regulations, general construction work will generally be permitted at all times, including during Regular Business Hours.

b. Tenant shall provide the Property Manager with at least twenty-four (24) hours' notice before proceeding with Special Work, as hereinafter defined, and such Special Work will be permitted only at times agreed to by the Property Manager during periods outside of Regular Business Hours. "Special Work" shall be defined as the following operations:

(1) All utility disruptions, shutoffs and turnovers;

(2) Activities involving high levels of noise, including demolition, coring, drilling and ramsetting;

(3) Activities resulting in excessive dust or odors, including demolition and spray painting.

c. The delivery of construction materials to the Building, their distribution within the Building, and the removal of waste materials shall also be confined to periods outside Regular Business Hours, unless otherwise specifically permitted in writing by the Property Manager.

d. If coordination, labor disputes or other circumstances require, the Property Manager may change the hours during which regular construction work can be scheduled and/or restrict or refuse entry to and exit from the Building by any Contractor.

6. CONTRACTOR PERSONNEL

6.1 Work in Harmony

a. All Contractors shall be responsible for employing skilled and competent personnel and suppliers who shall abide by the rules and regulations herein set forth as amended from time to time by Landlord.

b. No Tenant shall at any time, either directly or indirectly, employ, permit the employment, or continue the employment of any Contractor if such employment or continued employment will or does interfere or cause any labor disharmony, coordination difficulty, delay or conflict with any other contractors engaged in construction work in or about the Building or the complex in which the Building is located.

c. Should a work stoppage or other action occur anywhere in or about the Building as a result of the presence, anywhere in the Building, of a Contractor engaged directly or indirectly by a Tenant, or should such Contractor be deemed by Landlord to have violated any applicable rules or regulations, then upon twelve hours written notice, Landlord may, without incurring any liability to Tenant or said Contractor, require any such Contractor to vacate the premises demised by such Tenant and the Building, and to cease all further construction work therein.

6.2 Conduct

a. While in or about the Building, all Tradespersons shall perform in a dignified, quiet, courteous, and professional manner at all times. Tradespersons shall wear clothing suitable for their work and shall remain fully attired at all times. All Contractors will be responsible for their Tradespersons' proper behavior and conduct.

b. The Property Manager reserves the right to remove anyone who, or any Contractor which; is causing a disturbance to any tenant or occupant of the Building or any other person using or servicing the Building; is interfering with the work of others; or is in any other way displaying conduct or performance not compatible with the Landlord's standards.

6.3 Access

a. All Contractors and Tradespersons shall contact the Property Manager prior to commencing work, to confirm work location and Building access, including elevator usage and times of operation. Access to the Building before and after Regular Business Hours or any other hours designated from time to time by the Building Manger and all day on weekends and holidays will only be provided when twenty-four (24) hours advanced notice is given to the Property Manager.

b. No Contractor or Tradesperson will be permitted to enter any private or public space in the Building, other than the common areas of the Building necessary to give direct access to the premises of Tenant for which he has been employed, without the prior approval of the Property Manager.

c. All Contractors and Tradespersons must obtain permission from the Property Manager prior to undertaking work in any space outside of the Tenant's premises. This requirement specifically includes ceiling spaces below the premises where any work required must be undertaken at the convenience of the affected Tenant and outside of Regular Business Hours. Contractors undertaking such work shall ensure that all work, including work required to reinstate removed items and cleaning, be completed prior to opening of the next business day.

d. Contractors shall ensure that all furniture, equipment and accessories in areas potentially affected by any Tenant Work shall be adequately protected by means of drop cloths or other appropriate measures. In addition, all Contractors shall be responsible for maintain security to the extent required by the Property Manager.

e. Temporary access doors for tenant construction areas connecting with a public corridor will be building standards, i.e., door, frame, hardware and lockset. A copy of the key will be furnished to the Property Manager.

6.4 Safety

a. All Contractors shall police ongoing construction operations and activities at all times, keeping the premises orderly, maintaining cleanliness in and about the premises, and ensuring safety and protection of all areas, including truck docks, elevators, lobbies and all other public areas which are used for access to the premises.

b. All Contractors shall appoint a supervisor who shall be responsible for all safety measures, as well as for compliance with all applicable governmental laws, ordinances, rules and regulations such as, for example, "OSHA" and "Right-to-Know" legislation.

c. Any damage caused by Tradespersons or other Contractor employees shall be the responsibility of the Tenant employing the Contractor. Costs for repairing such damage shall be charge directly to such Tenant.

6.5 Parking

a. Parking is not allowed in or near truck docks, in handicapped or fire access lanes, or any private ways in or surrounding the property. vehicles so parked will be towed at the expense of the Tenant who has engaged the Contractor for whom the owner of such vehicle is employed.

b. The availability of parking in any parking areas of the Building is limited. Use of such parking for Contractors and their personnel is restricted and must be arranged with and approved by the Property Manager.

7. BUILDING MATERIALS

7.1 Delivery

All deliveries of construction materials shall be made at the predetermined times approved by the Property Manager and shall be effected safely and expeditiously only at the location determined by the Property Manager.

