

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

FORM 10-Q

**QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
FOR THE QUARTERLY PERIOD ENDED JUNE 30, 2021**

or

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

Commission file number 000-19319

Vertex Pharmaceuticals Incorporated

(Exact name of registrant as specified in its charter)

Massachusetts

(State or other jurisdiction of incorporation or organization)

04-3039129

(I.R.S. Employer Identification No.)

50 Northern Avenue, Boston, Massachusetts

(Address of principal executive offices)

02210

(Zip Code)

Registrant's telephone number, including area code **(617) 341-6100**

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

Title of each class	Trading Symbol	Name of each exchange on which registered
Common Stock, \$0.01 Par Value Per Share	VRTX	The Nasdaq Global Select Market

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

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

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

Large accelerated filer Accelerated filer Non-accelerated filer Smaller reporting company Emerging growth company

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

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

Indicate the number of shares outstanding of each of the issuer's classes of common stock, as of the latest practicable date.

Common Stock, par value \$0.01 per share

259,428,394

Outstanding at July 23, 2021

VERTEX PHARMACEUTICALS INCORPORATED
FORM 10-Q
FOR THE QUARTER ENDED JUNE 30, 2021

TABLE OF CONTENTS

	Page	
<u>Part I. Financial Information</u>		
Item 1.	Financial Statements	2
	Condensed Consolidated Financial Statements (unaudited)	2
	Condensed Consolidated Statements of Operations - Three and Six Months Ended June 30, 2021 and 2020	2
	Condensed Consolidated Statements of Comprehensive Income - Three and Six Months Ended June 30, 2021 and 2020	3
	Condensed Consolidated Balance Sheets - June 30, 2021 and December 31, 2020	4
	Condensed Consolidated Statements of Shareholders' Equity - Three and Six Months Ended June 30, 2021 and 2020	5
	Condensed Consolidated Statements of Cash Flows - Six Months Ended June 30, 2021 and 2020	6
	Notes to Condensed Consolidated Financial Statements	7
Item 2.	Management's Discussion and Analysis of Financial Condition and Results of Operations	22
Item 3.	Quantitative and Qualitative Disclosures About Market Risk	34
Item 4.	Controls and Procedures	35
<u>Part II. Other Information</u>		
Item 1.	Legal Proceedings	35
Item 1A.	Risk Factors	35
Item 2.	Unregistered Sales of Equity Securities and Use of Proceeds	36
Item 6.	Exhibits	37
Signatures		38

"We," "us," "Vertex" and the "Company" as used in this Quarterly Report on Form 10-Q refer to Vertex Pharmaceuticals Incorporated, a Massachusetts corporation, and its subsidiaries.

"Vertex," "KALYDECO[®]," "ORKAMBI[®]," "SYMDEKO[®]," "SYMKEVI[®]" and "TRIKAFTA[®]," are registered trademarks of Vertex. The trademark for "KAFTRIO[™]" is pending in the United States and registered in the European Union. Other brands, names and trademarks contained in this Quarterly Report on Form 10-Q are the property of their respective owners.

We use the brand name for our products when we refer to the product that has been approved and with respect to the indications on the approved label. Otherwise, including in discussions of our cystic fibrosis development programs, we refer to our compounds by their scientific (or generic) name or VX developmental designation.

Part I. Financial Information
Item 1. Financial Statements

VERTEX PHARMACEUTICALS INCORPORATED
Condensed Consolidated Statements of Operations
(unaudited)
(in thousands, except per share amounts)

	Three Months Ended June 30,		Six Months Ended June 30,	
	2021	2020	2021	2020
Revenues:				
Product revenues, net	\$ 1,793,370	\$ 1,524,485	\$ 3,516,675	\$ 3,039,5
Other revenues	—	—	1,000	—
Total revenues	1,793,370	1,524,485	3,517,675	3,039,5
Costs and expenses:				
Cost of sales	227,972	184,520	420,301	347,0
Research and development expenses	1,407,090	420,928	1,863,063	869,4
Selling, general and administrative expenses	194,669	191,804	386,746	374,0
Change in fair value of contingent consideration	1,600	9,200	(2,300)	10,8
Total costs and expenses	1,831,331	806,452	2,667,810	1,601,3
(Loss) income from operations	(37,961)	718,033	849,865	1,438,2
Interest income	1,133	4,243	2,598	16,8
Interest expense	(15,478)	(13,871)	(31,156)	(28,0)
Other income (expense), net	8,051	116,365	(44,602)	55,2
(Loss) income before (benefit from) provision for income taxes	(44,255)	824,770	776,705	1,482,3
(Benefit from) provision for income taxes	(111,179)	(12,500)	56,643	42,2
Net income	\$ 66,924	\$ 837,270	\$ 720,062	\$ 1,440,0
Net income per common share:				
Basic	\$ 0.26	\$ 3.22	\$ 2.78	\$ 5.
Diluted	\$ 0.26	\$ 3.18	\$ 2.75	\$ 5.
Shares used in per share calculations:				
Basic	258,988	259,637	259,179	260,0
Diluted	261,020	263,403	261,468	263,7

The accompanying notes are an integral part of these condensed consolidated financial statements.

VERTEX PHARMACEUTICALS INCORPORATED
Condensed Consolidated Statements of Comprehensive Income
(unaudited)
(in thousands)

	Three Months Ended June 30,		Six Months Ended June 30,	
	2021	2020	2021	2020
Net income	\$ 66,924	\$ 837,270	\$ 720,062	\$ 1,440,0
Other comprehensive income:				
Unrealized holding (losses) gains on marketable securities, net	(55)	2,714	(273)	1,9
Unrealized gains (losses) on foreign currency forward contracts, net of tax of \$(2.3) million, \$4.7 million, \$(11.6) million and \$(0.3) million, respectively	8,279	(19,680)	42,245	(8
Foreign currency translation adjustment	(81)	(10,538)	1,349	(13,2
Total other comprehensive income (loss)	8,143	(27,504)	43,321	(12,1
Comprehensive income	\$ 75,067	\$ 809,766	\$ 763,383	\$ 1,427,8

The accompanying notes are an integral part of these condensed consolidated financial statements.

VERTEX PHARMACEUTICALS INCORPORATED
Condensed Consolidated Balance Sheets
(unaudited)
(in thousands, except per share amounts)

	June 30, 2021	December 31, 2020
Assets		
Current assets:		
Cash and cash equivalents	\$ 6,063,678	\$ 5,988,1
Marketable securities	644,315	670,7
Accounts receivable, net	929,142	885,3
Inventories	321,620	280,7
Prepaid expenses and other current assets	498,759	308,3
Total current assets	8,457,514	8,133,3
Property and equipment, net	1,021,233	958,5
Goodwill	1,002,158	1,002,1
Intangible assets	400,000	400,0
Deferred tax assets	952,808	882,7
Operating lease assets	316,874	325,5
Other assets	71,099	49,3
Total assets	\$ 12,221,686	\$ 11,751,8
Liabilities and Shareholders' Equity		
Current liabilities:		
Accounts payable	\$ 127,534	\$ 155,1
Accrued expenses	1,482,556	1,404,9
Other current liabilities	226,358	317,4
Total current liabilities	1,836,448	1,877,5
Long-term finance lease liabilities	524,925	539,0
Long-term operating lease liabilities	368,924	350,4
Long-term contingent consideration	187,300	189,6
Other long-term liabilities	107,693	108,3
Total liabilities	3,025,290	3,064,9
Commitments and contingencies	—	—
Shareholders' equity:		
Preferred stock, \$0.01 par value; 1,000 shares authorized; none issued and outstanding	—	—
Common stock, \$0.01 par value; 500,000 shares authorized, 259,114 and 259,890 shares issued and outstanding, respectively	2,591	2,5
Additional paid-in capital	7,640,233	7,894,0
Accumulated other comprehensive loss	(25,159)	(68,4)
Retained earnings	1,578,731	858,6
Total shareholders' equity	9,196,396	8,686,8
Total liabilities and shareholders' equity	\$ 12,221,686	\$ 11,751,8

The accompanying notes are an integral part of these condensed consolidated financial statements.

VERTEX PHARMACEUTICALS INCORPORATED
Condensed Consolidated Statements of Shareholders' Equity
(unaudited)
(in thousands)

	Three Months Ended						
	Common Stock		Additional Paid-in Capital	Accumulated Other Comprehensive Income (Loss)	Retained Earnings (Accumulated Deficit)	Total Shareholder Equity	
	Shares	Amount					
Balance at March 31, 2020	259,079	\$ 2,591	\$ 7,695,905	\$ 13,383	\$ (1,250,225)	\$ 6,461,6	6,461,6
Other comprehensive loss, net of tax	—	—	—	(27,504)	—	—	(27,5
Net income	—	—	—	—	837,270	—	837,2
Common stock withheld for employee tax obligations	(11)	—	(3,080)	—	—	—	(3,0
Issuance of common stock under benefit plans	1,056	10	132,771	—	—	—	132,7
Stock-based compensation expense	—	—	118,121	—	—	—	118,1
Balance at June 30, 2020	<u>260,124</u>	<u>\$ 2,601</u>	<u>\$ 7,943,717</u>	<u>\$ (14,121)</u>	<u>\$ (412,955)</u>	<u>\$ 7,519,2</u>	<u>7,519,2</u>
Balance at March 31, 2021	258,829	\$ 2,588	\$ 7,499,161	\$ (33,302)	\$ 1,511,807	\$ 8,980,2	8,980,2
Other comprehensive income, net of tax	—	—	—	8,143	—	—	8,1
Net income	—	—	—	—	66,924	—	66,9
Common stock withheld for employee tax obligations	(17)	—	(3,524)	—	—	—	(3,5
Issuance of common stock under benefit plans	302	3	38,681	—	—	—	38,6
Stock-based compensation expense	—	—	105,915	—	—	—	105,9
Balance at June 30, 2021	<u>259,114</u>	<u>\$ 2,591</u>	<u>\$ 7,640,233</u>	<u>\$ (25,159)</u>	<u>\$ 1,578,731</u>	<u>\$ 9,196,3</u>	<u>9,196,3</u>

	Six Months Ended						
	Common Stock		Additional Paid-in Capital	Accumulated Other Comprehensive Loss	Retained Earnings (Accumulated Deficit)	Total Shareholders' Equity	
	Shares	Amount					
Balance at December 31, 2019	258,993	\$ 2,589	\$ 7,937,606	\$ (1,973)	\$ (1,852,978)	\$ 6,085,2	6,085,2
Other comprehensive loss, net of tax	—	—	—	(12,148)	—	—	(12,1
Net income	—	—	—	—	1,440,023	—	1,440,0
Repurchase of common stock	(1,404)	(14)	(300,012)	—	—	—	(300,0
Common stock withheld for employee tax obligations	(586)	(6)	(139,241)	—	—	—	(139,2
Issuance of common stock under benefit plans	3,121	32	210,343	—	—	—	210,3
Stock-based compensation expense	—	—	235,021	—	—	—	235,0
Balance at June 30, 2020	<u>260,124</u>	<u>\$ 2,601</u>	<u>\$ 7,943,717</u>	<u>\$ (14,121)</u>	<u>\$ (412,955)</u>	<u>\$ 7,519,2</u>	<u>7,519,2</u>
Balance at December 31, 2020	259,890	\$ 2,599	\$ 7,894,027	\$ (68,480)	\$ 858,669	\$ 8,686,8	8,686,8
Other comprehensive income, net of tax	—	—	—	43,321	—	—	43,3
Net income	—	—	—	—	720,062	—	720,0
Repurchase of common stock	(1,989)	(20)	(424,932)	—	—	—	(424,9
Common stock withheld for employee tax obligations	(489)	(5)	(105,659)	—	—	—	(105,6
Issuance of common stock under benefit plans	1,702	17	53,845	—	—	—	53,8
Stock-based compensation expense	—	—	222,952	—	—	—	222,9
Balance at June 30, 2021	<u>259,114</u>	<u>\$ 2,591</u>	<u>\$ 7,640,233</u>	<u>\$ (25,159)</u>	<u>\$ 1,578,731</u>	<u>\$ 9,196,3</u>	<u>9,196,3</u>

The accompanying notes are an integral part of these condensed consolidated financial statements.

VERTEX PHARMACEUTICALS INCORPORATED
Condensed Consolidated Statements of Cash Flows
(unaudited)
(in thousands)

	Six Months Ended June 30,	
	2021	2020
Cash flows from operating activities:		
Net income	\$ 720,062	\$ 1,440,0
Adjustments to reconcile net income to net cash provided by operating activities:		
Stock-based compensation expense	219,796	232,8
Depreciation expense	60,072	53,5
(Decrease) increase in fair value of contingent consideration	(2,300)	10,8
Deferred income taxes	(180,895)	8,9
Gains (losses) on equity securities	41,686	(65,1
Other non-cash items, net	11,186	16,3
Changes in operating assets and liabilities:		
Accounts receivable, net	(45,848)	(164,1
Inventories	(47,492)	(64,3
Prepaid expenses and other assets	(92,187)	(28,9
Accounts payable	(24,345)	14,6
Accrued expenses	107,526	369,8
Other liabilities	(45,973)	29,7
Net cash provided by operating activities	<u>721,288</u>	<u>1,854,2</u>
Cash flows from investing activities:		
Purchases of available-for-sale debt securities	(239,458)	(126,5
Maturities of available-for-sale debt securities	221,271	145,3
Purchases of property and equipment	(120,763)	(37,3
Investment in note receivable	(15,000)	-
Sale of equity securities	—	127,8
Investment in equity securities	—	(5,8
Net cash (used in) provided by investing activities	<u>(153,950)</u>	<u>103,5</u>
Cash flows from financing activities:		
Issuances of common stock under benefit plans	53,494	213,0
Repurchases of common stock	(424,952)	(300,0
Payments in connection with common stock withheld for employee tax obligations	(105,664)	(139,2
Payments on finance leases	(22,535)	(20,7
Proceeds from finance leases	11,625	5,8
Other financing activities	2,928	1,7
Net cash used in financing activities	<u>(485,104)</u>	<u>(239,4</u>
Effect of changes in exchange rates on cash		
Net increase in cash, cash equivalents and restricted cash	<u>82,223</u>	<u>1,715,0</u>
Cash, cash equivalents and restricted cash—beginning of period	5,988,845	3,120,6
Cash, cash equivalents and restricted cash—end of period	<u>\$ 6,071,068</u>	<u>\$ 4,835,7</u>
Supplemental disclosure of cash flow information:		
Cash paid for interest	\$ 30,085	\$ 27,3
Cash paid for income taxes	\$ 234,395	\$ 36,8

The accompanying notes are an integral part of these condensed consolidated financial statements.

VERTEX PHARMACEUTICALS INCORPORATED
Notes to Condensed Consolidated Financial Statements (unaudited)

A. Basis of Presentation and Accounting Policies

Basis of Presentation

The accompanying condensed consolidated financial statements are unaudited and have been prepared by Vertex Pharmaceuticals Incorporated (“Vertex” or the “Company”) in accordance with accounting principles generally accepted in the United States of America (“U.S. GAAP”).

The condensed consolidated financial statements reflect the operations of the Company and its wholly-owned subsidiaries. All material intercompany balances and transactions have been eliminated. The Company operates in one segment, pharmaceuticals. The Company has reclassified certain items from the prior year’s condensed consolidated financial statements to conform to the current year’s presentation.

Certain information and footnote disclosures normally included in the Company’s Annual Report on Form 10-K for the fiscal year ended December 31, 2020 (the “2020 Annual Report on Form 10-K”) have been condensed or omitted. These interim financial statements, in the opinion of management, reflect all normal recurring adjustments necessary for a fair presentation of the financial position and results of operations for the interim periods ended June 30, 2021 and 2020.

The results of operations for the interim periods are not necessarily indicative of the results of operations to be expected for the full fiscal year. These interim financial statements should be read in conjunction with the audited financial statements for the year ended December 31, 2020, which are contained in the Company’s 2020 Annual Report on Form 10-K.

Use of Estimates

The preparation of condensed consolidated financial statements in accordance with U.S. GAAP requires management to make certain estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the condensed consolidated financial statements, and the amounts of revenues and expenses during the reported periods. The Company bases its estimates on historical experience and various other assumptions, including in certain circumstances future projections that management believes to be reasonable under the circumstances. Actual results could differ from those estimates. Changes in estimates are reflected in reported results in the period in which they become known.

Recently Adopted and Issued Accounting Standards

Income Taxes

In 2019, the FASB issued ASU 2019-12, *Income Taxes (Topic 740)* (“ASU 2019-12”), which simplifies the accounting for income taxes. ASU 2019-12 became effective on January 1, 2021. The adoption of ASU 2019-12 did not have a significant impact on the Company’s condensed consolidated financial statements.

For a discussion of other recent accounting pronouncements please refer to Note A, “Nature of Business and Accounting Policies,” in the Company’s 2020 Annual Report on Form 10-K.

Summary of Significant Accounting Policies

The Company’s significant accounting policies are described in Note A, “Nature of Business and Accounting Policies,” in its 2020 Annual Report on Form 10-K.

VERTEX PHARMACEUTICALS INCORPORATED
Notes to Condensed Consolidated Financial Statements (unaudited)

B. Revenue Recognition

Disaggregation of Revenue

Revenues by Product

Product revenues, net consisted of the following:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2021	2020	2021	2020
	(in thousands)			
TRIKAFTA/KAFTRIO	\$ 1,255,611	\$ 917,715	\$ 2,448,828	\$ 1,812,9
SYMDEKO/SYMKEVI	133,505	171,729	258,554	344,8
ORKAMBI	220,966	231,981	439,663	466,1
KALYDECO	183,288	203,060	369,630	415,6
Total product revenues, net	\$ 1,793,370	\$ 1,524,485	\$ 3,516,675	\$ 3,039,5

Product Revenues by Geographic Location

Total net product revenues by geographic region, based on the location of the customer, consisted of the following:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2021	2020	2021	2020
	(in thousands)			
United States	\$ 1,256,920	\$ 1,210,314	\$ 2,510,353	\$ 2,397,9
Outside of the United States				
Europe	458,906	257,681	863,875	515,0
Other	77,544	56,490	142,447	126,6
Total product revenues outside of the United States	536,450	314,171	1,006,322	641,6
Total product revenues, net	\$ 1,793,370	\$ 1,524,485	\$ 3,516,675	\$ 3,039,5

Contract Liabilities

The Company had contract liabilities of \$122.6 million and \$191.5 million as of June 30, 2021 and December 31, 2020, respectively, related to annual contracts with government-owned and supported customers in international markets that limit the amount of annual reimbursement the Company can receive. Upon exceeding the annual reimbursement amount, products are provided free of charge, which is a material right. These contracts include upfront payments and fees. The Company defers a portion of the consideration received for shipments made up to the annual reimbursement limit as a portion of "Other current liabilities." The deferred amount is recognized as revenue when the free products are shipped. The Company's product revenue contracts include performance obligations that are one year or less.