7.2 Transportation in Building

a. Distribution of materials from delivery point to the work area in the Building shall be accomplished with the least disruption to the operation of the Building possible. Elevators will be assigned for material delivery and will be controlled by the Building management.

b. Contractors shall provide adequate protection to all carpets, wall surfaces, doors and trim in all public areas through which materials are transported. Contractors shall continuously clean all such areas. Protective measures shall include runners over carpet, padding in elevators and any other measures determined by the Property Manager.

c. Any damage caused to the Building through the movement of construction materials or otherwise shall be the responsibility of Tenant who has engaged the Contractor involved. Charges for such damage will be submitted by the Landlord directly to the Tenant.

7.3 Storage and Placement

a. All construction materials shall be stored only in the premises where they are to be installed. No storage of materials will be permitted in any public areas, loading docks or corridors leading to the premises.

b. No flammable, toxic, or otherwise hazardous materials may be brought in or about the Building unless: (i) authorized by the Property Manager, (ii) all applicable laws, ordinances, rules and regulations are complied with, and (iii) all necessary permits have been obtained. All necessary precautions shall be taken by the Contractor handling such materials against damage or injury caused by such materials.

c. All materials required for the construction of the premises must comply with Building standards, must conform with the plans and specifications approved by Landlord, and must be installed in the locations shown on the drawings approved by the Landlord.

f. All work shall be subject to reasonable supervision and inspection by Landlord's Representative.

e. No alternations to approved plans will be made without prior knowledge and approval of the Property Manager. Such changes shall be documented on the as-built drawings required to be delivered to Landlord pursuant to Paragraph 10 of the rules and regulations.

f. All protective devices (e.g., temporary enclosures and partitions) and materials, as well as their placement, must be approved by the Property Manager.

g. It is the responsibility of Contractors to ensure that the temporary placement of materials does not impose a hazard to the Building or its occupants, either through overloading, or interference with Building systems, access, egress or in any other manner whatsoever.

h. All existing and/or new openings made through the floor slab for piping, cabling, etc. must be packed solid with fiberglass insulation to make openings smoke tight. All holes in the floor slab at abandoned floor outlets, etc. will be filled with solid concrete.

7.4 Salvage and Waste Removal

a. All rubbish, waste and debris shall be neatly and cleanly removed from the Building by Contractors daily unless otherwise approved by the Property Manager. The Building's trash compactor shall not be used for construction or other debris. For any demolition and debris, each Contractor must make arrangements with the Property Manager for the scheduling and location of an additional dumpster to be supplied at the cost of the Tenant engaging such Contractor. Where, in the opinion of the Property Manager, such arrangements are not practical, such Contractors will make alternative arrangements for removal at the cost of the Tenant engaging such Contractors.

b. Toxic or flammable waste is to be properly removed daily and disposed of in full accordance with all applicable laws, ordinances, rules and regulations.

c. Contractors shall, prior to removing any item (including, without limitation, building standard doors, frames and hardware, light fixtures, ceiling diffusers, ceiling exhaust fans, sprinkler heads, fire horns, ceiling speakers and smoke detectors) from the Building, notify the Property Manager that it intends to remove such item. At the election of Property Manager, Contractors shall deliver any such items to the Property Manager. Such items will be delivered, without cost, to an area designated by the Property Manager which area shall be within the Building or the complex in which the Building is located.

8. PAYMENT OF CONTRACTORS

Tenant shall promptly pay the cost of all Tenant Work so that Tenant's premises and the Building shall be free of liens for labor or materials. If any mechanic's lien is filed against the Building or any part thereof which is claimed to be attributable to the Tenant, its agents, employees or contractors, Tenant shall give immediate notice of such lien to the Landlord and shall promptly discharge the same by payment or filing any necessary bond within 10 days after Tenant has first notice of such mechanic's lien.

9. CONTRACTORS INSURANCE

Prior to commencing any Tenant Work, and throughout the performance of the Tenant Work, each Contractor shall obtain and maintain insurance in accordance with Exhibit

A attached hereto. Each Contractor shall, prior to making entry into the Building provide Landlord with certificates that such insurance is in full force and effect.

10. SUBMISSIONS UPON COMPLETION

a. Upon completion of any Tenant Work, Tenant shall submit to Landlord a permanent certificate of occupancy and final approval of any other governmental agencies having jurisdiction.

b. A properly executed air balancing report, signed by a professional engineer, shall be submitted to Landlord upon completion of all mechanical work. Such report shall be subject to Landlord's approval.

c. Tenant shall submit to Landlord's Representative a final "as-built" set of sepia drawings as well as electronic "as-built" drawings in AutoCAD Release 12, DXF format.

11. ADJUSTMENT OF REGULATIONS

These Rules and Regulations may be amended from time to time in accordance with the reasonable judgment of Landlord.

12. CONFLICT BETWEEN RULES AND REGULATIONS AND LEASE

In the event of any conflict between the Lease and these rules and regulations, the terms of the Lease shall control.

[Remainder of page intentionally left blank.]

EXHIBIT A
TO

CONSTRUCTION RULES AND REGULATIONS

INSURANCE REQUIREMENTS FOR CONTRACTORS

When Tenant Work is to be done by Contractors in the Building, the Tenant authorizing such work shall be responsible for including in the contract for such work the following insurance and indemnity requirements to the extent that they are applicable. Insurance certificates must be received prior to construction. Landlord shall be named as an additional insured party on all certificates.

INSURANCE

Each Contractor and each Subcontractor shall, until the completion of the Tenant Work in question, procure and maintain at its expense, the following insurance coverages with companies acceptable to Landlord in the following minimum limits:

Workers' Compensation

(including coverage for Occupational Disease)

	Limit of Liability
Workers' Compensation	Statutory Benefits
Employer's Liability	$500,000

Comprehensive General Liability

(including Broad Form Comprehensive Liability Enhancement, Contractual Liability assumed by the Contractor and the Tenant under Article 15.3 of the Lease and Completed Operations coverage)

	Limit of Liability
Bodily Injury & Property Damage	Either (a) $5,000,000 combined single limit or (b) $1,000,000 per occurrence, $2,000,000 aggregate with umbrella coverage of at least $5,000,000 per occurrence, $5,000,000 aggregate

Comprehensive Automobile Liability

(including coverage for Hired and Non-owned Automobiles)

	Limit of Liability
Bodily Injury & Property Damage	$1,000,000 per occurrence

SUPPLEMENT TO RULES AND REGULATIONS FOR

DESIGN CONSTRUCTION OF TENANT WORK

FACT SHEET FOR UNIVERSITY PARK

1. PROPERTY MANAGER'S OFFICE

CONTACT(S):	Jay Kiely, Property Manager Robyn Arruda, Asst. Property Manager Eddie Arruda, Chief Engineer
LOCATION:	Forest City Management 38 Sidney Street Cambridge, MA 02139
TELEPHONE NUMBER:	(617) 494-9330

2. PERSONNEL, MATERIAL AND EQUIPMENT ACCESS

LOCATION OF LOADING DOCK:	
NORMAL HOURS OF ACCESS:	7:30 A.M. TO 5:30 P.M.
ENTRANCES NOT AVAILABLE:	All building lobbies.

3. USE OF ELEVATORS

LOCATION OF ELEVATORS:	Specific locations of service elevators will be pointed out by the building staff.
NORMAL HOURS OF OPERATION:	7:30 A.M. to 5:30 P.M.
OVERTIME OPERATION CHARGES:	$40.00 per hour
ELEVATORS NOT AVAILABLE:	All passenger elevators.

4. SPECIAL CONDITIONS AND PRECAUTIONS

As University Park consists of multi-use buildings incorporating offices, retail and hotel suites, special care must be taken to control noise at all times.

All window blinds are to be removed prior* to construction and replaced without damage immediately after completion of construction by the tenant and/or his contractor.

EXHIBIT G

FORM OF LETTER OF CREDIT

IRREVOCABLE STANDBY LETTER OF CREDIT NUMBER _____

ISSUE DATE: _____

ISSUING BANK:
SILICON VALLEY BANK
3003 TASMAN DRIVE
2ND FLOOR, MAIL SORT HF210
SANTA CLARA, CALIFORNIA 95054

BENEFICIARY:
UP 45/75 Sidney Street, LLC
c/o Forest City Commercial Group, LLC
1360 Terminal Tower
50 Public Square
Cleveland, Ohio 44113

APPLICANT:
BLUEPRINT MEDICINES CORPORATION
38 SIDNEY ST.
CAMBRIDGE MA 02139

AMOUNT:	US$3,500,000.00 (THREE MILLION FIVE HUNDRED THOUSAND AND 00/100 U.S. DOLLARS)
EXPIRATION DATE:	_____ (ONE YEAR FROM ISSUANCE)
LOCATION:	SANTA CLARA, CALIFORNIA

DEAR SIR/MADAM:

WE HEREBY ESTABLISH OUR IRREVOCABLE STANDBY LETTER OF CREDIT NO. SVBSF_____ IN YOUR FAVOR AVAILABLE BY YOUR DRAFTS DRAWN ON US AT SIGHT IN THE FORM OF EXHIBIT "A" ATTACHED AND ACCOMPANIED BY THE FOLLOWING DOCUMENTS:

1. THE ORIGINAL OF THIS LETTER OF CREDIT AND ALL AMENDMENT(S), IF ANY.
2. BENEFICIARY'S SIGNED STATEMENT STATING AS FOLLOWS:

(A) "THE AMOUNT REPRESENTS FUNDS DUE AND OWING TO US PURSUANT TO THE TERMS OF THAT CERTAIN LEASE BY AND BETWEEN UP 45/75 SIDNEY STREET, LLC, AS LANDLORD, AND BLUEPRINT MEDICINES CORPORATION, AS TENANT"

OR

(B) "UP 45/75 SIDNEY STREET, LLC HEREBY CERTIFIES THAT IT HAS RECEIVED NOTICE FROM SILICON VALLEY BANK THAT THE LETTER OF CREDIT NO. SVBSF _____ WILL NOT BE RENEWED, AND THAT IT HAS NOT RECEIVED A REPLACEMENT OF THIS LETTER OF CREDIT FROM _____ SATISFACTORY TO UP 45/75 SIDNEY STREET, LLC AT LEAST THIRTY (30) DAYS PRIOR TO THE EXPIRATION DATE OF THIS LETTER OF CREDIT." PARTIAL DRAWS AND MULTIPLE PRESENTATIONS ARE ALLOWED.