The Company's contract liabilities at the end of each fiscal year relate to contracts with annual reimbursement limits in international markets in which the annual period associated with the contract is not the same as the Company's fiscal year. In these markets, the Company recognizes revenues related to performance obligations satisfied in previous years; however, these revenues do not relate to any performance obligations that were satisfied more than 12 months prior to the beginning of the current year.

VERTEX PHARMACEUTICALS INCORPORATED
Notes to Condensed Consolidated Financial Statements (unaudited)

C. Collaborative Arrangements

The Company has entered into numerous agreements pursuant to which it collaborates with third parties on research, development and commercialization programs, including in-license and out-license agreements.

The Company's in-license and out-license agreements that had a significant impact on its financial statements for the three and six months ended June 30, 2021 and 2020, or were new or materially revised during the six months ended June 30, 2021, are described below. Additional in-license and out-license agreements were described in Note B, "Collaborative Arrangements," of the Company's 2020 Annual Report on Form 10-K.

In-license Agreements

The Company has entered into a number of in-license agreements in order to advance and obtain access to technologies and services related to its research and early-development activities. The Company is generally required to make an upfront payment upon execution of the license agreement; development, regulatory and commercialization milestones payments upon the achievement of certain product research, development and commercialization objectives; and royalty payments on future sales, if any, of commercial products resulting from the collaboration.

Pursuant to the terms of its in-license agreements, the Company's collaborators typically lead the discovery efforts and the Company leads all preclinical, development and commercialization activities associated with the advancement of any drug candidates and funds all expenses.

The Company typically can terminate its in-license agreements by providing advance notice to its collaborators; the required length of notice is dependent on whether any product developed under the license agreement has received marketing approval. The Company's license agreements may be terminated by either party for a material breach by the other, subject to notice and cure provisions. Unless earlier terminated, these license agreements generally remain in effect until the date on which the royalty term and all payment obligations with respect to all products in all countries have expired.

The Company's "Research and development expenses" included \$958.4 million and \$960.1 million for the three and six months ended June 30, 2021, respectively, and \$27.0 million and \$63.3 million for the three and six months ended June 30, 2020, respectively, related to upfront and milestone payments pursuant to its in-license agreements.

CRISPR Therapeutics AG - CRISPR-Cas9 Gene-editing Therapies

In 2015, the Company entered into a strategic collaboration, option and license agreement (the "CRISPR Agreement") with CRISPR Therapeutics AG and its affiliates ("CRISPR") to collaborate on the discovery and development of potential new treatments aimed at the underlying genetic causes of human diseases using CRISPR-Cas9 gene-editing technology. The Company had the exclusive right to license certain targets. In 2019, the Company elected to exclusively license three targets, including cystic fibrosis, pursuant to the CRISPR Agreement. For each of the three targets that the Company elected to license, CRISPR has the potential to receive up to an additional \$410.0 million in development, regulatory and commercial milestones as well as royalties on net product sales.

In 2017, the Company entered into a joint development and commercialization agreement with CRISPR pursuant to the terms of the CRISPR Agreement (the "Original CTX001 JDCA"), under which the Company and CRISPR were co-developing and preparing to co-commercialize CTX001 for the treatment of hemoglobinopathies, including treatments for sickle cell disease and beta thalassemia. The Company concluded that the Original CTX001 JDCA is a cost-sharing arrangement, which results in the net impact of the arrangement being recorded in "Research and development expenses" in its condensed consolidated statements of operations. During the three and six months ended June 30, 2021, the net expense related to the Original CTX001 JDCA was \$27.5 million and \$47.5 million, respectively. During the three and six months ended June 30, 2020, the net expense related to the Original CTX001 JDCA was \$9.8 million and \$19.0 million, respectively.

In the second quarter of 2021, the Company and CRISPR amended and restated the Original CTX001 JDCA (the "A&R JDCA"), pursuant to which the parties agreed to, among other things, (a) adjust the governance structure for the collaboration and adjust the responsibilities of each party thereunder; (b) adjust the allocation of net profits and net losses between the parties; and (c) exclusively license (subject to CRISPR's reserved rights to conduct certain activities) certain intellectual

VERTEX PHARMACEUTICALS INCORPORATED
Notes to Condensed Consolidated Financial Statements (unaudited)

property rights to the Company relating to the products that may be researched, developed, manufactured and commercialized under such agreement.

Pursuant to the A&R JDCA, the Company is now leading global development, manufacturing and commercialization of CTX001, with support from CRISPR. Subject to the terms and conditions of the A&R JDCA, the Company also has the right to conduct all research, development, manufacturing and commercialization activities relating to the product candidates and products under the A&R JDCA (including CTX001) throughout the world subject to CRISPR's reserved right to conduct certain activities.

In connection with the amendment and restatement of this agreement, the Company made a \$900.0 million upfront payment to CRISPR in the second quarter of 2021. The Company concluded that it did not have any alternative future use for the acquired in-process research and development and recorded this upfront payment to "Research and development expenses." CRISPR has the potential to receive an additional one-time \$200.0 million milestone payment upon receipt of the first marketing approval of CTX001 from the U.S. Food or Drug Administration or the European Commission. The Company and CRISPR continued to share equally all expenses incurred under the A&R JDCA through June 30, 2021. Beginning July 1, 2021, with respect to CTX001, the net profits and net losses incurred pursuant to the A&R JDCA will be allocated 60% to the Company and 40% to CRISPR, while all other product candidates and products will continue to have net profits and net losses shared equally between the parties.

Out-license Agreements

The Company has entered into licensing agreements pursuant to which it has out-licensed rights to certain drug candidates to third-party collaborators. Pursuant to these out-license agreements, the Company's collaborators become responsible for all costs related to the continued development of such drug candidates and obtain development and commercialization rights to these drug candidates. Depending on the terms of the agreements, the Company's collaborators may be required to make upfront payments, milestone payments upon the achievement of certain product research and development objectives and may also be required to pay royalties on future sales, if any, of commercial products resulting from the collaboration. The termination provisions associated with these collaborations are generally the same as those described above related to the Company's in-license agreements. None of the Company's out-license agreements had a significant impact on the Company's condensed consolidated statement of operations during the three and six months ended June 30, 2021 and 2020.

Cystic Fibrosis Foundation

The Company has a research, development and commercialization agreement that was originally entered into in 2004 with the Cystic Fibrosis Foundation, as successor in interest to the Cystic Fibrosis Foundation Therapeutics, Inc. This agreement was most recently amended in 2016. Pursuant to the agreement, as amended, the Company agreed to pay royalties ranging from low-single digits to mid-single digits on potential sales of certain compounds first synthesized and/or tested between March 1, 2014 and August 31, 2016, including elexacaftor, and tiered royalties ranging from single digits to sub-teens on covered compounds first synthesized and/or tested during a research term on or before February 28, 2014, including KALYDECO (ivacaftor), ORKAMBI (lumacaftor in combination with ivacaftor) and SYMDEKO/SYMKEVI (tezacaftor in combination with ivacaftor). For combination products, such as ORKAMBI, SYMDEKO/SYMKEVI and TRIKAFTA/KAFTRIO (elexacaftor/tezacaftor/ivacaftor and ivacaftor), sales are allocated equally to each of the active pharmaceutical ingredients in the combination product.

D. Earnings Per Share

Basic net income per common share is based upon the weighted-average number of common shares outstanding during the period. Diluted net income per common share utilizing the treasury-stock method is based upon the weighted-average number of common shares outstanding during the period plus additional weighted-average common equivalent shares outstanding during the period when the effect is dilutive.

VERTEX PHARMACEUTICALS INCORPORATED
Notes to Condensed Consolidated Financial Statements (unaudited)

The following table sets forth the computation of basic and diluted net income per common share for the periods ended:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2021	2020	2021	2020
	(in thousands, except per share amounts)			
Net income	\$ 66,924	\$ 837,270	\$ 720,062	\$ 1,440,0
Basic weighted-average common shares outstanding	258,988	259,637	259,179	260,0
Effect of potentially dilutive securities:				
Stock options	1,137	2,054	1,200	1,9
Restricted stock units (including PSUs)	892	1,704	1,084	1,7
Employee stock purchase program	3	8	5	
Diluted weighted-average common shares outstanding	261,020	263,403	261,468	263,7
Basic net income per common share	\$ 0.26	\$ 3.22	\$ 2.78	\$ 5.
Diluted net income per common share	\$ 0.26	\$ 3.18	\$ 2.75	\$ 5.

The Company did not include the securities in the following table in the computation of the net income per common share because the effect would have been anti-dilutive during each period:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2021	2020	2021	2020
	(in thousands)			
Stock options	718	7	537	4
Unvested restricted stock units (including PSUs)	404	5	558	2

E. Fair Value Measurements

The following fair value hierarchy is used to classify assets and liabilities based on observable inputs and unobservable inputs used in order to determine the fair value of the Company's financial assets and liabilities:

- Level 1: Quoted prices in active markets for identical assets or liabilities. An active market for an asset or liability is a market in which transactions for the asset or liability occur with sufficient frequency and volume to provide pricing information on an ongoing basis.
- Level 2: Observable inputs other than Level 1 inputs. Examples of Level 2 inputs include quoted prices in active markets for similar assets or liabilities and quoted prices for identical assets or liabilities in markets that are not active.
- Level 3: Unobservable inputs based on the Company's assessment of the assumptions that market participants would use in pricing the asset or liability.

The Company's investment strategy is focused on capital preservation. The Company invests in instruments that meet the credit quality standards outlined in the Company's investment policy. This policy also limits the amount of credit exposure to any one issue or type of instrument. The Company maintains strategic investments separately from the investment policy that governs its other cash, cash equivalents and marketable securities as described in Note F, "Marketable Securities and Equity Investments." Additionally, the Company utilizes foreign currency forward contracts intended to mitigate the effect of changes in foreign exchange rates on its condensed consolidated statement of operations.

During the three and six months ended June 30, 2021 and 2020, the Company did not record any other-than-temporary impairment charges related to its financial assets.

VERTEX PHARMACEUTICALS INCORPORATED
Notes to Condensed Consolidated Financial Statements (unaudited)

The following tables set forth the Company's financial assets and liabilities subject to fair value measurements by level within the fair value hierarchy (and does not include \$2.4 billion and \$2.8 billion of cash as of June 30, 2021 and December 31, 2020, respectively):

	As of June 30, 2021				As of December 31, 2020			
	Total	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3
(in thousands)								
Financial instruments carried at fair value (asset positions):								
Cash equivalents:								
Money market funds	\$ 3,674,645	\$ 3,674,645	\$ —	\$ —	\$ 3,141,053	\$ 3,141,053	\$ —	\$ —
Commercial paper	2,000	—	2,000	—	—	—	—	—
Marketable securities:								
Corporate equity securities	154,095	13,033	141,062	—	195,781	15,650	180,131	—
U.S. Treasury securities	16,220	16,220	—	—	—	—	—	—
Government-sponsored enterprise securities	62,375	62,375	—	—	80,063	80,063	—	—
Corporate debt securities	135,783	—	135,783	—	231,598	—	231,598	—
Commercial paper	275,842	—	275,842	—	163,268	—	163,268	—
Prepaid expenses and other current assets:								
Foreign currency forward contracts	9,545	—	9,545	—	—	—	—	—
Other assets:								
Foreign currency forward contracts	1,378	—	1,378	—	—	—	—	—
Total financial assets	\$ 4,331,883	\$ 3,766,273	\$ 565,610	\$ —	\$ 3,811,763	\$ 3,236,766	\$ 574,997	\$ —
Financial instruments carried at fair value (liability positions):								
Other current liabilities:								
Foreign currency forward contracts	\$ (20,361)	\$ —	\$ (20,361)	\$ —	\$ (59,184)	\$ —	\$ (59,184)	\$ —
Long-term contingent consideration	(187,300)	—	—	(187,300)	(189,600)	—	—	(189,600)
Other long-term liabilities:								
Foreign currency forward contracts	(206)	—	(206)	—	(4,283)	—	(4,283)	—
Total financial liabilities	\$ (207,867)	\$ —	\$ (20,567)	\$ (187,300)	\$ (253,067)	\$ —	\$ (63,467)	\$ (189,600)

Please refer to Note F, "Marketable Securities and Equity Investments," for the carrying amount and related unrealized gains (losses) by type of investment.

Fair Value of Corporate Equity Securities

The Company classifies its investments in publicly traded corporate equity securities as "Marketable securities" on its condensed consolidated balance sheets. Generally, the Company's investments in the common stock of these publicly traded companies are valued based on Level 1 inputs because they have readily determinable fair values. However, certain of the Company's investments in publicly traded companies have been or continue to be valued based on Level 2 inputs due to transfer restrictions associated with these investments. Please refer to Note F, "Marketable Securities and Equity Investments," for further information on these investments.

Fair Value of Contingent Consideration

In 2019, the Company acquired Exonics Therapeutics, Inc. ("Exonics"), a privately-held company focused on creating transformative gene-editing therapies to repair mutations that cause DMD and other severe neuromuscular diseases, including DM1. The Company's Level 3 contingent consideration liabilities are related to \$678.3 million of development and regulatory milestones potentially payable to Exonics' former equity holders. The Company bases its estimates of the probability of achieving the milestones relevant to the fair value of contingent payments on industry data attributable to rare diseases. The discount rates used in the valuation model for contingent payments, which were between 0.6% and 2.2% as of June 30, 2021, represent a measure of credit risk and market risk associated with settling the liabilities. Significant judgment

VERTEX PHARMACEUTICALS INCORPORATED
Notes to Condensed Consolidated Financial Statements (unaudited)

is used in determining the appropriateness of these assumptions at each reporting period. Due to the uncertainties associated with development and commercialization of drug candidates in the pharmaceutical industry and the effects of changes in other assumptions including discount rates, the Company expects its estimates regarding the fair value of contingent consideration to change in the future, resulting in adjustments to the fair value of the Company's contingent consideration liabilities, and the effect of any such adjustments could be material.

The following table represents a rollforward of the fair value of the Company's contingent consideration liabilities:

	Six Months Ended June 30, 2021	
	(in thousands)	
Balance at December 31, 2020	\$	189,600
Decrease in fair value of contingent payments		(2,300)
Balance at June 30, 2021	\$	187,300

F. Marketable Securities and Equity Investments

A summary of the Company's cash equivalents and marketable securities, which are recorded at fair value (and do not include \$2.4 billion and \$2.8 billion of cash as of June 30, 2021 and December 31, 2020, respectively), is shown below:

	As of June 30, 2021				As of December 31, 2020			
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
	(in thousands)							
Cash equivalents:								
Money market funds	\$ 3,674,645	\$ —	\$ —	\$ 3,674,645	\$ 3,141,053	\$ —	\$ —	\$ 3,141,053
Commercial paper	2,000	—	—	2,000	—	—	—	—
Total cash equivalents	\$ 3,676,645	\$ —	\$ —	\$ 3,676,645	\$ 3,141,053	\$ —	\$ —	\$ 3,141,053
Marketable securities:								
U.S. Treasury securities	\$ 16,226	\$ —	\$ (6)	\$ 16,220	\$ —	\$ —	\$ —	\$ —
Government-sponsored enterprise securities	62,356	19	—	62,375	80,046	17	—	80,063
Corporate debt securities	135,770	46	(33)	135,783	231,263	377	(42)	231,598
Commercial paper	275,807	43	(8)	275,842	163,286	19	(37)	163,268
Total marketable debt securities	490,159	108	(47)	490,220	474,595	413	(79)	474,929
Corporate equity securities	51,427	102,668	—	154,095	51,427	144,354	—	195,781
Total marketable securities	\$ 541,586	\$ 102,776	\$ (47)	\$ 644,315	\$ 526,022	\$ 144,767	\$ (79)	\$ 670,710

Available-for-sale debt securities were classified on the Company's condensed consolidated balance sheets at fair value as follows:

	As of June 30, 2021		As of December 31, 2020	
	(in thousands)			
Cash and cash equivalents	\$	3,676,645	\$	3,141,053
Marketable securities		490,220		474,929
Total	\$	4,166,865	\$	3,615,982

VERTEX PHARMACEUTICALS INCORPORATED
Notes to Condensed Consolidated Financial Statements (unaudited)

Available-for-sale debt securities by contractual maturity were as follows:

	As of June 30, 2021		As of December 31, 2020	
	(in thousands)			
Matures within one year	\$	4,131,731	\$	3,526,185
Matures after one year through five years		35,134		89,797
Total	\$	4,166,865	\$	3,615,982

The Company has a limited number of available-for-sale debt securities in insignificant loss positions as of June 30, 2021, which it does not intend to sell and has concluded it will not be required to sell before recovery of the amortized costs for the investments at maturity. The Company did not record any charges for other-than-temporary declines in the fair value of available-for-sale debt securities or gross realized gains or losses in the three and six months ended June 30, 2021 and 2020.

The Company records changes in the fair value of its investments in corporate equity securities to "Other income (expense), net" on its condensed consolidated statements of operations. During the three and six months ended June 30, 2021 and 2020, the Company's net unrealized gains (losses) on corporate equity securities held at the conclusion of each period were as follows:

	(in thousands)			
	Three Months Ended June 30,		Six Months Ended June 30,	
	2021	2020	2021	2020
Net unrealized gains (losses)	\$ 10,609	\$ 85,511	\$ (41,686)	\$ 35,1

During the six months ended June 30, 2020, the Company received proceeds of \$127.9 million related to the sale of the common stock of publicly traded companies, which had a total original weighted-average cost basis of \$46.8 million. There were no sales of the common stock of publicly traded companies during the six months ended June 30, 2021.

As of June 30, 2021, the carrying value of the Company's equity investments without readily determinable fair values, which are recorded in "Other assets" on its condensed consolidated balance sheets, was \$20.8 million.

VERTEX PHARMACEUTICALS INCORPORATED
Notes to Condensed Consolidated Financial Statements (unaudited)

G. Accumulated Other Comprehensive Income (Loss)

The following table summarizes the changes in accumulated other comprehensive income (loss) by component:

	Foreign Currency Translation Adjustment	Unrealized Holding Gains (Losses), Net of Tax		Total
		On Available-For-Sale Debt Securities	On Foreign Currency Forward Contracts	
				(in thousands)
Balance at December 31, 2020	\$ (15,678)	\$ 334	\$ (53,136)	\$ (68,480)
Other comprehensive income (loss) before reclassifications	1,349	(273)	15,503	16,579
Amounts reclassified from accumulated other comprehensive income (loss)	—	—	26,742	26,742
Net current period other comprehensive income (loss)	1,349	(273)	42,245	43,321
Balance at June 30, 2021	\$ (14,329)	\$ 61	\$ (10,891)	\$ (25,159)
Balance at December 31, 2019	\$ (895)	\$ 503	\$ (1,581)	\$ (1,973)
Other comprehensive (loss) income before reclassifications	(13,200)	1,950	11,079	(17)
Amounts reclassified from accumulated other comprehensive income (loss)	—	—	(11,977)	(11,977)
Net current period other comprehensive (loss) income	(13,200)	1,950	(898)	(12,148)
Balance at June 30, 2020	\$ (14,095)	\$ 2,453	\$ (2,479)	\$ (14,121)

H. Hedging

Foreign currency forward contracts - Designated as hedging instruments

The Company maintains a hedging program intended to mitigate the effect of changes in foreign exchange rates for a portion of the Company's forecasted product revenues denominated in certain foreign currencies. The program includes foreign currency forward contracts that are designated as cash flow hedges under U.S. GAAP having contractual durations from one to eighteen months. The Company recognizes realized gains and losses for the effective portion of such contracts in "Product revenues, net" in its condensed consolidated statements of operations in the same period that it recognizes the product revenues that were impacted by the hedged foreign exchange rate changes.

The Company formally documents the relationship between foreign currency forward contracts (hedging instruments) and forecasted product revenues (hedged items), as well as the Company's risk management objective and strategy for undertaking various hedging activities, which includes matching all foreign currency forward contracts that are designated as cash flow hedges to forecasted transactions. The Company also formally assesses, both at the hedge's inception and on an ongoing basis, whether the foreign currency forward contracts are highly effective in offsetting changes in cash flows of hedged items on a prospective and retrospective basis. If the Company were to determine that a (i) foreign currency forward contract is not highly effective as a cash flow hedge, (ii) foreign currency forward contract has ceased to be a highly effective hedge or (iii) forecasted transaction is no longer probable of occurring, the Company would discontinue hedge accounting treatment prospectively. The Company measures effectiveness based on the change in fair value of the forward contracts and the fair value of the hypothetical foreign currency forward contracts with terms that match the critical terms of the risk being hedged. As of June 30, 2021, all hedges were determined to be highly effective.

The Company considers the impact of its counterparties' credit risk on the fair value of the foreign currency forward contracts. As of June 30, 2021 and December 31, 2020, credit risk did not change the fair value of the Company's foreign currency forward contracts.

VERTEX PHARMACEUTICALS INCORPORATED
Notes to Condensed Consolidated Financial Statements (unaudited)

The following table summarizes the notional amount in U.S. dollars of the Company's outstanding foreign currency forward contracts designated as cash flow hedges under U.S. GAAP:

Foreign Currency	As of June 30, 2021		As of December 31, 2020	
	(in thousands)			
Euro	\$	1,172,339	\$	745,099
British pound sterling		269,038		160,427
Australian dollar		99,375		99,922
Canadian dollar		84,190		86,468
Swiss Franc		25,740		—
Total foreign currency forward contracts	\$	1,650,682	\$	1,091,916

Foreign currency forward contracts - Not designated as hedging instruments

The Company also enters into foreign currency forward contracts with contractual maturities of less than one month, which are designed to mitigate the effect of changes in foreign exchange rates on monetary assets and liabilities, including intercompany balances. These contracts are not designated as hedging instruments under U.S. GAAP. The Company recognizes realized gains and losses for such contracts in "Other income (expense), net" in its condensed consolidated statements of operations each period. As of June 30, 2021, the notional amount of the Company's outstanding foreign currency forward contracts where hedge accounting under U.S. GAAP is not applied was \$392.4 million.

During the three and six months ended June 30, 2021 and 2020, the Company recognized the following related to foreign currency forward contracts in its condensed consolidated statements of operations:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2021	2020	2021	2020
(in thousands)				
<i>Designated as hedging instruments - Reclassified from AOCI</i>				
Product revenues, net	\$	(17,600)	\$	6,366
			\$	(34,118)
			\$	15,2
<i>Not designated as hedging instruments</i>				
Other income (expense), net	\$	(953)	\$	6,056
			\$	(8,950)
			\$	(10,1
<i>Total reported in the Condensed Consolidated Statement of Operations</i>				
Product revenues, net	\$	1,793,370	\$	1,524,485
			\$	3,516,675
			\$	3,039,5
Other income (expense), net	\$	8,051	\$	116,365
			\$	(44,602)
			\$	55,2

The following table summarizes the fair value of the Company's outstanding foreign currency forward contracts designated as cash flow hedges under U.S. GAAP included on its condensed consolidated balance sheets:

As of June 30, 2021					
Assets		Liabilities			
Classification	Fair Value	Classification	Fair Value		
(in thousands)					
Prepaid expenses and other current assets	\$	9,545	Other current liabilities	\$	(20,3
Other assets		1,378	Other long-term liabilities		(2
Total assets	\$	10,923	Total liabilities	\$	(20,5

VERTEX PHARMACEUTICALS INCORPORATED
Notes to Condensed Consolidated Financial Statements (unaudited)

As of December 31, 2020

Assets		Liabilities	
Classification	Fair Value	Classification	Fair Value
(in thousands)			
Prepaid expenses and other current assets	\$ —	Other current liabilities	\$ (59,111)
Other assets	—	Other long-term liabilities	(4,211)
Total assets	\$ —	Total liabilities	\$ (63,422)

As of June 30, 2021, the Company expects the amounts that are related to foreign exchange forward contracts designated as cash flow hedges under U.S. GAAP recorded in “Prepaid expenses and other current assets” and “Other current liabilities” to be reclassified to earnings within twelve months.

The following table summarizes the potential effect of offsetting derivatives by type of financial instrument designated as cash flow hedges under U.S. GAAP on the Company’s condensed consolidated balance sheets:

	As of June 30, 2021				
	Gross Amounts Recognized	Gross Amounts Offset	Gross Amounts Presented	Gross Amounts Not Offset	Legal Offset
(in thousands)					
Foreign currency forward contracts					
Total assets	\$ 10,923	\$ —	\$ 10,923	\$ (10,923)	\$ —
Total liabilities	(20,567)	—	(20,567)	10,923	(9,644)

	As of December 31, 2020				
	Gross Amounts Recognized	Gross Amounts Offset	Gross Amounts Presented	Gross Amounts Not Offset	Legal Offset
(in thousands)					
Foreign currency forward contracts					
Total assets	\$ —	\$ —	\$ —	\$ —	\$ —
Total liabilities	(63,467)	—	(63,467)	—	(63,467)

I. Inventories

Inventories consisted of the following:

	As of June 30, 2021	As of December 31, 2020
	(in thousands)	
Raw materials	\$ 47,740	\$ 46,232
Work-in-process	182,655	161,324
Finished goods	91,225	73,221
Total	\$ 321,620	\$ 280,777

VERTEX PHARMACEUTICALS INCORPORATED
Notes to Condensed Consolidated Financial Statements (unaudited)

J. Stock-based Compensation Expense and Share Repurchase Programs

Stock-based compensation expense

During the three and six months ended June 30, 2021 and 2020, the Company recognized the following stock-based compensation expense:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2021	2020	2021	2020
(in thousands)				
Stock-based compensation expense by type of award:				
Restricted stock units (including PSUs) and restricted stock	\$ 88,847	\$ 98,419	\$ 189,673	\$ 195,5
Stock options	11,109	16,847	21,705	34,1
ESPP share issuances	5,959	2,855	11,574	5,3
Stock-based compensation expense related to inventories	(1,293)	(932)	(3,156)	(2,1
Total stock-based compensation expense included in costs and expenses	<u>\$ 104,622</u>	<u>\$ 117,189</u>	<u>\$ 219,796</u>	<u>\$ 232,8</u>
Stock-based compensation expense by line item:				
Cost of sales	\$ 1,540	\$ 1,387	\$ 2,971	\$ 2,7
Research and development expenses	62,615	70,275	135,417	142,9
Selling, general and administrative expenses	40,467	45,527	81,408	87,1
Total stock-based compensation expense included in costs and expenses	104,622	117,189	219,796	232,8
Income tax effect	(20,856)	(31,151)	(52,107)	(95,3
Total stock-based compensation expense, net of tax	<u>\$ 83,766</u>	<u>\$ 86,038</u>	<u>\$ 167,689</u>	<u>\$ 137,4</u>

Share repurchase programs

In 2019, the Company's Board of Directors approved a share repurchase program (the "2019 Share Repurchase Program"), pursuant to which the Company repurchased \$500.0 million of its common stock in 2019 and 2020. During the six months ended June 30, 2020, the Company repurchased 1,403,868 shares of its common stock under the 2019 Share Repurchase Program for an aggregate of \$300.0 million.

In November 2020, the Company's Board of Directors approved a share repurchase program (the "2020 Share Repurchase Program"), pursuant to which the Company repurchased \$500.0 million of its common stock in 2020 and the first quarter of 2021. During the three months ended March 31, 2021, the Company repurchased 1,988,941 shares of its common stock under the 2020 Share Repurchase Program for an aggregate of \$424.9 million.

On June 23, 2021, the Company's Board of Directors approved a new share repurchase program (the "2021 Share Repurchase Program"), pursuant to which the Company is authorized to repurchase up to \$1.5 billion of its common stock by December 31, 2022. As of June 30, 2021, the full repurchase authorization remained available under this program.

VERTEX PHARMACEUTICALS INCORPORATED
Notes to Condensed Consolidated Financial Statements (unaudited)

K. Income Taxes

The Company is subject to U.S. federal, state, and foreign income taxes. During the three and six months ended June 30, 2021 and 2020, the Company recorded the following (benefits from) provisions for income taxes and effective tax rates as compared to its (loss) income before (benefit from) provision for income taxes:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2021	2020	2021	2020
	(in thousands, except percentages)			
(Loss) income before (benefit from) provision for income taxes	\$ (44,255)	\$ 824,770	\$ 776,705	\$ 1,482,304
(Benefit from) provision for income taxes	(111,179)	(12,500)	56,643	42,281
Effective tax rate	251 %	(2)%	7 %	3 %

The Company's effective tax rate for the three and six months ended June 30, 2021 was different than the U.S. statutory rate primarily due to a \$99.7 million discrete tax benefit associated with an increase in the U.K.'s corporate tax rate effective in April 2023. The Company's effective tax rate for the three and six months ended June 30, 2020 was different than the U.S. statutory rate primarily due to a discrete tax benefit of \$187.0 million associated with an intra-entity transfer of intellectual property rights to the U.K. in the second quarter of 2020, a discrete benefit related to the write-off of a long-term intercompany receivable in the first quarter of 2020 and excess tax benefits related to stock-based compensation.

On a periodic basis, the Company reassesses the need for a valuation allowance against its deferred tax assets, weighing positive and negative evidence to assess the recoverability of the deferred tax assets. As of December 31, 2020, the Company maintained a valuation allowance of \$213.8 million related primarily to U.S. state and foreign tax attributes.

As part of the U.S. Tax Cut and Jobs Act of 2017, the Company is subject to a territorial tax system, under which it must establish an accounting policy to provide for tax on Global Intangible Low Taxed Income ("GILTI") earned by certain foreign subsidiaries. The Company has elected to treat the impact of GILTI as a current tax expense in its provision for income taxes.

The Company has reviewed the tax positions taken, or to be taken, in its tax returns for all tax years currently open to examination by a taxing authority. Unrecognized tax benefits represent the aggregate tax effect of differences between tax return positions and the benefits recognized in the consolidated financial statements. As of June 30, 2021 and December 31, 2020, the Company had \$84.5 million and \$75.8 million, respectively, of net unrecognized tax benefits, which would affect the Company's tax rate if recognized. The Company does not expect that its unrecognized tax benefits will materially change within the next twelve months. The Company accrues interest and penalties related to unrecognized tax benefits as a component of its provision for income taxes. The Company did not recognize any material interest or penalties related to uncertain tax positions during the three and six months ended June 30, 2021 and 2020.

As of June 30, 2021, foreign earnings have been retained by foreign subsidiaries for indefinite reinvestment. Upon repatriation of those earnings, in the form of dividends or otherwise, the Company could be subject to withholding taxes payable to the various foreign countries.

The Company files U.S. federal income tax returns and income tax returns in various state, local and foreign jurisdictions. The Company is no longer subject to any tax assessment from an income tax examination in the U.S. or any other major taxing jurisdiction, except where the Company has net operating losses or tax credit carryforwards that originate before 2011. The Company has various income tax audits ongoing at any time throughout the world.

VERTEX PHARMACEUTICALS INCORPORATED
Notes to Condensed Consolidated Financial Statements (unaudited)

L. Commitments and Contingencies

Revolving Credit Facilities

The Company and certain of its subsidiaries have entered into two credit agreements (the “Credit Agreements”) with Bank of America, N.A., as administrative agent and the lenders referred to therein (the “Lenders”). The Credit Agreements were not drawn upon at closing and the Company has not drawn upon them to date. Amounts drawn pursuant to the Credit Agreements, if any, will be used for general corporate purposes. Any amounts borrowed under the Credit Agreements will bear interest, at the Company’s option, at either a base rate or a Eurocurrency rate, in each case plus an applicable margin based on the Company’s consolidated leverage ratio (the ratio of the Company’s total consolidated funded indebtedness to the Company’s consolidated EBITDA for the most recently completed four fiscal quarter period).

In September 2019, the Company and certain of its subsidiaries entered into a \$500.0 million unsecured revolving facility (the “2019 Credit Agreement”) with the Lenders, which matures on September 17, 2024. Under the 2019 Credit Agreement, the applicable margins on base rate loans range from 0.125% to 0.500% and the applicable margins on Eurocurrency loans range from 1.125% to 1.500%. The 2019 Credit Agreement provides a sublimit of \$50.0 million for letters of credit.

In September 2020, the Company and certain of its subsidiaries entered into a \$2.0 billion unsecured revolving facility (the “2020 Credit Agreement”) with the Lenders, which matures on September 18, 2022. Under the 2020 Credit Agreement, the applicable margins on base rate loans range from 0.500% to 0.875% and the applicable margins on Eurocurrency loans range from 1.500% to 1.875%. The 2020 Credit Agreement does not support letters of credit.

Subject to satisfaction of certain conditions, the Company may request that the borrowing capacity for each of the Credit Agreements be increased by an additional \$500.0 million. Any amounts borrowed pursuant to the Credit Agreements are guaranteed by certain of the Company’s existing and future domestic subsidiaries, subject to certain exceptions.

The Credit Agreements contain customary representations and warranties and affirmative and negative covenants, including financial covenants to maintain (x) subject to certain limited exceptions, a consolidated leverage ratio of 3.50 to 1.00, subject to an increase to 4.00 to 1.00 following a material acquisition and (y) a consolidated interest coverage ratio of 2.50 to 1.00, in each case measured on a quarterly basis. As of June 30, 2021, the Company was in compliance with the covenants described above. The Credit Agreements also contain customary events of default. In the case of a continuing event of default, the administrative agent would be entitled to exercise various remedies, including the acceleration of amounts due under outstanding loans.

Direct costs related to the Credit Agreements, which were not material to the Company’s financial statements, were deferred and recorded over the term of the Credit Agreements.

Guaranties and Indemnifications

As permitted under Massachusetts law, the Company’s Articles of Organization and By-laws provide that the Company will indemnify certain of its officers and directors for certain claims asserted against them in connection with their service as an officer or director. The maximum potential amount of future payments that the Company could be required to make under these indemnification provisions is unlimited. However, the Company has purchased directors’ and officers’ liability insurance policies that could reduce its monetary exposure and enable it to recover a portion of any future amounts paid. No indemnification claims currently are outstanding, and the Company believes the estimated fair value of these indemnification arrangements is minimal.

The Company customarily agrees in the ordinary course of its business to indemnification provisions in agreements with clinical trial investigators and sites in its drug development programs, sponsored research agreements with academic and not-for-profit institutions, various comparable agreements involving parties performing services for the Company and its real estate leases. The Company also customarily agrees to certain indemnification provisions in its drug discovery, development and commercialization collaboration agreements. With respect to the Company’s clinical trials and sponsored research agreements, these indemnification provisions typically apply to any claim asserted against the investigator or the investigator’s institution relating to personal injury or property damage, violations of law or certain breaches of the

VERTEX PHARMACEUTICALS INCORPORATED
Notes to Condensed Consolidated Financial Statements (unaudited)

Company's contractual obligations arising out of the research or clinical testing of the Company's compounds or drug candidates. With respect to lease agreements, the indemnification provisions typically apply to claims asserted against the landlord relating to personal injury or property damage caused by the Company, to violations of law by the Company or to certain breaches of the Company's contractual obligations. The indemnification provisions appearing in the Company's collaboration agreements are similar to those for the other agreements discussed above, but in addition provide some limited indemnification for its collaborator in the event of third-party claims alleging infringement of intellectual property rights. In each of the cases above, the indemnification obligation generally survives the termination of the agreement for some extended period, although the Company believes the obligation typically has the most relevance during the contract term and for a short period of time thereafter. The maximum potential amount of future payments that the Company could be required to make under these provisions is generally unlimited. The Company has purchased insurance policies covering personal injury, property damage and general liability that reduce its exposure for indemnification and would enable it in many cases to recover all or a portion of any future amounts paid. The Company has never paid any material amounts to defend lawsuits or settle claims related to these indemnification provisions. Accordingly, the Company believes the estimated fair value of these indemnification arrangements is minimal.

Other Contingencies

The Company has certain contingent liabilities that arise in the ordinary course of its business activities. The Company accrues a reserve for contingent liabilities when it is probable that future expenditures will be made, and such expenditures can be reasonably estimated. Other than the Company's contingent consideration liabilities discussed in Note E, "Fair Value Measurements," there were no material contingent liabilities accrued as of June 30, 2021 or December 31, 2020.