THIS LETTER OF CREDIT SHALL BE AUTOMATICALLY EXTENDED FOR AN ADDITIONAL PERIOD OF ONE YEAR, WITHOUT AMENDMENT, FROM THE PRESENT OR EACH FUTURE EXPIRATION DATE UNLESS AT LEAST 60 DAYS PRIOR TO THE THEN CURRENT EXPIRATION DATE WE SEND YOU A NOTICE BY REGISTERED MAIL OR OVERNIGHT COURIER SERVICE AT THE ABOVE ADDRESS THAT THIS LETTER OF CREDIT WILL NOT BE EXTENDED BEYOND THE CURRENT EXPIRATION DATE. IN NO EVENT SHALL THIS LETTER OF CREDIT BE AUTOMATICALLY EXTENDED BEYOND _____.

THIS LETTER OF CREDIT IS TRANSFERABLE ONE OR MORE TIMES, BUT IN EACH INSTANCE ONLY TO A SINGLE BENEFICIARY AS TRANSFEREE AND ONLY UP TO THE THEN AVAILABLE AMOUNT, ASSUMING SUCH TRANSFER TO SUCH TRANSFEREE WOULD BE IN COMPLIANCE WITH THEN APPLICABLE LAW AND REGULATION, INCLUDING BUT NOT LIMITED TO THE REGULATIONS OF THE U. S. DEPARTMENT OF TREASURY AND U. S. DEPARTMENT OF COMMERCE. AT THE TIME OF TRANSFER, THE ORIGINAL LETTER OF CREDIT AND ORIGINAL AMENDMENT(S), IF ANY, MUST BE SURRENDERED TO US AT OUR ADDRESS INDICATED IN THIS LETTER OF CREDIT TOGETHER WITH OUR TRANSFER FORM ATTACHED HERETO AS EXHIBIT "B" DULY EXECUTED. THE CORRECTNESS OF THE SIGNATURE AND TITLE OF THE PERSON SIGNING THE TRANSFER FORM MUST BE VERIFIED BY BENEFICIARY'S BANK. APPLICANT SHALL PAY OUR TRANSFER FEE OF ¼ OF 1% OF THE TRANSFER AMOUNT (MINIMUM US$250.00) UNDER THIS LETTER OF CREDIT.

DRAFT(S) AND DOCUMENTS MUST INDICATE THE NUMBER AND DATE OF THIS LETTER OF CREDIT.

ALL DEMANDS FOR PAYMENT SHALL BE MADE BY PRESENTATION OF THE ORIGINAL APPROPRIATE DOCUMENTS ON A BUSINESS DAY AT OUR OFFICE (THE "BANK'S OFFICE") AT: SILICON VALLEY BANK, 3003 TASMAN DRIVE, SANTA CLARA, CA 95054, ATTENTION: STANDBY LETTER OF CREDIT NEGOTIATION SECTION

FACSIMILE PRESENTATIONS ARE PERMITTED. SHOULD BENEFICIARY WISH TO MAKE PRESENTATIONS UNDER THIS LETTER OF CREDIT ENTIRELY BY FACSIMILE TRANSMISSION IT NEED NOT TRANSMIT THIS LETTER OF CREDIT AND AMENDMENT(S), IF ANY. EACH FACSIMILE TRANSMISSION SHALL BE MADE AT: (408) 496-2418 OR (408) 969-6510 ; AND SIMULTANEOUSLY UNDER TELEPHONE ADVICE TO: (408) 654-6274 OR (408) 654-7716, ATTENTION: STANDBY LETTER OF CREDIT NEGOTIATION SECTION WITH ORIGINALS TO FOLLOW BY OVERNIGHT COURIER SERVICE; PROVIDED, HOWEVER, THE BANK WILL DETERMINE HONOR OR DISHONOR ON THE BASIS OF PRESENTATION BY FACSIMILE ALONE, AND WILL NOT EXAMINE THE ORIGINALS. IN ADDITION, ABSENCE OF THE AFORESAID TELEPHONE ADVICE SHALL NOT AFFECT OUR OBLIGATION TO HONOR ANY DRAW REQUEST.

WE HEREBY AGREE WITH THE BENEFICIARY THAT DRAFTS DRAWN UNDER AND IN ACCORDANCE WITH THE TERMS AND CONDITIONS OF THIS LETTER OF CREDIT WILL BE DULY HONORED UPON PRESENTATION TO US ON OR BEFORE THE EXPIRATION DATE OF THIS LETTER OF CREDIT OR ANY AUTOMATICALLY EXTENDED EXPIRATION DATE.

IF ANY INSTRUCTIONS ACCOMPANYING A DRAWING UNDER THIS LETTER OF CREDIT REQUEST THAT PAYMENT IS TO BE MADE BY TRANSFER TO YOUR ACCOUNT WITH ANOTHER BANK, WE WILL ONLY EFFECT SUCH PAYMENT BY FED WIRE TO A U.S. REGULATED BANK, AND WE AND/OR SUCH OTHER BANK MAY RELY ON AN ACCOUNT NUMBER SPECIFIED IN SUCH INSTRUCTIONS EVEN IF THE NUMBER IDENTIFIES A PERSON OR ENTITY DIFFERENT FROM THE INTENDED PAYEE.

THIS LETTER OF CREDIT IS SUBJECT TO THE INTERNATIONAL STANDBY PRACTICES (ISP98), INTERNATIONAL CHAMBER OF COMMERCE, PUBLICATION NO. 590.

_____	_____
AUTHORIZED SIGNATURE	AUTHORIZED SIGNATURE

IRREVOCABLE STANDBY LETTER OF CREDIT NUMBER _____

EXHIBIT A

DATE: _____ REF. NO. _____

AT SIGHT OF THIS DRAFT

PAY TO THE ORDER OF _____ US$ _____

US DOLLARS _____

DRAWN UNDER SILICON VALLEY BANK, SANTA CLARA, CALIFORNIA, STANDBY LETTER OF CREDIT NUMBER NO. _____ DATED _____

TO: SILICON VALLEY BANK
3003 TASMAN DRIVE
SANTA CLARA, CA 95054

_____
(BENEFICIARY'S NAME)

_____
Authorized Signature

EXHIBIT B

TRANSFER FORM

DATE: _____

TO: SILICON VALLEY BANK
3003 TASMAN DRIVE
SANTA CLARA, CA 95054
ATTN:INTERNATIONAL DIVISION.
STANDBY LETTERS OF CREDIT

RE: IRREVOCABLE STANDBY LETTER OF CREDIT NO. _____ ISSUED BY SILICON VALLEY BANK, SANTA CLARA

L/C AMOUNT: _____

GENTLEMEN:

FOR VALUE RECEIVED, THE UNDERSIGNED BENEFICIARY HEREBY IRREVOCABLY TRANSFERS TO:

_____
(NAME OF TRANSFEREE)

_____
(ADDRESS)

ALL RIGHTS OF THE UNDERSIGNED BENEFICIARY TO DRAW UNDER THE ABOVE LETTER OF CREDIT UP TO ITS AVAILABLE AMOUNT AS SHOWN ABOVE AS OF THE DATE OF THIS TRANSFER.

BY THIS TRANSFER, ALL RIGHTS OF THE UNDERSIGNED BENEFICIARY IN SUCH LETTER OF CREDIT ARE TRANSFERRED TO THE TRANSFEREE. TRANSFEREE SHALL HAVE THE SOLE RIGHTS AS BENEFICIARY THEREOF, INCLUDING SOLE RIGHTS RELATING TO ANY AMENDMENTS, WHETHER INCREASES OR EXTENSIONS OR OTHER AMENDMENTS, AND WHETHER NOW EXISTING OR HEREAFTER MADE. ALL AMENDMENTS ARE TO BE ADVISED DIRECTLY TO THE TRANSFEREE WITHOUT NECESSITY OF ANY CONSENT OF OR NOTICE TO THE UNDERSIGNED BENEFICIARY.

THE ORIGINAL OF SUCH LETTER OF CREDIT IS RETURNED HEREWITH, AND WE ASK YOU TO ENDORSE THE TRANSFER ON THE REVERSE THEREOF, AND FORWARD IT DIRECTLY TO THE TRANSFEREE WITH YOUR CUSTOMARY NOTICE OF TRANSFER.

SINCERELY,

_____
(BENEFICIARY'S NAME)

_____
(SIGNATURE OF BENEFICIARY)

_____
(NAME AND TITLE)

SIGNATURE AUTHENTICATED

The name(s), title(s), and signature(s) conform to that/those on file with us for the company and the signature(s) is/are authorized to execute this instrument.