M. Additional Cash Flow Information

The cash, cash equivalents and restricted cash at the beginning and ending of each period presented in the Company's condensed consolidated statements of cash flows consisted of the following:

	Six Months Ended June 30,			
	2021		2020	
	Beginning of period	End of period	Beginning of period	End of period
	(in thousands)			
Cash and cash equivalents	\$ 5,988,187	\$ 6,063,678	\$ 3,109,322	\$ 4,831,332
Prepaid expenses and other current assets	658	7,390	8,004	4,368
Other assets	—	—	3,355	—
Cash, cash equivalents and restricted cash per condensed consolidated statement of cash flows	<u>\$ 5,988,845</u>	<u>\$ 6,071,068</u>	<u>\$ 3,120,681</u>	<u>\$ 4,835,700</u>

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

OVERVIEW

We invest in scientific innovation to create transformative medicines for people with serious diseases with a focus on specialty markets. We have four approved medicines to treat cystic fibrosis, or CF, a life-threatening genetic disease, and are focused on increasing the number of people with CF eligible and able to receive our medicines through label expansions, approval of new medicines, and expanded reimbursement. We are broadening our pipeline into additional disease areas through internal research efforts and accessing external innovation through business development transactions.

Our triple combination regimen, TRIKAFTA/KAFTRIO, was approved in 2019 in the United States, or U.S., and in 2020 in the European Union, or E.U. Collectively, our four medicines are approved to treat the majority of the approximately 83,000 people with CF in North America, Europe and Australia. We are evaluating our medicines in additional patient populations, including younger children, with the goal of having small molecule treatments for up to 90% of people with CF. We are also pursuing genetic therapies to address the remaining 10% of people with CF.

Beyond CF, we continue to research and develop small molecule drug candidates for the treatment of serious diseases, including alpha-1 antitrypsin, or AAT, deficiency, APOL1-mediated kidney diseases and pain. We are also focused on developing cell and genetic therapies for various diseases in our pipeline, including sickle cell disease, or SCD, beta thalassemia, type 1 diabetes, or T1D, Duchenne muscular dystrophy, or DMD, myotonic dystrophy, or DM1, and CF. We are evaluating CTX001, a genetic therapy, as a potential treatment for SCD and transfusion-dependent beta thalassemia, or TDT, the most severe form of beta thalassemia, in collaboration with CRISPR Therapeutics AG, or CRISPR. In T1D, we are pursuing two programs for the transplant of functional islets into patients: transplantation of islet cells alone, using immunosuppression to protect the implanted cells, and implantation of the islet cells inside a novel immunoprotective device.

Financial Highlights

Revenues

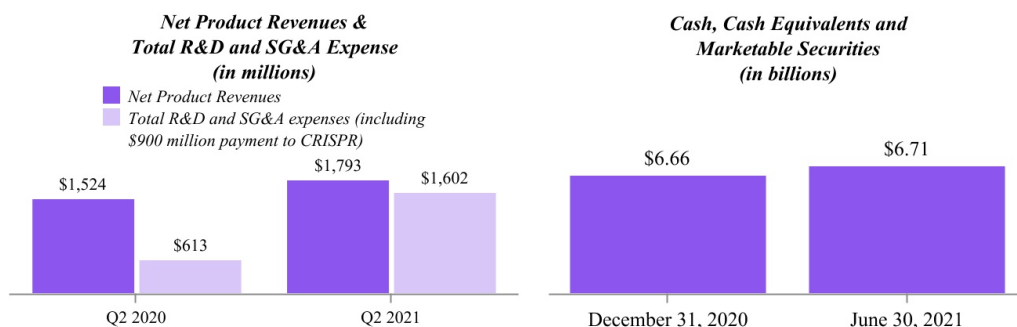
In the second quarter of 2021, our net product revenues continued to increase due to the uptake of KAFTRIO in Europe and continued performance of TRIKAFTA in the U.S.

Expenses

Our total R&D and SG&A expenses increased to \$1.60 billion in the second quarter of 2021 as compared to \$612.7 million in the second quarter of 2020 primarily due to a \$900 million upfront payment we made to CRISPR in connection with an amendment to our CTX001 collaboration. In the second quarter of 2021, cost of sales was 12.7% of our net product revenues.

Cash

Our cash, cash equivalent and marketable securities increased to \$6.71 billion as of June 30, 2021 as compared to \$6.66 billion as of December 31, 2020 primarily due to our net product revenues and profitability, offset by the \$900 million payment to CRISPR and repurchases of our common stock in the first quarter of 2021.



Business Updates

Cystic Fibrosis Marketed Products

We expect to continue to grow our CF business by increasing the number of people with CF eligible and able to receive our medicines. Recent progress in our CF business is included below.

- In June, the U.S. Food and Drug Administration, or the FDA, approved the use of TRIKAFTA (elixacaftor/tezacaftor/ivacaftor and ivacaftor) for children with CF 6 to 11 years of age who have at least one *F508del* mutation or at least one mutation that is responsive to TRIKAFTA.
- In June, Health Canada granted marketing authorization for TRIKAFTA for people with CF 12 years of age and older who have at least one *F508del* mutation.
- TRIKAFTA/KAFTRIO is now approved and reimbursed or accessible in more than 15 countries outside the U.S., including Italy and France.

Pipeline

We continue to advance a pipeline of potentially transformative small molecule and cell and genetic therapies aimed at treating serious diseases. Recent and anticipated progress in activities supporting these efforts is included below.

Cystic Fibrosis

- We plan to initiate a Phase 3 development program for the next-in-class, once-daily triple combination of VX-121, tezacaftor and VX-561 in the second half of 2021. Clinical and preclinical data suggest that this triple combination has the potential to provide enhanced benefit for people with CF who have the *F508del* mutation on at least one allele.
- Our Phase 3 program will consist of two 48-week clinical trials, which will evaluate the safety and efficacy of the new combination relative to TRIKAFTA in a total of 800 people with CF. Both clinical trials will measure the regulatory-enabling endpoint of absolute change in ppFEV₁, a measure of lung function, that will be analyzed for non-inferiority to TRIKAFTA. The clinical trials also are designed to assess the absolute change from baseline in ppFEV₁ and sweat chloride for superiority to TRIKAFTA.

Beta Thalassemia and Sickle Cell Disease

- We and our collaborator, CRISPR, are evaluating the use of a non-viral ex vivo CRISPR gene-editing therapy, CTX001, for the treatment of TDT and SCD. This approach aims to edit a person's hematopoietic stem cells to produce fetal hemoglobin in red blood cells, which has the potential to reduce or eliminate symptoms associated with the diseases.
- In the second quarter of 2021, we amended the collaboration for CTX001 and in connection this amendment, we made a \$900 million upfront payment to CRISPR. Pursuant to the amended collaboration, we now lead global development, manufacturing and commercialization of CTX001, with support from CRISPR.
- In June, data from 22 people with at least three months of follow-up after CTX001 infusion were presented at the European Hematology Association Annual Meeting and continued to support the profile of CTX001 as a one-time functional cure for people with TDT and SCD, showing consistent and durable benefit with longer term data from a larger population of people.
- Enrollment and dosing are ongoing in the clinical trials evaluating CTX001, and more than 45 people have been dosed across the program. We expect to achieve target enrollment in both clinical trials in the third quarter of 2021, with regulatory filings possible in the next 18 to 24 months.

APOL1-Mediated Kidney Diseases

- We are evaluating the potential of inhibitors of APOL1 function to treat people with APOL1-mediated kidney diseases.
- Enrollment is ongoing in a Phase 2 proof-of-concept clinical trial designed to evaluate the reduction in proteinuria in people with APOL1-mediated focal segmental glomerulosclerosis after treatment with VX-147.
- We expect data from this clinical trial in the second half of 2021.

Pain

- NaV1.8 is a genetically and pharmacologically validated novel target for the treatment of pain. We previously have demonstrated clinical proof-of-concept with a small molecule investigational treatment targeting NaV1.8 in multiple pain indications including acute pain, neuropathic pain and musculoskeletal pain. Our approach is to selectively inhibit NaV1.8 using small molecules with the objective of creating a new class of medicines that have the potential to provide superior relief of acute pain without the limitations of opioids, including their addictive potential. VX-548 is the most recent molecule to enter clinical development from our portfolio of NaV1.8 inhibitors.
- In July, we announced the initiation of our VX-548 Phase 2 acute pain program. The proof-of-concept clinical trial for acute pain following bunionectomy surgery is open for enrollment. We also expect to initiate a Phase 2 clinical trial evaluating VX-548 for acute pain following abdominoplasty surgery in the third quarter of 2021.
- We expect data from the bunionectomy clinical trial by early 2022.

Type 1 Diabetes

- We are evaluating a cell therapy designed to replace insulin-producing islet cells in people with T1D. We are pursuing two programs for the transplant of stem cell-derived, fully differentiated, insulin-producing islet cells into patients: transplantation of islet cells alone, using immunosuppression to protect the implanted cells, and implantation of the islet cells inside a novel immunoprotective device.
- Our Phase 1/2 clinical trial evaluating VX-880, our islet cells alone program, is ongoing in people with T1D. This clinical trial involves an infusion of fully differentiated, functional islet cells, and chronic administration of concomitant immunosuppressive therapy, to protect the islet cells from immune rejection. The first person in this clinical trial was dosed, and we expect initial data from this clinical trial in 2022.

Alpha-1 Antitrypsin Deficiency

- We are evaluating multiple compounds with the potential to correct the misfolding of Z-AAT protein in the liver, in order to increase the systemic levels of functional AAT. Misfolded Z-AAT protein is the root cause of AAT deficiency and our small molecule corrector program targets both the liver and lung manifestations of the disease.
- In June, we announced that we had achieved our primary endpoint and established proof of mechanism in a Phase 2 clinical trial evaluating our Z-AAT corrector, VX-864. However, because the magnitude of treatment effect was unlikely to translate into substantial clinical benefit, we decided not to advance VX-864 into late-stage development.
- We plan to advance one or more novel small molecule Z-AAT correctors into the clinic in 2022.

COVID-19

We continue to monitor the impacts of the COVID-19 global pandemic on our business. COVID-19 has not affected our supply chain or the demand for our medicines, and we believe that we will be able to continue to supply all of our approved medicines to patients globally. We adjusted our business operations in response to COVID-19 and have continued to monitor local COVID-19 trends and government guidance for each of our site locations. We are utilizing a phased, site-specific approach to assess and permit employee access to our sites. Currently, our sites are open to certain employees where appropriate and permitted by local laws and guidelines.

Research

We continue to invest in our research programs and foster scientific innovation in order to identify and develop transformative medicines. Our strategy is to combine transformative advances in the understanding of human disease and the science of therapeutics in order to identify and develop new medicines. We believe that pursuing research in diverse areas allows us to balance the risks inherent in drug development and may provide drug candidates that will form our pipeline in future years. To supplement our internal research programs, we acquire technologies and programs and collaborate with biopharmaceutical and technology companies, leading academic research institutions, government laboratories, foundations and other organizations, as needed, to advance research in our areas of therapeutic interest and to access technologies needed to execute on our strategy.

Drug Discovery and Development

Discovery and development of a new pharmaceutical product is a difficult and lengthy process that requires significant financial resources along with extensive technical and regulatory expertise. Potential drug candidates are subjected to rigorous evaluations, driven in part by stringent regulatory considerations, designed to generate information concerning efficacy, side effects, proper dosage levels and a variety of other physical and chemical characteristics that are important in determining whether a drug candidate should be approved for marketing as a pharmaceutical product. Most chemical compounds that are investigated as potential drug candidates never progress into development, and most drug candidates that do advance into development never receive marketing approval. Our investments in drug candidates are subject to considerable risks. We closely monitor the results of our discovery, research, clinical trials and nonclinical studies and frequently evaluate our drug development programs in light of new data and scientific, business and commercial insights, with the objective of balancing risk and potential. This process can result in rapid changes in focus and priorities as new information becomes available and as we gain additional understanding of our ongoing programs and potential new programs, as well as those of our competitors. For example, in June 2021, we decided not to progress VX-864, a drug candidate for the treatment of AAT deficiency, into late-stage development based on data obtained from a Phase 2 clinical trial.

If we believe that data from a completed registration program support approval of a drug candidate, we submit an NDA or BLA to the FDA requesting approval to market the drug candidate in the U.S. and seek analogous approvals from comparable regulatory authorities in jurisdictions outside the U.S. To obtain approval, we must, among other things, demonstrate with evidence gathered in nonclinical studies and well-controlled clinical trials that the drug candidate is safe and effective for the disease it is intended to treat and that the manufacturing facilities, processes and controls for the manufacture of the drug candidate are adequate. The FDA and ex-U.S. regulatory authorities have substantial discretion in deciding whether or not a drug candidate should be granted approval based on the benefits and risks of the drug candidate in the treatment of a particular disease, and could delay, limit or deny regulatory approval. If regulatory delays are significant or regulatory approval is limited or denied altogether, our financial results and the commercial prospects for the drug candidate involved will be harmed.

Regulatory Compliance

Our marketing of pharmaceutical products is subject to extensive and complex laws and regulations. We have a corporate compliance program designed to actively identify, prevent and mitigate risk through the implementation of compliance policies and systems and through the promotion of a culture of compliance. Among other laws, regulations and standards, we are subject to various U.S. federal and state laws, and comparable laws in other jurisdictions, pertaining to health care fraud and abuse, including anti-kickback and false claims laws, and laws prohibiting the promotion of drugs for unapproved or off-label uses. Anti-kickback laws generally make it illegal for a prescription drug manufacturer to knowingly and willfully solicit, offer, receive or pay any remuneration in return for or to induce the referral of business, including the purchase or prescription of a particular drug that is reimbursed by a state or federal health care program. False claims laws prohibit anyone from knowingly or willfully presenting for payment to third-party payors, including Medicare and Medicaid, claims for reimbursed drugs or services that are false or fraudulent, claims for items or services not provided as claimed, or claims for medically unnecessary items or services. We are subject to laws and regulations that regulate the sales and marketing practices of pharmaceutical manufacturers, as well as laws such as the U.S. Foreign Corrupt Practices Act, which govern our international business practices with respect to payments to government officials. In addition, we are subject to various data protection and privacy laws and regulations in the U.S., E.U., U.K., Canada, Australia and other jurisdictions.

We expect to continue to devote substantial resources to maintain, administer and expand these compliance programs globally.

Reimbursement

Sales of our products depend, to a large degree, on the extent to which our products are reimbursed by third-party payors, such as government health programs, commercial insurance and managed health care organizations. We dedicate substantial management and other resources in order to obtain and maintain appropriate levels of reimbursement for our products from third-party payors, including governmental organizations in the U.S. and ex-U.S. markets.

In the U.S., we have worked successfully with third party payors in order to promptly obtain appropriate levels of reimbursement for our CF medicines. We plan to continue to engage in discussions with numerous commercial insurers and managed health care organizations, along with government health programs that are typically managed by authorities in the individual states, to ensure that payors recognize the significant benefits that our medicines provide by treating the underlying cause of CF and continue to provide access to our medicines.

In Europe and other ex-U.S. markets, we seek government reimbursement for our medicines on a country-by-country basis. This is necessary for each new medicine, as well as for label expansions for our current medicines. We successfully obtained reimbursement for KALYDECO in each significant ex-U.S. market within two years of approval, but experienced significant challenges in obtaining reimbursement for ORKAMBI in certain ex-U.S. markets. With the completion of reimbursement discussions in England and France in 2019, we have reimbursement for ORKAMBI or SYMKEVI in most of our significant ex-U.S. markets. In addition, in several ex-U.S. markets, including England, Ireland, Denmark and Australia, our reimbursement agreements include innovative arrangements that provide a pathway to access and rapid reimbursement for certain future CF medicines. For example, our existing reimbursement agreements in England, Ireland, and Denmark have been expanded to include KAFTRIO. Additionally, we have entered into new reimbursement agreements for our medicines throughout Europe, including Italy and France. We expect to continue to focus significant resources to obtain appropriate reimbursement for our products in ex-U.S. markets.

Strategic Transactions

Acquisitions

As part of our business strategy, we seek to acquire drugs, drug candidates and other technologies and businesses that have the potential to complement our ongoing research and development efforts. In 2019, we invested significantly in business development transactions designed to augment our pipeline, including the acquisition of Semma Therapeutics, Inc., or Semma, a privately-held company focused on the use of stem cell-derived human islets as a potentially curative treatment for T1D, and Exonics Therapeutics, Inc., or Exonics, a privately-held company focused on creating transformative gene-editing therapies to repair mutations that cause DMD and other severe neuromuscular diseases, including DM1. We expect to continue to identify and evaluate potential acquisitions and may include larger transactions or later-stage assets.

Collaboration and Licensing Arrangements

We enter into arrangements with third parties, including collaboration and licensing arrangements, for the development, manufacture and commercialization of drugs, drug candidates and other technologies that have the potential to complement our ongoing research and development efforts. We expect to continue to identify and evaluate collaboration and licensing opportunities that may be similar to or different from the collaborations and licenses that we have engaged in previously.

In-License Agreements

We have entered into collaborations with biotechnology and pharmaceutical companies in order to acquire rights or to license drug candidates or technologies that enhance our pipeline and/or our research capabilities. Over the last several years, we entered into collaboration agreements with a number of companies, including Affinia Therapeutics, Inc., Arbor Biotechnologies, Inc., CRISPR, Kymera Therapeutics, Inc., Moderna, Inc., Molecular Templates, Inc., Obsidian Therapeutics, Inc., and Skyhawk Therapeutics, Inc. Generally, when we in-license a technology or drug candidate, we make upfront payments to the collaborator, assume the costs of the program and/or agree to make contingent payments, which could consist of milestone, royalty and option payments. Most of these collaboration payments are expensed as research and development expenses; however, depending on many factors, including the structure of the collaboration, the significance of the in-licensed drug candidate to the collaborator's operations and the other activities in which our collaborators are engaged,

the accounting for these transactions can vary significantly. In the first half of 2021 and 2020, our research and development expenses included \$960.1 million and \$63.3 million, respectively, related to upfront and milestones payments pursuant to our collaboration agreements. In the first half of 2021, these payments were primarily related to the \$900.0 million upfront payment we made to CRISPR.

Joint Development and Commercialization Agreement with CRISPR

In 2017, we entered into a joint development and commercialization agreement, or JDCA, with CRISPR pursuant to which we are developing and preparing to commercialize CTX001 for TDT and SCD. This JDCA was entered into following our exercise of an option to co-develop and co-commercialize the hemoglobinopathies program that was contained in the collaboration agreement that we entered into with CRISPR in 2015.

In April 2021, we and CRISPR entered into an amended and restated joint development and commercialization agreement, or the A&R JDCA. In June 2021, we made a \$900.0 million upfront payment to CRISPR in connection with the closing of the transactions contemplated by the A&R JDCA, which we recorded to research and development expenses. Under the terms of the A&R JDCA, we are leading worldwide development, manufacturing and commercialization of CTX001. Additionally, 60% of the net profits and net losses for CTX001 will be allocated to us and 40% of the net profits and net losses for CTX001 will be allocated to CRISPR. CRISPR may earn an additional one-time \$200.0 million milestone payment upon regulatory approval of CTX001.

Out-License Agreements

We also have out-licensed internally developed programs to collaborators who are leading the development of these programs. These out-license arrangements include our agreement with Merck KGaA, Darmstadt, Germany, which licensed oncology research and development programs from us in early 2017. Pursuant to these out-licensing arrangements, our collaborators are responsible for the research, development and commercialization costs associated with these programs, and we are entitled to receive contingent milestone and/or royalty payments. As a result, we do not expect to incur significant expenses in connection with these programs and have the potential for future collaborative and royalty revenues resulting from these programs.

Please refer to Note C, “Collaborative Arrangements,” for further information regarding our in-license agreements and out-license agreements.

Strategic Investments

In connection with our business development activities, we have periodically made equity investments in our collaborators. As of June 30, 2021, we held strategic equity investments in public companies and certain private companies, and we plan to make additional strategic equity investments in the future. While we invest the majority of our cash, cash equivalents and marketable securities in instruments that meet specific credit quality standards and limit our exposure to any one issue or type of instrument, our strategic investments are maintained and managed separately from our other cash, cash equivalents and marketable securities. Any changes in the fair value of equity investments with readily determinable fair values (including publicly traded securities) are recorded to other income (expense), net in our condensed consolidated statement of operations.

In the first half of 2021 and 2020, we recorded within other income (expense), losses of \$41.7 million and gains of \$65.1 million, respectively, related to changes in the fair value of our strategic investments, and from sales of certain equity investments. As of June 30, 2021, the fair value of our investments in publicly traded companies was \$154.1 million. To the extent that we continue to hold strategic investments, particularly strategic investments in publicly traded companies, we will record other income (expense) related to these strategic investments on a quarterly basis. Due to the volatility of the global markets, including as a result of COVID-19, and the high volatility of stocks in the biotechnology industry, we expect the value of these strategic investments to fluctuate and that the increases or decreases in the fair value of these strategic investments will continue to have material impacts on our net income (expense) and our profitability on a quarterly and/or annual basis.

RESULTS OF OPERATIONS

	Three Months Ended June 30,		Increase/(Decrease)		Six Months Ended June 30,		Increase/(Decrease)	
	2021	2020	\$	%	2021	2020	\$	%
(in thousands, except percentages and per share amounts)								
Revenues	\$ 1,793,370	\$ 1,524,485	\$ 268,885	18%	\$ 3,517,675	\$ 3,039,592	\$ 478,083	16
Operating costs and expenses	1,831,331	806,452	1,024,879	127%	2,667,810	1,601,335	1,066,475	67
(Loss) income from operations	(37,961)	718,033	(755,994)	**	849,865	1,438,257	(588,392)	(41)
Other non-operating (expense) income, net	(6,294)	106,737	(113,031)	**	(73,160)	44,047	(117,207)	*
(Benefit from) provision for income taxes	(111,179)	(12,500)	(98,679)	789%	56,643	42,281	14,362	34
Net income	\$ 66,924	\$ 837,270	\$ (770,346)	(92)%	\$ 720,062	\$ 1,440,023	\$ (719,961)	(50)
Net income per diluted common share	\$ 0.26	\$ 3.18			\$ 2.75	\$ 5.46		
Diluted shares used in per share calculations	261,020	263,403			261,468	263,746		

** Not meaning

Net Income

Our net income decreased in the second quarter and first half of 2021 as compared to the second quarter and first half of 2020 primarily due to the \$900.0 million upfront payment we made to CRISPR in the second quarter of 2021 in connection with the amendment of our CTX001 collaboration. Changes in the fair value of our strategic investments also decreased our net income in the second quarter and first half of 2021 as compared to the second quarter and first half of 2020. These decreases to our net income were partially offset by increased revenues resulting from the uptake of KAFTRIO in Europe and continued performance of TRIKAFTA in the U.S. Our decreased net income in the second quarter of 2021 as compared to the second quarter of 2020 was also partially offset by a larger benefit from income taxes.

Revenues

	Three Months Ended June 30,		Increase/(Decrease)		Six Months Ended June 30,		Increase/(Decrease)	
	2021	2020	\$	%	2021	2020	\$	%
(in thousands, except percentages)								
Product revenues, net	\$ 1,793,370	\$ 1,524,485	\$ 268,885	18%	\$ 3,516,675	\$ 3,039,592	\$ 477,083	16
Other revenues	—	—	—	N/A	1,000	—	1,000	*
Total revenues	\$ 1,793,370	\$ 1,524,485	\$ 268,885	18%	\$ 3,517,675	\$ 3,039,592	\$ 478,083	16

** Not meaning

Product Revenues, Net

	Three Months Ended June 30,		Increase/(Decrease)		Six Months Ended June 30,		Increase/(Decrease)	
	2021	2020	\$	%	2021	2020	\$	%
(in thousands, except percentages)								
TRIKAFTA/KAFTRIO	\$ 1,255,611	\$ 917,715	\$ 337,896	37%	\$ 2,448,828	\$ 1,812,948	\$ 635,880	35
SYMDEKO/SYMKEVI	133,505	171,729	(38,224)	(22)%	258,554	344,888	(86,334)	(25)
ORKAMBI	220,966	231,981	(11,015)	(5)%	439,663	466,119	(26,456)	(6)
KALYDECO	183,288	203,060	(19,772)	(10)%	369,630	415,637	(46,007)	(11)
Total product revenues, net	\$ 1,793,370	\$ 1,524,485	\$ 268,885	18%	\$ 3,516,675	\$ 3,039,592	\$ 477,083	16

In the second quarter and first half of 2021, our net product revenues increased by \$268.9 million and \$477.1 million, respectively, as compared to the second quarter and first half of 2020. The increase in our net product revenues in the second quarter and first half of 2021 was primarily due to the uptake of KAFTRIO, which was approved in Europe in the third quarter of 2020, and the continued performance of TRIKAFTA in the U.S. Decreases in revenues for our products other than TRIKAFTA/KAFTRIO were primarily the result of patients switching from these medicines to TRIKAFTA/KAFTRIO. In the second quarter and first half of 2021, our net product revenues included \$536.5 million and \$1.01 billion, respectively, from ex-U.S. markets. In the second quarter and first half of 2020, our net product revenues included \$314.2 million and \$641.7 million, respectively, from ex-U.S. markets.

Other Revenues

Our other revenues were \$1.0 million related to a collaborative milestone that we earned in the first half of 2021. We did not record any other revenues in the first half of 2020. Our other revenues have historically fluctuated significantly from one period to another based on our collaborative out-license activities, and may continue to fluctuate in the future. Our future royalty revenues will be dependent on if, and when, our collaborators are able to successfully develop drug candidates that we have out-licensed to them.

Operating Costs and Expenses

	Three Months Ended June 30,		Increase/(Decrease)		Six Months Ended June 30,		Increase/(Decrease)	
	2021	2020	\$	%	2021	2020	\$	%
(in thousands, except percentages)								
Cost of sales	\$ 227,972	\$ 184,520	\$ 43,452	24%	\$ 420,301	\$ 347,017	\$ 73,284	21%
Research and development expenses	1,407,090	420,928	986,162	234%	1,863,063	869,456	993,607	114%
Selling, general and administrative expenses	194,669	191,804	2,865	1%	386,746	374,062	12,684	3%
Change in fair value of contingent consideration	1,600	9,200	(7,600)	(83)%	(2,300)	10,800	(13,100)	*
Total costs and expenses	\$ 1,831,331	\$ 806,452	\$ 1,024,879	127%	\$ 2,667,810	\$ 1,601,335	\$ 1,066,475	67%

** Not meaning

Cost of Sales

Our cost of sales primarily consists of third-party royalties payable on our net sales of our products as well as the cost of producing inventories that corresponded to product revenues for the reporting period. Pursuant to our agreement with the Cystic Fibrosis Foundation our tiered third-party royalties on sales of TRIKAFTA/KAFTRIO, SYMDEKO/SYMKEVI, KALYDECO and ORKAMBI, calculated as a percentage of net sales, range from the single digits to the sub-teens, with royalties on sales of TRIKAFTA/KAFTRIO slightly lower than for our other products. Over the last several years, our cost of sales has been increasing due to increased net product revenues. Our cost of sales as a percentage of our net product revenues was 12.7% and 12.1% in the second quarter of 2021 and 2020, respectively. Our cost of sales as a percentage of our net product revenues was 12.0% and 11.4% in the first half of 2021 and 2020, respectively.

Research and Development Expenses

	Three Months Ended June 30,		Increase/(Decrease)		Six Months Ended June 30,		Increase/(Decrease)	
	2021	2020	\$	%	2021	2020	\$	%
(in thousands, except percentages)								
Research expenses	\$ 147,984	\$ 134,138	\$ 13,846	10%	\$ 277,732	\$ 291,408	\$ (13,676)	(5)%
Development expenses	1,259,106	286,790	972,316	339%	1,585,331	578,048	1,007,283	174%
Total research and development expenses	\$ 1,407,090	\$ 420,928	\$ 986,162	234%	\$ 1,863,063	\$ 869,456	\$ 993,607	114%

Our research and development expenses include internal and external costs incurred for research and development of our drugs and drug candidates and expenses related to certain technology that we acquire or license through business development transactions. We do not assign our internal costs, such as salary and benefits, stock-based compensation expense, laboratory supplies and other direct expenses and infrastructure costs, to individual drugs or drug candidates, because the employees within our research and development groups typically are deployed across multiple research and development programs. These internal costs are significantly greater than our external costs excluding collaborative upfront and milestone payments, such as the costs of services provided to us by clinical research organizations and other outsourced research, which we allocate by individual program. All research and development costs for our drugs and drug candidates are expensed as incurred.

Since January 2019, we have incurred approximately \$5.4 billion in research and development expenses associated with drug discovery and development. The successful development of our drug candidates is highly uncertain and subject to a number of risks. In addition, the duration of clinical trials may vary substantially according to the type, complexity and novelty of the drug candidate and the disease indication being targeted. The FDA and comparable agencies in foreign countries impose substantial requirements on the introduction of therapeutic pharmaceutical products, typically requiring lengthy and detailed laboratory and clinical testing procedures, sampling activities and other costly and time-consuming procedures. Data obtained from nonclinical and clinical activities at any step in the testing process may be adverse and lead to

discontinuation or redirection of development activities. Data obtained from these activities also are susceptible to varying interpretations, which could delay, limit or prevent regulatory approval. The duration and cost of discovery, nonclinical studies and clinical trials may vary significantly over the life of a project and are difficult to predict. Therefore, accurate and meaningful estimates of the ultimate costs to bring our drug candidates to market are not available.

In 2020 and the first half of 2021, costs related to our CF programs represented the largest portion of our development costs, excluding the \$900.0 million upfront payment to CRISPR. Any estimates regarding development and regulatory timelines for our drug candidates are highly subjective and subject to change. Until we have data from Phase 3 clinical trials, we cannot make a meaningful estimate regarding when, or if, a clinical development program will generate revenues and cash flows.

Research Expenses

	Three Months Ended June 30,		Increase/(Decrease)		Six Months Ended June 30,		Increase/(Decrease)		
	2021	2020	\$	%	2021	2020	\$	%	
(in thousands, except percentages)									
Research Expenses:									
Salary and benefits	\$ 33,152	\$ 31,099	\$ 2,053	7%	\$ 67,894	\$ 65,368	\$ 2,526	4%	
Stock-based compensation expense	17,971	26,496	(8,525)	(32)%	38,973	52,905	(13,932)	(26)%	
Outsourced services and other direct expenses	39,016	21,073	17,943	85%	79,122	51,926	27,196	52%	
Collaborative payments	25,750	27,000	(1,250)	(5)%	27,400	63,250	(35,850)	(57)%	
Infrastructure costs	32,095	28,470	3,625	13%	64,343	57,959	6,384	11%	
Total research expenses	\$ 147,984	\$ 134,138	\$ 13,846	10%	\$ 277,732	\$ 291,408	\$ (13,676)	(5)%	

We expect to continue to invest in our research programs with a focus on creating transformative medicines for serious diseases. Our research expenses have historically fluctuated, and are expected to continue to fluctuate, from one period to another due to upfront and milestone payments related to our business development activities that are reflected in the preceding table as collaborative payments. Our research expenses, excluding these collaborative payments, have been increasing over the last several years as we have invested in our pipeline and expanded our cell and genetic therapy capabilities.

Development Expenses

	Three Months Ended June 30,		Increase/(Decrease)		Six Months Ended June 30,		Increase/(Decrease)		
	2021	2020	\$	%	2021	2020	\$	%	
(in thousands, except percentages)									
Development Expenses:									
Salary and benefits	\$ 79,075	\$ 68,532	\$ 10,543	15%	\$ 163,605	\$ 148,130	\$ 15,475	10%	
Stock-based compensation expense	44,644	43,779	865	2%	96,444	90,057	6,387	7%	
Outsourced services and other direct expenses	144,002	124,898	19,104	15%	276,814	241,331	35,483	15%	
Collaborative payments	932,650	—	932,650	**	932,650	—	932,650	*	
Infrastructure costs	58,735	49,581	9,154	18%	115,818	98,530	17,288	18%	
Total development expenses	\$ 1,259,106	\$ 286,790	\$ 972,316	339%	\$ 1,585,331	\$ 578,048	\$ 1,007,283	174%	

** Not meaningful

Our development expenses increased by \$972.3 million in the second quarter of 2021 as compared to second quarter of 2020 and increased by \$1.0 billion in the first half of 2021 as compared to the first half of 2020, primarily due to the \$900.0

million upfront payment to CRISPR, that is included in the preceding table under collaborative payments, and increased expenses related to our diversifying pipeline, including clinical trials, headcount and infrastructure costs.

Sales, General and Administrative Expenses

	Three Months Ended June 30,		Increase/(Decrease)		Six Months Ended June 30,		Increase/(Decrease)	
	2021	2020	\$	%	2021	2020	\$	%
(in thousands, except percentages)								
Sales, general and administrative expenses	\$ 194,669	\$ 191,804	\$ 2,865	1%	\$ 386,746	\$ 374,062	\$ 12,684	3%

Sales, general and administrative expenses increased by 1% in the second quarter of 2021 as compared to second quarter of 2020 and increased by 3% in the first half of 2021 as compared to the first half of 2020, primarily due to the continued investment to support the commercialization of our medicines and increased support for our CF pipeline products and other disease areas.

Contingent Consideration

The fair value of contingent consideration potentially payable to Exonics' former equity holders increased \$1.6 million and decreased \$2.3 million in the second quarter and first half of 2021, respectively. The fair value of contingent consideration increased by \$9.2 million and \$10.8 million in the second quarter and first half of 2020, respectively.

Other Non-Operating Income (Expense), Net

Interest Income

Interest income decreased from \$4.2 million and \$16.8 million in the second quarter and first half of 2020, respectively, to \$1.1 million and \$2.6 million in the second quarter and first half of 2021, respectively primarily due to a decrease in prevailing market interest rates despite an increase in our cash equivalents and available-for-sale debt securities. Our future interest income will be dependent on the amount of, and prevailing market interest rates on, our outstanding cash equivalents and available-for-sale debt securities.

Interest Expense

Interest expense was \$15.5 million and \$31.2 million in the second quarter and first half of 2021, respectively, as compared to \$13.9 million and \$28.0 million in the second quarter and first half of 2020, respectively. The majority of our interest expense in these periods was related to imputed interest expense associated with our leased corporate headquarters in Boston. Our future interest expense will be dependent on whether, and to what extent, we borrow amounts under our credit facilities.

Other Income (Expense), Net

Other income (expense), net was income of \$8.1 million and expense of \$44.6 million in the second quarter and first half of 2021, respectively, as compared to income of \$116.4 million and \$55.2 million in the second quarter and first half of 2020, respectively. Our other income (expense), net in these periods was primarily related to changes in the fair value of our strategic investments. We expect that due to the volatility of the stock price of biotechnology companies, our other income (expense), net will fluctuate in future periods based on increases or decreases in the fair value of our strategic investments.

Income Taxes

We recorded a benefit from income taxes of \$111.2 million and a provision for income taxes of \$56.6 million in the second quarter and first half of 2021, respectively, as compared to a benefit from income taxes of \$12.5 million and a provision for income taxes of \$42.3 million in the second quarter and first half of 2020, respectively. Our effective tax rate of 7% for the first half of 2021 was lower than the U.S. statutory rate primarily due to a \$99.7 million discrete tax benefit associated with an increase in the U.K.'s corporate tax rate effective in April 2023. Our effective tax rate of 3% for the first half of 2020 was lower than the U.S. statutory rate primarily due to a discrete tax benefit of \$187.0 million associated with the transfer of intellectual property rights to the U.K. in the second quarter of 2020, a discrete benefit related to the write off

of a long-term intercompany receivable in the first quarter of 2020 and excess tax benefits related to stock-based compensation.

LIQUIDITY AND CAPITAL RESOURCES

The following table summarizes the components of our financial condition as of June 30, 2021 and December 31, 2020:

	June 30, 2021	December 31, 2020	Increase/(Decrease)	
			\$	%
	(in thousands)			
Cash, cash equivalents and marketable securities	\$ 6,707,993	\$ 6,658,897	\$ 49,096	1%
Working Capital				
Total current assets	8,457,514	8,133,379	324,135	4%
Total current liabilities	(1,836,448)	(1,877,533)	(41,085)	(2)%
Total working capital	<u>\$ 6,621,066</u>	<u>\$ 6,255,846</u>	<u>\$ 365,220</u>	<u>6%</u>

As of June 30, 2021, total working capital was \$6.6 billion, which represented an increase of \$365 million from \$6.3 billion as of December 31, 2020. The increase in total working capital in the first half of 2021 was primarily related to \$721.3 million of cash provided by operations, which was net of our \$900 million payment to CRISPR, partially offset by \$425.0 million of cash used in the first quarter of 2021 to repurchase our common stock pursuant to a share repurchase program approved by our Board of Directors in November 2020 and expenditures for property and equipment of \$120.8 million.