_____
(Name of Bank)

_____
(Address of Bank)

_____
(City, State, ZIP Code)

_____
(Authorized Name and Title)

_____
(Authorized Signature)

_____
(Telephone number)

EXHIBIT H

EXPEDITED DISPUTE RESOLUTION PROCEDURE

Any dispute or determination by a party hereto which, pursuant to the terms of this Lease, may be resolved pursuant to this Exhibit I shall be undertaken in accordance with the following provisions:

(a) In the event of any such dispute, the complaining party (the "Claimant") shall serve upon the other party (the "Respondent") by registered mail or hand delivery a written demand for arbitration (the "Dispute Notice"), setting forth with particularity the nature of the dispute. The Claimant shall simultaneously serve any request (the "Document Request") for production of relevant documents from the Respondent. The service of such Dispute Notice and Document Request shall be effective upon receipt thereof. Failure to serve a Document Request shall constitute a waiver by the Claimant of any right to demand documents from the Respondent, except as provided in Subparagraph (c) below. The Dispute Notice shall also be delivered to the Boston office of the American Arbitration Association (the "AAA") which shall select an arbitrator to conduct the arbitration (hereinafter the "Arbitrator"), the choice of which shall be binding on the parties. If the Arbitrator believes he/she has a material conflict of interest with any of the parties, the AAA shall select an alternative Arbitrator within ten (10) business days of receipt of the Dispute Notice. If AAA shall cease to exist and/or shall decline to serve under this Lease as to all or any particular dispute submitted thereto for arbitration, or within ten (10) business days of receipt of a Dispute Notice, shall fail to select an Arbitrator, then, and in any such event, the parties shall mutually select an alternative arbitrator for their dispute(s) and, in the absence of agreement within a period of ten (10) business days, either party shall have the right, on notice to the other, to apply to the President of the Boston Bar Association for selection of an independent arbitrator.

(b) Response by Respondent. Within ten (10) business days of receipt of a Dispute Notice and Document Request, the Respondent shall serve a detailed written response to the Dispute Notice, including any arbitrable counterclaims, and shall produce all non-privileged documents called for in the Document Request. At the same time, Respondent shall serve any Document Request on Claimant, failing which Respondent shall be deemed to have waived any right to demand documents from Claimant. Within two (2) business days of delivery of the response, all undisputed amounts shall be paid by Respondent by wire transfer.

(c) Response by Claimant. Within ten (10) business days of receipt of such written response, the Claimant shall serve a reply to any counterclaims asserted by Respondent and shall produce all non-privileged documents requested by Respondent. At the same time, the Claimant may serve a second Document Request limited to documents relevant to Respondent's counterclaim. Within two (2) business days of delivery of the reply to any counterclaims, all undisputed amounts shall be paid by the Claimant by wire transfer.

(d) Response by Respondent. Respondent shall produce all non-privileged documents called for in any such second Document Request within ten (10) business days of service thereof.

(e) Appearance Before Arbitrator. Within thirty five (35) business days of service of the Dispute Notice, any arbitrable dispute shall be submitted to the Arbitrator, whose decision shall

be final, binding and non-appealable, and may be entered and enforced as a judgment by any court of competent jurisdiction. The Arbitrator shall consider and determine only matters properly subject to arbitration pursuant to this Lease.

The Arbitrator shall, in consultation with the parties, establish such further procedures, including hearings, as he or she deems appropriate, provided, however, that a decision of the dispute (including counterclaims) shall be rendered no later than sixty (60) business days after service of the Dispute Notice.

(f) Final Decision; Fees and Expenses. The Arbitrator's decision shall be in writing, and shall include findings of fact and a concise explanation of the reasons for the decision. The decision shall be delivered to the parties immediately. The Arbitrator's fees and expenses shall be borne by one or both of the parties in accordance with the direction of the Arbitrator, who shall be guided in such determination by the results of the arbitration. If any party refuses to appear before the Arbitrator or to respond as required in subparagraphs (a) through (e) above, the Arbitrator shall decide the matter as by default against the non-appearing party, and such decision shall be final, binding and non-appealable to the same extent as a decision rendered with the full participation of such party.

[Remainder of page intentionally left blank.]

EXHIBIT I

FORM OF NON-DISTURBANCE AGREEMENT WITH MIT

Non-Disturbance Agreement

Agreement dated as of April 27, 2017 (this "Agreement"), by and between MASSACHUSETTS INSTITUTE OF TECHNOLOGY, a Massachusetts educational corporation chartered by Massachusetts law ("Ground Lessor"), UP 45/75 SIDNEY STREET, LLC, a Delaware limited liability company ("Landlord") and BLUEPRINT MEDICINES CORPORATION., a Delaware corporation ("Tenant").

BACKGROUND

Ground Lessor and Landlord are parties, as landlord and tenant respectively, to a Construction and Lease Agreement (the "Ground Lease") for certain real property located at 45 Sidney Street in Cambridge, Massachusetts, a legal description of which is set forth on Exhibit A attached hereto (the "Land"). Landlord has constructed a building (the "Building") on the Land. Tenant has entered into a lease dated as of April 27, 2017 (the "Lease") with Landlord for certain premises in the Building (the "Premises"), the Premises being more particularly described in the Lease.

AGREEMENTS

1. Non-Disturbance. If the Ground Lease is terminated, for any reason, Ground Lessor shall not disturb Tenant in Tenant's possession of the Premises and without any hindrance or interference from the Ground Lessor, shall permit Tenant peaceably to hold and enjoy the Premises for the remainder of the unexpired term of the Lease, together with any extension periods provided for therein, upon and subject to the same terms, covenants and conditions as are contained in the Lease, and shall recognize the Lease as modified hereby. The foregoing is on the condition that Tenant is not in default under the Lease beyond any applicable notice and grace periods contained in the Lease.