Sources of Liquidity

As of June 30, 2021, we had cash, cash equivalents and marketable securities of \$6.71 billion, which represented an increase of \$49 million from \$6.66 billion as of December 31, 2020. We intend to rely on our existing cash, cash equivalents and marketable securities together with cash flows from product sales as our primary source of liquidity.

We may borrow up to a total of \$2.5 billion pursuant to two revolving credit facilities. We may repay and reborrow amounts under these revolving credit agreements without penalty. Subject to certain conditions, we may request that the borrowing capacity for each of the credit agreements be increased by an additional \$500.0 million, for a total of \$3.5 billion collectively.

Other possible sources of future liquidity include commercial debt, public and private offerings of our equity and debt securities, strategic sales of assets or businesses and financial transactions. Negative covenants in our credit agreement may prohibit or limit our ability to access these sources of liquidity. As of June 30, 2021, we were in compliance with these covenants.

Future Capital Requirements

We have significant future capital requirements, including:

- significant expected operating expenses to conduct research and development activities and to operate our organization; and
- substantial facility and finance lease obligations.

In addition:

- We have entered into certain collaboration agreements with third parties that include the funding of certain research, development and commercialization efforts. Certain of our business development transactions, including collaborations and acquisitions, include the potential for future milestone and royalty payments by us upon the achievement of pre-established developmental and regulatory targets and/or commercial targets. We may enter into additional business development transactions, including acquisitions, collaborations and equity investments, that require additional capital.

- To the extent we borrow amounts under the credit agreements we entered into in 2020 and 2019, we would be required to repay any outstanding principal amounts in 2022 or 2024, respectively.
- We have \$1.5 billion available under a new share repurchase program approved by our Board of Directors on June 23, 2021.

We expect that cash flows from our products together with our current cash, cash equivalents and marketable securities will be sufficient to fund our operations for at least the next twelve months. The adequacy of our available funds to meet our future operating and capital requirements will depend on many factors, including the amounts of future revenues generated by our products, and the potential introduction of one or more of our other drug candidates to the market, the level of our business development activities and the number, breadth, cost and prospects of our research and development programs.

Financing Strategy

We may raise additional capital by borrowing under credit agreements, through public offerings or private placements of our securities or securing new collaborative agreements or other methods of financing. We will continue to manage our capital structure and will consider all financing opportunities, whenever they may occur, that could strengthen our long-term liquidity profile. There can be no assurance that any such financing opportunities will be available on acceptable terms, if at all.

CONTRACTUAL COMMITMENTS AND OBLIGATIONS

Our commitments and obligations were reported in our Annual Report on Form 10-K for the year ended December 31, 2020, which was filed with the Securities and Exchange Commission, or SEC, on February 11, 2021. There have been no material changes from the contractual commitments and obligations previously disclosed in that Annual Report on Form 10-K.

CRITICAL ACCOUNTING POLICIES AND ESTIMATES

Our discussion and analysis of our financial condition and results of operations are based upon our condensed consolidated financial statements prepared in accordance with generally accepted accounting principles in the U.S. The preparation of these financial statements requires us to make certain estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities at the date of the condensed consolidated financial statements and the reported amounts of revenues and expenses during the reported periods. These items are monitored and analyzed by management for changes in facts and circumstances, and material changes in these estimates could occur in the future. Changes in estimates are reflected in reported results for the period in which the change occurs. We base our estimates on historical experience and various other assumptions that we believe to be reasonable under the circumstances. Actual results may differ from our estimates if past experience or other assumptions do not turn out to be substantially accurate. During the six months ended June 30, 2021, there were no material changes to our critical accounting policies as reported in our Annual Report on Form 10-K for the year ended December 31, 2020, which was filed with the SEC on February 11, 2021.

RECENT ACCOUNTING PRONOUNCEMENTS

For a discussion of recent accounting pronouncements, please refer to Note A, “Basis of Presentation and Accounting Policies.”

Item 3. Quantitative and Qualitative Disclosures About Market Risk

Information required by this item is incorporated by reference from the discussion in Part II, Item 7A, “Quantitative and Qualitative Disclosures About Market Risk,” of our Annual Report on Form 10-K for the year ended December 31, 2020, which was filed with the SEC on February 11, 2021.

Item 4. Controls and Procedures

Evaluation of Disclosure Controls and Procedures

Our management (under the supervision and with the participation of our chief executive officer and chief financial officer), after evaluating the effectiveness of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended) as of the end of the period covered by this Quarterly Report on Form 10-Q, has concluded that, based on such evaluation, as of June 30, 2021 our disclosure controls and procedures were effective and designed to provide reasonable assurance that the information required to be disclosed is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms. In designing and evaluating our disclosure controls and procedures, our management recognized that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives, and our management necessarily was required to apply its judgment in evaluating the cost-benefit relationship of possible controls and procedures.

Changes in Internal Controls 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 Securities Exchange Act of 1934, as amended) occurred during the three months ended June 30, 2021 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 subject to any material legal proceedings.

Item 1A. Risk Factors

Information regarding risk factors appears in Part I, Item 1A. "Risk Factors" of our Annual Report on Form 10-K for the year ended December 31, 2020, which was filed with the SEC on February 11, 2021. There have been no material changes from the risk factors previously disclosed in the Annual Report on Form 10-K.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This Quarterly Report on Form 10-Q and, in particular, our Management's Discussion and Analysis of Financial Condition and Results of Operations set forth in Part I, Item 2, contain a number of forward-looking statements. Forward-looking statements are not purely historical and may be accompanied by words such as "anticipates," "may," "forecasts," "expects," "intends," "plans," "potentially," "believes," "seeks," "estimates," and other words and terms of similar meaning. Such statements may relate to:

- our expectations regarding the amount of, timing of, and trends with respect to our financial performance, including revenues, costs and expenses and other gains and losses, including those related to net product revenues;
- our expectations regarding the effect of COVID-19 on, among other things, our financial performance, liquidity, business and operations, including manufacturing, supply chain, research and development activities and pipeline programs;
- our expectations regarding clinical trials, development timelines, regulatory authority filings, submissions and potential approvals and label expansions for our medicines, product candidates and other pipeline programs, including timing and structure of clinical trials, timing of our receipt of data from our ongoing and planned clinical trials, and timing of anticipated regulatory filings;
- our ability to obtain reimbursement for our medicines in the U.S. and ex-U.S. markets and our ability to launch, commercialize and market our medicines or any of our other drug candidates for which we obtain regulatory approval;

- the data that will be generated by ongoing and planned clinical trials and the ability to use that data to advance compounds, continue development or support regulatory filings;
- our beliefs regarding the support provided by clinical trials and preclinical and nonclinical studies of our drug candidates and other pipeline programs for further investigation, clinical trials or potential use as a treatment;
- our beliefs regarding the number of people with CF and those potentially eligible for our medicines, and our ability to grow our CF business by increasing the number of people with CF eligible and able to receive our medicines;
- our expectations regarding the potential benefits and commercial potential of our product candidates, including the potential approach to treating or cure specific diseases;
- our plan to continue investing in our research and development programs, including anticipated timelines for our programs, and our strategy to develop our pipeline programs, alone or with third party-collaborators;
- the potential future benefits of our acquisitions and collaborations, including our CTX001 collaboration with CRISPR;
- the establishment, development and maintenance of collaborative relationships, including potential milestone payments or other obligations;
- potential business development activities, including the identification of potential collaborative partners or acquisition targets;
- potential fluctuations in foreign currency exchange rates;
- our expectations regarding our provision for or benefit from income taxes and the utilization of our deferred tax assets;
- our ability to use our research programs to identify and develop new drug candidates to address serious diseases and significant unmet medical needs; and
- our liquidity and our expectations regarding the possibility of raising additional capital.

Forward-looking statements are subject to certain risks, uncertainties, or other factors that are difficult to predict and could cause actual events or results to differ materially from those indicated in any such statements. These risks, uncertainties, and other factors include, but are not limited to, those described in our “Risk Factors” in Item 1A of our Annual Report on Form 10-K for the year ended December 31, 2020, which was filed with the SEC on February 11, 2021, and those described from time to time in our future reports filed with the Securities and Exchange Commission.

Any such forward-looking statements are made on the basis of our views and assumptions as of the date of the filing and are not estimates of future performance. Except as required by law, we undertake no obligation to publicly update any forward-looking statements. The reader is cautioned not to place undue reliance on any such statements.

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

Issuer Repurchases of Equity Securities

On June 23, 2021, our Board of Directors approved a share repurchase program (the “2021 Share Repurchase Program”), pursuant to which we are authorized to repurchase up to \$1.5 billion of our common stock by December 31, 2022. As of June 30, 2021, the full repurchase authorization remained available under this program.

Under the 2021 Share Repurchase Program, we are authorized to purchase shares from time to time through open market or privately negotiated transactions. Such purchases may be pursuant to Rule 10b5-1 plans or other means as determined by management and in accordance with the requirements of the SEC.

Item 6. Exhibits

Exhibit Number	Exhibit Description
10.1	Amended and Restated Joint Development and Commercialization Agreement, dated April 16, 2021, between Vertex Pharmaceuticals Incorporated, Vertex Pharmaceuticals (Europe) Limited and CRISPR Therapeutics AG, CRISPR Therapeutics Limited, CRISPR Therapeutics, Inc., TRACR Hematology Ltd. †#
10.2	Lease, dated May 5, 2011, between Fifty Northern Avenue LLC and Vertex Pharmaceuticals Incorporated. †
10.3	Lease, dated May 5, 2011, between Eleven Fan Pier Boulevard LLC and Vertex Pharmaceuticals Incorporated. †
31.1	Certification of the Chief Executive Officer under Section 302 of the Sarbanes-Oxley Act of 2002.
31.2	Certification of the Chief Financial Officer under Section 302 of the Sarbanes-Oxley Act of 2002.
32.1	Certification of the Chief Executive Officer and the Chief Financial Officer under Section 906 of the Sarbanes-Oxley Act of 2002.
101.INS	XBRL Instance - the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document.
101.SCH	XBRL Taxonomy Extension Schema
101.CAL	XBRL Taxonomy Extension Calculation
101.LAB	XBRL Taxonomy Extension Labels
101.PRE	XBRL Taxonomy Extension Presentation
101.DEF	XBRL Taxonomy Extension Definition
104	Cover Page Interactive Data File—the cover page interactive data file does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document.
†	Confidential portions of this document have been redacted according to the applicable rules.
#	Certain exhibits and schedules to these agreements have been omitted pursuant to Item 601 of Regulation S-K. The registrant will furnish copies of any of the exhibits and schedules to the Securities and Exchange Commission upon request.

SIGNATURES

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

Vertex Pharmaceuticals Incorporated

July 30, 2021

By: _____

/s/ Charles F. Wagner, Jr.

Charles F. Wagner, Jr.

Executive Vice President, Chief Financial Officer

*(principal financial officer and
duly authorized officer)*

Certain confidential information contained in this document, marked by [***], has been omitted because it is not material and would likely cause competitive harm to Vertex Pharmaceuticals Incorporated if publicly disclosed.

**AMENDED AND RESTATED
JOINT DEVELOPMENT AND COMMERCIALIZATION AGREEMENT**

BETWEEN

VERTEX PHARMACEUTICALS INCORPORATED

VERTEX PHARMACEUTICALS (EUROPE) LIMITED

AND

CRISPR THERAPEUTICS AG

CRISPR THERAPEUTICS LIMITED

CRISPR THERAPEUTICS, INC.

TRACR HEMATOLOGY LTD.

TABLE OF CONTENTS

	Page
ARTICLE 1 DEFINITIONS	2
ARTICLE 2 ANTITRUST FILINGS	12
2.1. Antitrust Filings	12
2.2. Resolution of Any Objections	13
2.3. Provisions Effective As of the Amendment Date	13
ARTICLE 3 GOVERNANCE	14
3.1. Joint Oversight Committee	14
3.2. Transition Committee	14
3.3. Alliance Managers	15
3.4. Disbandment of Committees	16
ARTICLE 4 DEVELOPMENT	16
4.1. Development Plan and Follow-On Research	16
4.2. Regulatory Matters	17
4.3. Quality Agreement	18
4.4. Diligence	18
4.5. Clinical Trial Data	18
ARTICLE 5 MEDICAL AFFAIRS ACTIVITIES	19
ARTICLE 6 COMMERCIALIZATION	19
6.1. Responsibilities	19
6.2. Commercialization Plans	19
6.3. Participation in Significant Commercial Meetings	19
6.4. Reporting	20
6.5. Diligence	20
ARTICLE 7 MANUFACTURING	20
7.1. Transfer of Assigned Contracts to Vertex	20
7.2. Manufacturing Technology Transfer	20
7.3. Vertex Manufacturing Responsibilities	21
ARTICLE 8 TRANSITION ACTIVITIES	21
8.1. Transition Plan	21
8.2. Transition Activities	21
ARTICLE 9 CRISPR ACTIVITIES	22

9.1. CRISPR Activities Plan	22
9.2. Diligence	22
9.3. Reporting	22
ARTICLE 10 FINANCIAL TERMS; ALLOCATION OF NET PROFIT AND NET LOSS	22
10.1. Payments Under Original Agreement	22
10.2. Amendment Upfront Payment	23
10.3. Milestone Payment	23
10.4. Allocation	23
10.5. Calculation	23
10.6. Payment of Expenses; Summary Statements	23
10.7. Reconciliation	24
10.8. Books and Records	25
10.9. Payment Method; Currency	26
10.10. Late Payment	26
10.11. Capital Equipment	26
ARTICLE 11 ADVERSE EVENTS	26
11.1. Pharmacovigilance Agreement	26
11.2. Global Safety Database	26
11.3. Access to Safety Information	26
11.4. Notice of Certain Events	27
ARTICLE 12 SUBCONTRACTING	27
ARTICLE 13 LICENSE GRANTS	27
13.1. Acknowledgment of Option Exercise	27
13.2. License Grants to Vertex	27
13.3. License Grants to CRISPR	28
13.4. Licenses to Improvements	29
13.5. Sublicensing	29
13.6. No Implied Licenses	29
13.7. Third Party Agreements	30
ARTICLE 14 INTELLECTUAL PROPERTY	31
ARTICLE 15 REPRESENTATIONS AND WARRANTIES	31
15.1. Representations and Warranties of Vertex	31
15.2. Representations and Warranties of CRISPR	32
15.3. CRISPR Covenants	33
15.4. Vertex Covenants	35

15.5. Disclaimer	35
ARTICLE 16 INDEMNIFICATION; INSURANCE	35
16.1. Indemnification by Vertex	35
16.2. Indemnification by CRISPR	36
16.3. Procedure	36
16.4. Other Third Party Claims	36
16.5. Insurance	36
16.6. Limitation of Consequential Damages	37
ARTICLE 17 TERM; TERMINATION	38
17.1. Co-Co Agreement Term; Expiration	38
17.2. Termination of the Agreement	38
17.3. Opt-Out	42
17.4. Consequences of Expiration or Certain Terminations of the Agreement	44
17.5. Alternative Remedies for Material Breach	45
17.6. Survival	45
ARTICLE 18 CONFIDENTIALITY	45
18.1. Confidentiality	45
18.2. Authorized Disclosure	46
18.3. SEC Filings and Other Disclosures	46
18.4. Public Announcement; Publications	46
18.5. Site Media Materials	47
18.6. Confidentiality Obligations of CRISPR Personnel	48
ARTICLE 19 MISCELLANEOUS	48
19.1. Assignment	48
19.2. Effects of Change of Control	49
19.3. Force Majeure	49
19.4. Representation by Legal Counsel	49
19.5. Notices	49
19.6. Amendment	51
19.7. Waiver	51
19.8. Severability	51
19.9. Descriptive Headings	51
19.10. Export Control	51
19.11. Data Privacy Matters	51
19.12. Governing Law	52
19.13. Entire Agreement	52
19.14. Independent Contractors	52

19.15.	Interpretation	52
19.16.	No Third Party Rights or Obligations	53
19.17.	Further Actions	53
19.18.	Counterparts	53
19.19.	CRISPR Entities	53

SCHEDULE A: CRISPR In-License Agreements

SCHEDULE B: Designated Shared Products

SCHEDULE C: Vertex In-License Agreements

SCHEDULE D: Assigned Contracts

SCHEDULE E: Other Manufacturing Contracts

SCHEDULE F: Preliminary Transition Plan

SCHEDULE G: Annual OPEX Cap

SCHEDULE H: CRISPR Disclosure Schedule

SCHEDULE I: Form of Non-Disclosure Agreement

SCHEDULE J: Form of Joint Press Release

AMENDED AND RESTATED

JOINT DEVELOPMENT AND COMMERCIALIZATION AGREEMENT

This AMENDED AND RESTATED JOINT DEVELOPMENT AND COMMERCIALIZATION AGREEMENT (this “**Agreement**”) is entered into as of April 16, 2021 (the “**Amendment Date**”) by and between, on the one hand, **Vertex Pharmaceuticals Incorporated**, a corporation organized and existing under the laws of The Commonwealth of Massachusetts (“**Vertex Parent**”), and **Vertex Pharmaceuticals (Europe) Limited**, a private limited liability company organized under the laws of England and Wales (“**Vertex UK**” and, together with Vertex Parent, “**Vertex**”) and, on the other hand, **CRISPR Therapeutics AG**, a corporation organized under the laws of Switzerland (“**CRISPR AG**”), **CRISPR Therapeutics, Inc.**, a corporation organized under the laws of the state of Delaware (“**CRISPR Inc.**”), **CRISPR Therapeutics Limited**, a corporation organized under the laws of England and Wales (“**CRISPR UK**”), and **TRACR Hematology Ltd**, a UK limited company (“**Tracr**” and together with CRISPR AG, CRISPR Inc. and CRISPR UK, “**CRISPR**”), and amends and restates that certain Joint Development and Commercialization Agreement entered into as of December 12, 2017 (the “**Effective Date**”) by and between Vertex and CRISPR (the “**Original Agreement**”). Vertex and CRISPR each may be referred to herein individually as a “**Party**” or collectively as the “**Parties.**”

RECITALS

WHEREAS, the Parties and certain of their Affiliates (as defined below) have entered into that certain Strategic Collaboration, Option and License Agreement dated as of October 26, 2015, as amended by that certain Amendment No. 1 by and between the Parties dated as of the Effective Date and that certain Amendment No. 2 (“**Amendment No. 2**”) by and between the Parties dated as of June 6, 2019 (the “**Collaboration Agreement**”);

WHEREAS, pursuant to the Collaboration Agreement, Vertex and CRISPR are conducting a strategic collaboration focused on exploring potential targets related to certain diseases and creating therapeutics using gene editing [***], including the CRISPR/Cas System, to treat such diseases, including the Shared Products (as defined below);

WHEREAS, pursuant to Section 4.1.1 of the Collaboration Agreement, Vertex has obtained an Option (as defined therein) with respect to [***], and the execution of the Original Agreement constituted the exercise by Vertex of the Option with respect to [***];

WHEREAS, the Parties have agreed that [***] under the Collaboration Agreement;

WHEREAS, the Parties entered into the Original Agreement in accordance with Section 6.1.2(c) of the Collaboration Agreement in order for the Parties to conduct additional research with respect to and develop and commercialize the Shared Products; and

WHEREAS, the Parties now desire to amend and restate the Original Agreement in its entirety as set forth herein.

NOW, THEREFORE, in consideration of the respective covenants, representations, warranties and agreements set forth herein, the Parties hereto agree as follows:

ARTICLE 1 DEFINITIONS

For purposes of this Agreement, the following capitalized terms will have the meanings set forth in this ARTICLE 1. Capitalized terms used but not defined herein will have their respective meanings set forth in the Collaboration Agreement.

- 1.1. “**Agreement**” has the meaning set forth in the Preamble.
- 1.2. [***].
- 1.3. “**Alliance Manager**” has the meaning set forth in Section 3.3.1.
- 1.4. “**Amendment Date**” has the meaning set forth in the Preamble.
- 1.5. “**Amendment Date Provisions**” has the meaning set forth in Section 2.3.
- 1.6. “**Amendment Effective Date**” means the later of (a) the Amendment Date or (b) the Antitrust Clearance Date, *provided* that the Effective Date shall not occur if either Party has exercised its termination right under Section 17.2.1 prior to the Antitrust Clearance Date.
- 1.7. “**Amendment No. 2**” has the meaning set forth in the Recitals.
- 1.8. “**Annual OPEX Cap**” has the meaning set forth in Section 10.7.2.
- 1.9. “**Antitrust Clearance Date**” means the first date that (a) the waiting period (and any extension thereof) applicable to the transactions contemplated by this Agreement under HSR, and any applicable foreign counterpart(s) thereof, shall have expired or earlier been terminated; (b) no injunction (whether temporary, preliminary or permanent) prohibiting consummation of the transactions contemplated by this Agreement or any material portion hereof shall be in effect; and (c) no judicial or administrative proceeding opposing consummation of all or any part of this Agreement shall be pending.
- 1.10. “**Approvals**” has the meaning set forth in Section 18.5.3.
- 1.11. “**Approved Action**” has the meaning set forth in Section 18.5.3.
- 1.12. “**Assigned Contract**” has the meaning set forth in Section 7.1.
- 1.13. [***].
- 1.14. [***].

- 1.15. “[***] **Third Party Agreement**” has the meaning set forth in Section 13.7.2.
- 1.16. [***].
- 1.17. [***].
- 1.18. “**Calendar Quarter**” means the respective periods of three consecutive calendar months ending on March 31, June 30, September 30 or December 31, during the Co-Co Agreement Term, or the applicable part thereof during the first or last calendar quarter of the Co-Co Agreement Term.
- 1.19. “**Calendar Year**” means any calendar year ending on December 31, or the applicable part thereof during the first or last year of the Co-Co Agreement Term.
- 1.20. “**Challenging Party**” has the meaning set forth in Section 17.2.4.
- 1.21. “**CMO**” means contract manufacturing organization.
- 1.22. “**Co-Co Agreement Term**” means the period commencing on the Effective Date and ending on the expiration of this Agreement pursuant to Section 17.1, unless terminated earlier as provided herein.
- 1.23. “**Collaboration Agreement**” has the meaning set forth in the Recitals.
- 1.24. “**Combination Product**” has the meaning set forth in Section 1.81.
- 1.25. “**Commercialization Costs**” means [***]:
 - 1.25.1. [***];
 - 1.25.2. [***];
 - 1.25.3. [***];
 - 1.25.4. [***];
 - 1.25.5. [***];
 - 1.25.6. [***];
 - 1.25.7. [***];
 - 1.25.8. [***];
 - 1.25.9. [***]; and
 - 1.25.10. [***].

Commercialization Costs will exclude all of the payments set forth in Section 7.1 of the Collaboration Agreement, Research Costs, Development Costs, Transition Costs, Manufacturing Costs, Medical Affairs Costs, Patent Costs, Quality Costs, Other Out-of-Pocket Costs and Expenses attributable to general corporate activities, executive management, investor relations, treasury services, business development, corporate government relations, external financial reporting and other overhead activities.

- 1.26. “**Commercialize**” or “**Commercializing**” means to market, promote, distribute, offer for sale, sell, have sold, import, export or otherwise commercialize a product, and to conduct activities, other than Research, Development and Manufacturing, in preparation for the foregoing activities, including obtaining Price Approval. When used as a noun, “Commercialization” means any and all activities involved in Commercializing.
- 1.27. “**Commercially Reasonable Efforts**” means with respect to the efforts to be expended by any Person, with respect to any objective, reasonable, diligent and good faith efforts to accomplish such objective. With respect to any objective relating to the Research, Development or Commercialization of a Shared Product, “Commercially Reasonable Efforts” means [***] taking into account, without limitation, with respect to each Shared Product, [***]. “Commercially Reasonable Efforts” [***].
- 1.28. [***].
- 1.29. “[***] **Agreement**” has the meaning set forth in Section 13.7.3.
- 1.30. [***].
- 1.31. “**Control**” or “**Controlled**” means, with respect to any Know-How or Patent or other data, information or materials (including [***]), possession of the ability by a Party or its Affiliate(s) (whether by sole or joint ownership, license or otherwise, other than pursuant to this Agreement) to grant, without violating the terms of any agreement with a Third Party, a license, access or other right in, to or under such Know-How or Patent or other data, information or materials. Notwithstanding anything in this Agreement to the contrary, a Party will be deemed to not Control any Patents or Know-How that are owned or controlled by a Third Party described in the definition of “Change of Control,” or such Third Party’s Affiliates (other than an Affiliate of such Party prior to the Change of Control), (a) prior to the closing of such Change of Control, except to the extent that any such Patents or Know-How were developed prior to such Change of Control through the use of such Party’s technology, or (b) after such Change of Control to the extent that such Patents or Know-How are developed or conceived by such Third Party or its Affiliates (other than such Party) after such Change of Control without using or incorporating such Party’s technology.

- 1.32. “**Cost of Goods Sold**” means [***].
- 1.33. “**CRISPR**” has the meaning set forth in the Preamble.
- 1.34. “**CRISPR Activities Plan**” has the meaning set forth in ARTICLE 9.
- 1.35. “**CRISPR Background Know-How**” means any Know-How, other than Joint Program Know-How and CRISPR Program Know-How, that (a) [***] and (b) [***].
- 1.36. “**CRISPR Background Patents**” means any Patent, other than a Joint Program Patent, CRISPR Program Patent or CRISPR Platform Technology Patent that (a) [***] and (b) [***].
- 1.37. “**CRISPR In-License Agreements**” means CRISPR’s or its Affiliates’ agreements with Third Party licensors or sellers listed on Schedule A, which Schedule shall be updated following filing of the first IND for any Shared Product (other than the Initial Shared Product) under this Agreement to include any agreements pursuant to which CRISPR or its Affiliates have in-licensed or acquired any Licensed CRISPR Technology with respect to such Shared Product.
- 1.38. “**CST**” has the meaning set forth in Section 3.4.
- 1.39. [***].
- 1.40. [***].
- 1.41. “**Designated Personnel**” means [***].
- 1.42. “**Designated Shared Products**” means those Shared Products initially listed on Schedule B [***].
- 1.43. [***].
- 1.44. “**Development**” means, with respect to a Shared Product, all clinical and non-clinical research and development activities conducted after filing of an IND for such Shared Product, including toxicology, pharmacology test method development and stability testing, process development, formulation development, delivery system development, quality assurance and quality control development, statistical analysis, Clinical Trials (including post-Marketing Approval Clinical Trials), regulatory affairs, pharmacovigilance, Clinical Trial regulatory activities and obtaining and maintaining Regulatory Approval. When used as a verb, “Develop” or “Developing” means to engage in Development.
- 1.45. “**Development Costs**” means, [***]:
 - 1.45.1. [***];

- 1.45.2. [***];
- 1.45.3. [***];
- 1.45.4. [***];
- 1.45.5. [***]; and
- 1.45.6. [***].

[***].

- 1.46. “**Distributor**” means a Third Party to whom Vertex grants a right to sell or distribute a Shared Product, which Third Party does not make payments to Vertex that are calculated on the basis of a percentage of, or profit share on, such Third Party’s sales of the Shared Products.
- 1.47. “**DOJ**” has the meaning set forth in Section 2.1.
- 1.48. “**Dollar**” means the United States Dollar.
- 1.49. “**Effective Date**” has the meaning set forth in the Preamble.
- 1.50. “**Exclusive License**” has the meaning set forth in Section 13.2.1.
- 1.51. “**Executive Officers**” means (a) the Chief Executive Officer of CRISPR, initially Samarth Kulkarni, and (b) the Executive Vice President, Chief of Cell and Genetic Therapies of Vertex, initially Bastiano Sanna or, in the case of this clause (b), any other Executive Vice President-level or higher officer designated in writing by Vertex.
- 1.52. “**Expenses**” means Out-of-Pocket Costs and FTE Costs.
- 1.53. “**FTC**” has the meaning set forth in Section 2.1.
- 1.54. “**FTE**” means one employee full-time for one year or more than one person working the equivalent of a full-time person, working directly on the Research, Development, Manufacture or Commercialization of the Shared Products or Transition Activities, where “full-time” is considered [***] hours for one Calendar Year. No additional payment will be made with respect to any individual who works more than [***] hours per Calendar Year and any individual who devotes less than [***] hours per Calendar Year will be treated as an FTE on a pro rata basis based upon the actual number of hours worked divided by [***].
- 1.55. “**FTE Costs**” means the product of (a) [***], and (b) [***].
- 1.56. “**GDPR Letter Agreement**” has the meaning set forth in Section 19.11.

- 1.57. “**Global Commercialization Plan**” has the meaning set forth in Section 6.2.
- 1.58. “**Global Development Plan**” means the development plan for the Shared Products that has been agreed by the Parties prior to the Amendment Date with respect to the Initial Shared Product, as such development plan may be updated from time to time by Vertex in accordance with Section 4.1.1, including to reflect the anticipated Development activities for any other Shared Product for which Vertex intends to file an IND.
- 1.59. “**Global Safety Database**” has the meaning set forth in Section 11.2.
- 1.60. [***].
- 1.61. [***].
- 1.62. [***].
- 1.63. “**HSR**” means the Hart-Scott-Rodino Antitrust Improvements Act of 1976, as amended, and the rules and regulations promulgated thereunder.
- 1.64. “**Initial Shared Product**” means [***].
- 1.65. “**JOC**” has the meaning set forth in Section 3.1.1.
- 1.66. “**Knowledge**” means the [***] of [***] after [***].
- 1.67. “**Licensed CRISPR Know-How**” means (a) CRISPR Background Know-How, (b) CRISPR Program Know-How and (c) CRISPR’s interest in the Joint Program Know-How.
- 1.68. “**Licensed CRISPR Patents**” means (a) CRISPR Background Patents, (b) CRISPR Platform Technology Patents, (c) CRISPR Program Patents and (d) CRISPR’s interest in the Joint Program Patents.
- 1.69. “**Licensed CRISPR Technology**” means, subject to Section 13.2.3 and Section 13.7.2, any and all Licensed CRISPR Patents and Licensed CRISPR Know-How.
- 1.70. “**Licensed Vertex Know-How**” means [***].
- 1.71. “**Licensed Vertex Patents**” means [***].
- 1.72. “**Licensed Vertex Technology**” means, subject to Section 13.2.3 and Section 13.7.2, any and all Licensed Vertex Patents and Licensed Vertex Know-How.
- 1.73. “**Major [***] Countries**” means [***].
- 1.74. “**Manufacture**”, “**Manufactured**” or “**Manufacturing**” means activities directed to making, having made, producing, manufacturing, processing, filling, finishing,

packaging, labeling, quality control testing and quality assurance release, shipping or storage of a Shared Product (including any [***] that comprise such Shared Product).

1.75. “**Manufacturing Costs**” means, [***]:

- (a) [***];
- (b) [***];
- (c) [***]; and
- (d) [***];

[***].

1.76. “**Medical Affairs Activities**” means responding to external inquiries or complaints, the planning for and conduct of investigator sponsored Clinical Trials not included in the Global Development Plan, medical education, speaker programs, advisory boards, thought leader activities, educational grants and fellowships, local country government affairs, phase 3b Clinical Trials, phase IV/post-Regulatory Approval Clinical Trials, generating health economics and outcomes research data from patient reported outcomes, prospective observational studies and retrospective observational studies, and economic models and reimbursement dossiers, deployment of MSLs, medical affairs clinical trial management, doctors in field (other than MSLs), scientific publications and medical communications.

1.77. “**Medical Affairs Costs**” means, with respect to a Shared Product, all Expenses incurred by the Parties or their respective Affiliates in connection with the conduct of Medical Affairs Activities for such Shared Product, *provided* that, in the case of CRISPR or its Affiliates, such Expenses are incurred in the performance of activities set forth in a CRISPR Activities Plan.

1.78. “**MSL**” means medical science liaisons.

1.79. “**Net Loss**” means, with respect to a Shared Product, for a given period, Net Sales of such Shared Product in the Territory plus Sublicense Revenue for such Shared Product less Program Expenses for such Shared Product, where the result is a negative number.

1.80. “**Net Profit**” means, with respect to a Shared Product, for a given period, Net Sales of such Shared Product in the Territory plus Sublicense Revenue for such Shared Product less Program Expenses for such Shared Product, where the result is a positive number.

1.81. “**Net Sales**” means, with respect to a Shared Product, the gross invoiced price for units of such Shared Product sold by Vertex or its Affiliates (the “**Selling Party**”) to Third Parties, less the following deductions from such gross amounts:

- (a) [***];
- (b) [***];
- (c) [***];
- (d) [***]; and
- (e) [***].

Generally, only items that are deducted from the Selling Party’s gross invoiced sales price of such Shared Product, as included in the Selling Party’s published financial statements and that are in accordance with GAAP, applied on a consistent basis, will be deducted from such gross invoiced sales price for purposes of the calculation of Net Sales. However, compulsory payments required by federal or state governments based upon sales volume or market share of such Shared Product (but for clarity excluding taxes on the Selling Party’s net income), to the extent borne by the Selling Party, will be deducted from “Net Sales” regardless of its classification in the Selling Party’s published financial statements; *provided* that any such deduction will be limited to that share of such compulsory payment proportional to the share of the total sales volume or market share of the Selling Party used to compute the compulsory payment represented by applicable Net Sales of such Shared Product.

A qualifying amount may be deducted only once regardless of the number of the preceding categories that describe such amount. If a Selling Party makes any adjustment to such deductions after the associated Net Sales have been reported pursuant to this Agreement, the adjustments will be reported with the next Summary Statement. Sales between or among Vertex and its Affiliates will be excluded from the computation of Net Sales if such sales are not intended for end use, but Net Sales will include the subsequent final sales to Third Parties by Vertex or any such Affiliates. A Shared Product will not be deemed to be sold if such Shared Product is provided free of charge to a Third Party in reasonable quantities as a sample consistent with industry standard promotional and sample practices. [***].

If a sale, transfer or other disposition with respect to a Shared Product involves consideration other than cash or is not at arm’s length, then the Net Sales from such sale, transfer or other disposition will be calculated on the [***].

Solely for purposes of calculating Net Sales, if a Selling Party sells a Shared Product in the form of a combination product containing a Shared Product and one or more other therapeutically or prophylactically active ingredients or delivery devices (whether combined in a single formulation or package, as applicable, or formulated separately but packaged under a single label approved by a Regulatory Authority and sold together for a single price) (a “**Combination Product**”), Net Sales of such Combination Product will be calculated by multiplying actual Net Sales of such Combination Product as determined in the first paragraph of the definition of “Net Sales” by the fraction $A/(A+B)$ where [***]. The weighted average invoice prices referenced above will be calculated with reference to the prevailing prices during the applicable Calendar Quarter in those top selling countries that equate to [***]% of Net Sales of the applicable Shared Product in the Territory, with the prices weighted in the calculation to reflect the actual relative sales value of such Shared Product in each of the countries to which the calculation relates. If it is not possible to determine the fraction $A/(A+B)$ based on the criteria specified in the preceding sentence (e.g., if a Shared Product component is not sold separately), the Parties shall determine Net Sales for the Shared Product in such Combination Product in good faith by mutual agreement [***].

[***].