2. Attornment. Tenant hereby agrees that if the Ground Lease is terminated for any reason, Tenant shall attorn to Ground Lessor and shall be liable to and recognize Ground Lessor as Landlord under the Lease for the balance of the term of the Lease upon and subject to all of the terms and conditions thereof. In such case, upon receipt of notice from Ground Lessor setting forth the effective date of the termination of the Ground Lease, Tenant shall pay to the Ground Lessor all obligations required to be paid and performed by Tenant under the Lease arising after the date of termination. The Lease shall continue in full force and effect as a direct lease between Ground Lessor and Tenant.

3. Additional Conditions. Tenant agrees that Ground Lessor shall not be: (i) liable for any act or omission of any person or party who may be landlord under the Lease prior to any termination of the Ground Lease ("Prior Landlord"); (ii) subject to any offsets or defenses which Tenant might have against Prior Landlord; (iii) bound by any prepayment of rent or additional rent, or any other charge which Tenant might have paid to Prior Landlord for more than the then current

month (other than a bona fide security deposit paid by Tenant to Landlord under the Lease, estimated monthly payments made on account of additional rent as and when required to be made pursuant to the provisions of the Lease, or other rent, additional rent or charges which have been received by Ground Lessor); and (iv) bound by any amendment, modification or termination of the Lease made without Ground Lessor's express agreement when such agreement is required under the Ground Lease. Tenant additionally agrees with Ground Lessor that Tenant shall not enter into any assignment of the Lease or sublease of all or any part of the Premises in cases where Landlord's consent is required thereto, unless Ground Lessor shall have also given its consent thereto, which consent shall not unreasonably withheld or delayed. Nothing herein, however, shall constitute a waiver of Tenant's rights as against such individual or entity which is the landlord under the Lease as of the time of any event or circumstances which may give rise to a claim of the Tenant against such individual or entity. In addition, nothing herein shall relieve any successor landlord under the Lease from its obligation to comply with those obligations of a Landlord under the Lease during the period for which it is the owner of the Landlord's interest in the Lease.

4. Landlord's Defaults. Tenant hereby agrees that, if Tenant provides Landlord with any notice of default or claimed default on the part of Landlord under the Lease, Tenant shall concurrently therewith send a copy of such notice to Ground Lessor. In such event, Ground Lessor shall be permitted (but not obligated) to cure any such default within the period of time allotted thereto in the Lease. If landlord shall fail to cure such default within the time period allocated thereto in the Lease (or if Landlord shall not within such time period have commenced diligent efforts to remedy a default that cannot be fully cured within such time period) then Tenant shall provide Ground Lessor with notice of such failure. Upon receipt of such notice of Landlord's failure to cure, Ground Lessor shall be granted an additional thirty (30) days during which it shall be permitted (but not obligated) to cure such default. In the case of a default which cannot with diligence be cured by Ground Lessor within thirty (30) days, Ground Lessor shall have such additional period of time as may be reasonably necessary in order for Ground Lessor to remedy such default with diligence and continuity of effort, provided that Ground Lessor has commenced to cure such default within such thirty (30) day period.

5. Notices. Duplicates of all notices delivered by any party to another party and required by this Agreement shall be delivered concurrently to all other parties to this Agreement. All notices shall be written, delivered by certified or registered mail, and sent, if to Ground Lessor, to 238 Main Street, Suite 200, Cambridge, Massachusetts 02142, Attention: Managing Director, Real Estate, if to Tenant to Blueprint Medicines Corporation, 38 Sidney Street, Suite 200, Cambridge, MA 02139-4234, Attention: Legal Department, and if to Landlord to 38 Sidney Street, Cambridge, MA 02139-4234, Attention: Asset Manager, or such addresses as may, from time to time, be set forth in notices to the other parties hereunder.

6. Exculpation of Ground Lessor. Ground Lessor shall not be personally liable hereunder. Tenant agrees to look to Ground Lessor's interest in the Land and Building only for satisfaction of any claim against Ground Lessor hereunder.

7. Successors and Assigns. This Agreement shall bind Tenant, its successors and assigns, and shall benefit Tenant and only such successor and assigns of Tenant as are permitted by the Lease and shall bind and benefit Ground Lessor and its successors and assigns (provided

that after transfer of Ground Lessor's entire interest in the Land to another party, Ground Lessor shall have no liability for any act or omission of such party) and shall bind and benefit Landlord and its successors and assigns.

[Remainder of page intentionally left blank.]

EXECUTED as an instrument under seal as of the date set forth above.

GROUND LESSOR

MASSACHUSETTS INSTITUTE OF TECHNOLOGY

By: _____
Name:
Title:

TENANT

BLUEPRINT MEDICINES CORPORATION

By: _____
Name: Jeffrey W. Albers
Title: Chief Executive Officer and President

LANDLORD

UP 45/75 SIDNEY STREET, LLC
a Delaware limited liability company

By: _____
Name:
Title:

COMMONWEALTH OF MASSACHUSETTS)
) ss:
COUNTY OF MIDDLESEX)

BEFORE ME, a Notary Public in and for said County and State, personally appeared the MASSACHUSETTS INSTITUTE OF TECHNOLOGY, by _____, its _____, who acknowledged that he did sign the foregoing instrument and that the same is his free act and deed and the free act and deed of said corporation.

IN TESTIMONY HEREOF, I set my hand and official seal at Cambridge, this _____ day of _____, 2017.

_____
Notary Public
My Commission Expires: _____

COMMONWEALTH OF MASSACHUSETTS)
) ss:
COUNTY)
OF _____

BEFORE ME, a Notary Public in and for said County and State, personally appeared the above-named BLUEPRINT MEDICINES CORPORATION, by Jeffrey W. Albers, its Chief Executive Officer and President, who acknowledged that he/she did sign the foregoing instrument and that the same is his/her free act and deed and the free act and deed of said corporation.

IN TESTIMONY HEREOF, I set my hand and official seal at _____, this _____ day of _____, 2017.

_____
Notary Public
My Commission
Expires: _____

COMMONWEALTH OF MASSACHUSETTS)
) ss:
COUNTY OF MIDDLESEX)

BEFORE ME, a Notary Public in and for said County and State, personally appeared the above-named UP 45/75 SIDNEY STREET, LLC, by _____, its _____, who acknowledged that he did sign the foregoing instrument and that the same is his free act and deed and the free act and deed of said corporation on behalf of said limited partnership.

IN TESTIMONY HEREOF, I set my hand and official seal at Cambridge, this _____ day of _____, 2017.

_____
Notary Public
My Commission
Expires: _____

EXHIBIT A

Legal Description

The land located at 45-75 Sidney Street in the City of Cambridge, County of Middlesex, Commonwealth of Massachusetts, and more particularly described as follows:

Beginning at a point at the intersection of the northwesterly sideline of Sidney Street with the southwesterly sideline of Franklin Street, thence N 51°34’10” W, a distance of 125.50 feet to the true Point of Beginning.

Thence through land now or formerly of the Massachusetts Institute of Technology the following ten (10) courses:

S 38°25’13” W, a distance of 55.46 feet to a point;
S 51°34’47” E, a distance of 15.50 feet to a point;
S 38°25’13” W, a distance of 40.19 feet to a point;
N 51°34’47” W, a distance of 15.50 feet to a point;
S 38°25’13” W, a distance of 248.03 feet to a point;
S 51°34’47” E, a distance of 15.50 feet to a point;
S 38°25’13” W, a distance of 40.19 feet to a point;
N 51°34’47” W, a distance of 15.50 feet to a point;
S 38°25’13” W, a distance of 75.46 feet to a point; and
N 51°34’47” W, a distance of 197.50 feet to a point on the northwesterly sideline of Brookline Place so-called (other land now or formerly of the Massachusetts Institute of Technology under lease to the Auburn Court Housing Project).

Thence N 38°25’13” E along said northwesterly sideline of Brookline Place a distance of 459.36 feet to a point as the intersection of said northwesterly sideline of Brookline Place with the southwesterly sideline of Franklin Street.

Thence S 51°34’10” E along said southwesterly sideline of Franklin Street, a distance of 197.50’ to the Point of Beginning.

Exhibit 31.1

CERTIFICATIONS

I, Jeffrey W. Albers, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Blueprint Medicines Corporation;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) for the registrant and have:

(a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

(b) (Paragraph omitted pursuant to SEC Release Nos. 33-8238/34-47986 and 33-8392/34-49313);

(c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

(d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

(a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

(b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: May 3, 2017

By: /s/ Jeffrey W. Albers
Jeffrey W. Albers
President and Chief Executive Officer
(Principal Executive Officer)

Exhibit 31.2

CERTIFICATIONS

I, Michael Landsittel, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Blueprint Medicines Corporation;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) for the registrant and have:

(a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

(b) (Paragraph omitted pursuant to SEC Release Nos. 33-8238/34-47986 and 33-8392/34-49313);

(c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

(d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

(a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

(b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: May 3, 2017

By: /s/ Michael Landsittel
Michael Landsittel
Vice President of Finance
(Principal Financial and 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**

In connection with the Quarterly Report on Form 10-Q of Blueprint Medicines Corporation (the "Company") for the period ended March 31, 2017 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), each of the undersigned officers of the Company hereby certifies, pursuant to 18 U.S.C. Section 1350, that to his knowledge:

(1) the Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: May 3, 2017

By: /s/ Jeffrey W. Albers
Jeffrey W. Albers
President and Chief Executive Officer
(Principal Executive Officer)

Date: May 3, 2017

By: /s/ Michael Landsittel
Michael Landsittel
Vice President of Finance
(Principal Financial and Accounting Officer)