- 1.82. “**Non-Challenging Party**” has the meaning set forth in Section 17.2.4.
- 1.83. “**OPEX Overage**” has the meaning set forth in Section 10.7.2.
- 1.84. “**Opt-Out**” has the meaning set forth in Section 17.3.1.
- 1.85. “**Opt-Out Royalties**” has the meaning set forth in Section 17.3.1.
- 1.86. “**Opt-Out Shared Product**” has the meaning set forth in Section 17.3.1.
- 1.87. “**Original Agreement**” has the meaning set forth in the Preamble.
- 1.88. “**Other Manufacturing Contract**” has the meaning set forth in Section 7.1.
- 1.89. “**Other Out-of-Pocket Costs**” means, [***]:
 - 1.89.1. [***];
 - 1.89.2. [***];
 - 1.89.3. [***];
 - 1.89.4. [***];
 - 1.89.5. [***]; and

- 1.89.6. [***].
- 1.90. **“Party”** or **“Parties”** has the meaning set forth in the Preamble.
- 1.91. **“Patent Challenge”** has the meaning set forth in Section 17.2.4.
- 1.92. **“Patent Costs”** means, with respect to a Shared Product, all Expenses reasonably allocated to such Shared Product for the prosecution, maintenance and enforcement of Patents that Cover such Shared Product.
- 1.93. **“Pharmacovigilance Agreement”** means [***].
- 1.94. **“Preliminary Transition Plan”** has the meaning set forth in Section 8.1.
- 1.95. **“Program Expenses”** means, [***].
- 1.96. **“Quality Agreement”** has the meaning set forth in Section 4.3.
- 1.97. **“Quality Costs”** means, [***].
- 1.98. **“Reconciliation Report”** has the meaning set forth in Section 10.7.
- 1.99. **“Research Costs”** means, [***].
- 1.100. **“Selling Party”** has the meaning set forth in Section 1.81.
- 1.101. **“Senior-Level Employee”** means [***].
- 1.102. **“Shared Agent”** means [***].
- 1.103. **“Shared Product”** means (a) the Initial Shared Product and (b) any other pharmaceutical product, medical therapy, preparation, substance, or formulation comprising or employing, in whole or in part, a Shared Agent.
- 1.104. **“Shared Target”** means (a) [***], (b) [***], (c) the [***] and (d) [***].
- 1.105. **“Site Media Materials”** has the meaning set forth in Section 18.5.1.
- 1.106. **“Specified Shared Product Information”** has the meaning set forth in Section 18.1.
- 1.107. **“Subcontract”** has the meaning set forth in ARTICLE 12.
- 1.108. **“Subcontractor”** has the meaning set forth in ARTICLE 12.
- 1.109. **“Sublicense Revenue”** means, [***].

- 1.110. “**Sublicensee**” means an Affiliate or Third Party, other than a Distributor, to whom Vertex (or a Sublicensee or Affiliate of Vertex) licenses or sublicenses its rights under the Licensed CRISPR Technology or the Vertex Technology, in each case, with respect to a Shared Product during the Co-Co Agreement Term.
- 1.111. “**Summary Statement**” has the meaning set forth in Section 10.6.
- 1.112. “**Terminated Shared Product**” has the meaning set forth in Section 17.4.
- 1.113. “**Third Party Obligations**” means any non-financial encumbrances, obligations, restrictions, or limitations imposed by a [***] that are required to be passed through to a sublicensee of the [***], as applicable, and relate to a Shared Product or a Shared Target, including field or territory restrictions, covenants, diligence obligations or limitations pertaining to enforcement of intellectual property rights.
- 1.114. “**Trademark**” means all trademarks, service marks, trade names, brand names, sub-brand names, trade dress rights, product configuration rights, certification marks, collective marks, logos, taglines, slogans, designs or business symbols and all words, names, symbols, colors, shapes, designations or any combination thereof that function as an identifier of source or origin or quality, whether or not registered, and all statutory and common law rights therein, and all registrations and applications therefor, together with all goodwill associated with, or symbolized by, any of the foregoing.
- 1.115. “**Transition Activities**” has the meaning set forth in Section 8.1.
- 1.116. “**Transition Committee**” has the meaning set forth in Section 3.2.1.
- 1.117. “**Transition Costs**” means, [***].
- 1.118. “**Transition Plan**” has the meaning set forth in Section 8.1.
- 1.119. “**Vertex**” has the meaning set forth in the Preamble.
- 1.120. “**Vertex In-License Agreements**” means Vertex’s or its Affiliates’ agreements with Third Party licensors or sellers listed on Schedule C, which Schedule shall be updated following filing of the first IND for any Shared Product (other than the Initial Shared Product) under this Agreement to include any agreements pursuant to which Vertex or its Affiliates have in-licensed or acquired any Vertex Technology with respect to such Shared Product.
- 1.121. “**Vertex Know-How**” means (a) any Know-How, other than Joint Program Know-How and Vertex Program Know-How, that (i) [***] and (ii) [***].
- 1.122. “**Vertex Parent**” has the meaning set forth in the Preamble.

- 1.123. “**Vertex Patents**” means (a) any Patent, other than a Joint Program Patent or Vertex Program Patent, that (i) [***] and (ii) [***].
- 1.124. “**Vertex Technology**” means any and all Vertex Patents and Vertex Know-How.
- 1.125. “**Vertex UK**” has the meaning set forth in the Preamble.

ARTICLE 2 ANTITRUST FILINGS

- 2.1. **Antitrust Filings.** Each of Vertex and CRISPR agrees to prepare and make appropriate filings under HSR and other antitrust requirements in the Territory relating to this Agreement and the transactions contemplated hereby, as soon as reasonably practicable after the Amendment Date (but no later than [***] Business Days after the Amendment Date), and the filing fees associated with such filings will be borne by Vertex. Each Party will otherwise bear its own costs in connection with such filings. The Parties agree to cooperate in the antitrust clearance process and to furnish promptly to the Federal Trade Commission (“**FTC**”), the Antitrust Division of the Department of Justice (“**DOJ**”) and any other applicable agency or authority in the Territory, any information reasonably requested by them in connection with such filings. With respect to the HSR and other filings made pursuant to this Section 2.1, each of Vertex and CRISPR shall, to the extent practicable: (a) promptly notify the other Party of any material communication to that Party from the FTC, the DOJ, or any other agency or authority and, subject to Applicable Laws, discuss with and permit the other Party to review in advance any proposed written communication to any of the foregoing; (b) not agree to participate in any substantive meeting or discussion with the FTC, the DOJ or any other agency or authority in respect of any filings, investigation or inquiry concerning this Agreement unless it consults with the other Party in advance and, to the extent permitted by such agency or authority, give the other Party the opportunity to attend and participate thereat; and (c) furnish the other Party with copies of all correspondence and communications (and memoranda setting forth the substance thereof) between them and their Affiliates and their respective representatives on the one hand, and the FTC, the DOJ or any other agency or authority or members of their respective staffs on the other hand, with respect to this Agreement.
- 2.2. **Resolution of Any Objections.** In furtherance of obtaining clearance for an HSR filing or other antitrust filing filed pursuant to this ARTICLE 2, CRISPR and Vertex will use their respective Commercially Reasonable Efforts to resolve as promptly as practicable any objections that may be asserted with respect to this Agreement or the transactions contemplated by this Agreement under any antitrust, competition or trade regulatory law. In connection with obtaining such HSR or other antitrust clearance from the FTC, the DOJ or any other Governmental Authority, Vertex and its Affiliates will not be required to (a) sell, divest (including through a license or a reversion of licensed or assigned rights),

hold separate, transfer or dispose of any assets, operations, rights, product lines, businesses or interest therein of Vertex or any of its Affiliates (or consent to any of the foregoing actions); or (b) litigate or otherwise formally oppose any determination (whether judicial or administrative in nature) by a Governmental Authority seeking to impose any of the restrictions referenced in clause (a) above.

- 2.3. **Provisions Effective As of the Amendment Date.** Other than the provisions of this ARTICLE 2, Section 3.2.1, Section 3.2.2, Section 4.3, Section 7.1, Section 7.2, Section 8.1, Section 11.1, ARTICLE 15, Section 17.2.1, the first sentence of Section 18.1, Section 18.3 and all definitions necessary to give effect to the foregoing provisions (collectively, the “**Amendment Date Provisions**”), each of which shall become effective on the Amendment Date, the rights and obligations of the Parties under this Agreement shall not become effective until the Amendment Effective Date. For the avoidance of doubt, except for those provisions of the Original Agreement that are superseded by the Amendment Date Provisions, the Original Agreement will remain in full force and effect unless and until the Amendment Effective Date occurs.

ARTICLE 3 GOVERNANCE

3.1. Joint Oversight Committee.

3.1.1. **Formation.** As of the Amendment Date, the Parties have established a joint oversight committee (the “**JOC**”). Following the Amendment Effective Date, the JOC will solely serve as a forum for discussing and sharing information regarding the activities under this Agreement, and will have no decision-making authority. The JOC will at all times be comprised of [***] representatives from each Party, or such other number of equal representatives as the Parties may mutually agree upon. The JOC will conduct its responsibilities hereunder in good faith and with reasonable care and diligence. The JOC will meet (a) on a [***] basis during the period starting on the Amendment Effective Date and ending on December 31, 2021, and (b) on a [***] basis thereafter for the remainder of the Co-Co Agreement Term, except, in each case ((a) and (b)), as otherwise mutually agreed by the Parties in writing. The JOC will meet on such dates and at such times and places as agreed to by the members of the JOC. Each Party will be responsible for its own expenses relating to attendance at or participation in JOC meetings.

3.1.2. **Responsibilities.** Following the Amendment Effective Date, the JOC will:

- (a) discuss any near-term operational decisions to be made with respect to the Research, Development or Manufacture of the Shared Products prior to completion of the Transition Activities;

- (b) discuss strategy for the Shared Products;
- (c) discuss the Global Development Plan and each Global Commercialization Plan, including the cost estimates therein, and any updates thereto;
- (d) discuss the updates provided by the Parties regarding the activities under this Agreement;
- (e) discuss the updates provided by each Party with respect to [***];
- (f) [***];
- (g) discuss matters pertaining to the research activities described in Section 4.1.2; and
- (h) perform such other information-sharing functions as are specifically assigned to the JOC under this Agreement.

3.2. **Transition Committee.**

3.2.1. **Formation.** Within [***] Business Days after the Amendment Date, the Parties will have established a transition committee (the “**Transition Committee**”). The Transition Committee will exist solely to provide a forum for planning, discussing and sharing information regarding the Transition Activities of the Parties under ARTICLE 8, and will have no decision-making authority. The Transition Committee will be comprised of [***] representatives from each Party, or such other number of equal representatives as the Parties may mutually agree upon. The Transition Committee will conduct its responsibilities hereunder in good faith and with reasonable care and diligence. The Transition Committee will meet [***], or less frequently as otherwise mutually agreed by the Parties in writing, on such dates and at such times and places as agreed to by the members of the Transition Committee. Each Party will be responsible for its own expenses relating to attendance at or participation in Transition Committee meetings.

3.2.2. **Responsibilities Prior to the Amendment Effective Date.** Following the Amendment Date and prior to the Amendment Effective Date, the Transition Committee will:

- (a) prepare the Transition Plan and submit the Transition Plan to the Parties for approval; and
- (b) serve as a forum for discussion of any other planning matters relating to the Transition Activities.

3.2.3. **Responsibilities Following the Amendment Effective Date.** Following the Amendment Effective Date, the Transition Committee will:

- (a) coordinate and oversee the Transition Activities of the Parties under ARTICLE 8, including any [***]; and
- (b) prepare and discuss any amendments or updates to the Transition Plan and submit such amendments or updates to the Parties for approval.

3.2.4. **Discontinuation of the Transition Committee.** The Transition Committee will disband with respect to this Agreement following the completion of substantive Transition Activities under ARTICLE 8.

3.3. **Alliance Managers.**

3.3.1. **Appointment.** Each Party will appoint a representative of such Party to act as its alliance manager under this Agreement (each, an “Alliance Manager”). Each Party may replace its Alliance Manager at any time by written notice to the other Party.

3.3.2. **Specific Responsibilities.** The Alliance Managers will assist the Transition Committee in executing on the Transition Plan, facilitate the flow of information, and promote communication, coordination and collaboration, between the Parties under this Agreement.

3.4. **Disbandment of Committees.** Effective as of the Amendment Effective Date, the Collaboration Strategy Team (the “CST”) (as defined in that certain New Governance Structure Letter Agreement, dated July 16, 2020, by and between the Parties) and any working groups established by the CST are hereby disbanded.

**ARTICLE 4
DEVELOPMENT**

4.1. **Development Plan and Follow-On Research.**

4.1.1. **Global Development Plan.** Vertex will control and will have the sole right to conduct, in its sole discretion, all Development of the Shared Products in the Territory, except as expressly set forth in the Transition Plan or a CRISPR Activities Plan. Such Development will be conducted in accordance with the Global Development Plan, which will be updated by Vertex within [***] days after the Amendment Effective Date to reflect the allocation of all activities thereunder to Vertex following the completion of the Transition Activities. Such updated Global Development Plan will set forth at a high level the anticipated Development activities for the Initial Shared Product in the Territory and

will include a good faith estimate of the costs to be incurred by Vertex and its Affiliates in the conduct of such Development activities. On [***] basis (or more frequently as determined by Vertex), Vertex will update the Global Development Plan and will provide such updated Global Development Plan to the JOC for discussion. Without limiting the foregoing, prior to filing any IND with respect to any Shared Product (other than the Initial Shared Product), Vertex will provide to the JOC for discussion an updated Global Development Plan reflecting the anticipated Development activities for such Shared Product.

- 4.1.2. **Follow-On Research.** Vertex will control and will have the sole right to conduct, in its sole discretion, all Research regarding the Designated Shared Products, except as expressly set forth in the Transition Plan or a CRISPR Activities Plan. Notwithstanding anything to the contrary set forth in this Agreement, each Party shall be permitted to conduct Research activities aimed at identifying novel Shared Products [***].
- 4.1.3. **Bioinformatics.** Except as otherwise set forth in the Transition Plan, CRISPR will be responsible for maintaining [***] and will provide Vertex access as reasonably needed with respect to the Shared Products, including access to validation data and reports. CRISPR will consult with Vertex if any material changes or updates are to be made to [***] and take reasonable steps to provide such changes or updates to Vertex. Additionally, CRISPR will provide reasonable support to Vertex if [***].
- 4.1.4. **Participation in Significant Development Meetings.** Subject to Section 18.6, CRISPR will have the opportunity to designate, by written notice to Vertex, one of its Senior-Level Employees to attend as an observer (a) [***] or (b) [***], in each case ((a) and (b)), relating to the Shared Products. Vertex will (i) give CRISPR at least [***] Business Days' prior written notice, to the extent practicable (and, in any event, Vertex will endeavor to provide at least [***] hours' prior written notice, *provided* that notice provided to CRISPR at the same time as notice provided to other participants in the meetings described in this Section 4.1.4 shall be deemed to be sufficient prior notice), regarding any of the meetings described in this Section 4.1.4 and (ii) provide CRISPR access to such portions of any written materials, documents or information prepared in connection with, or to be discussed at, any of the meetings described in this Section 4.1.4 and related to the Shared Products, either at the time Vertex provides notice of such meetings under Section 4.1.4(i) or, if not available at such time, immediately before or promptly after such meetings (and in any event within [***] Business Days after the date of such meetings), *provided* that CRISPR shall limit access to any of the materials, documents or information received under this Section 4.1.4 to the Designated Personnel.

- 4.1.5. **Reporting.** Vertex will provide the JOC with reasonably detailed summary updates regarding the progress of activities pursuant to the Global Development Plan at each JOC meeting. Each Party will provide the JOC with reasonably detailed summary updates regarding the progress of Research activities with respect to the Shared Products at each JOC meeting.
- 4.2. **Regulatory Matters.**
- 4.2.1. **Regulatory Filings.** All Regulatory Filings and Regulatory Approvals that relate to the Shared Products shall be owned, prepared and filed by and held in the name of Vertex or its designated Affiliates. Vertex shall provide copies of all Regulatory Filings for the Shared Products to CRISPR and, subject to Section 18.6, CRISPR shall have the right to have its Senior-Level Employees and Designated Personnel review, in parallel with the process used by Vertex for its internal review, reasonably in advance of submission (it being agreed that at least [***] Business Days is reasonable advance notice) [***].
- 4.2.2. **Participation in Regulatory Meetings.** Subject to Section 18.6, and to the extent permitted by Applicable Law, CRISPR will have the opportunity to designate, by written notice to Vertex, one of its Senior-Level Employees to attend as an observer [***]. CRISPR will comply with Vertex's internal policies disclosed to CRISPR regarding attendance and participation in such meetings, conferences and discussions.
- 4.2.3. **CRISPR Assistance.** CRISPR will provide reasonable assistance to Vertex with respect to regulatory matters for the purpose of obtaining and maintaining Regulatory Approvals of the Shared Products. Without limiting the foregoing, CRISPR will, promptly following any request by Vertex, provide any assistance or documentation as may be reasonably necessary to enable Vertex to submit Regulatory Filings with respect to the Shared Products. Notwithstanding anything to the contrary in this Agreement, the costs of such requested assistance by CRISPR will be Development Costs subject to the sharing of Net Profits/Net Loss pursuant to Section 10.4.
- 4.3. **Quality Agreement.** Vertex will control and will have the sole right to conduct, in its sole discretion, all quality activities with respect to the Shared Products in the Territory, except as expressly set forth in the Transition Plan or a CRISPR Activities Plan. The Parties have entered into a quality agreement for the Shared Products (the "**Quality Agreement**"), which contains terms and conditions for quality analysis and control criteria for the Manufacture of the Shared Products, electronic system compliance, responsibilities for managing Clinical Trials and pre-clinical studies, and decision-making criteria. The Transition Plan will

provide for the Parties to update the Quality Agreement as may be necessary in light of the allocation of responsibilities contemplated by this Agreement. The updated Quality Agreement will be consistent with the relevant provisions of the Pharmacovigilance Agreement, as such provisions may be updated pursuant to Section 11.1.

- 4.4. **Diligence.** Vertex and its Affiliates will use Commercially Reasonable Efforts to Develop (a) the Initial Shared Product and (b) each other Shared Product for which Vertex files an IND, in each case ((a) and (b)), in [***]. Vertex and its Affiliates will conduct its Research and Development activities in good scientific manner and in compliance with Applicable Law. Notwithstanding anything to the contrary contained herein, Vertex or its Affiliates will not be obligated to undertake or continue any Research or Development activities with respect to any Shared Product if Vertex (or any of its Affiliates) reasonably determines that performance of such Research or Development activity would violate Applicable Law or infringe or misappropriate a Third Party's intellectual property.
- 4.5. **Clinical Trial Data.** Vertex shall provide CRISPR and its designees with access to the data arising from, relating to or otherwise in connection with any Clinical Trial of any Shared Product as follows: (a) [***]; and (b) [***]. CRISPR shall limit access to any of the information or data received under this Section 4.5 to the Designated Personnel.

ARTICLE 5 MEDICAL AFFAIRS ACTIVITIES

Vertex will control and will have the sole right to conduct, in its sole discretion, all Medical Affairs Activities with respect to the Shared Products in the Territory, except as expressly set forth in the Transition Plan or a CRISPR Activities Plan. Such Medical Affairs Activities will be conducted using Commercially Reasonable Efforts.

ARTICLE 6 COMMERCIALIZATION

- 6.1. **Responsibilities.** Vertex will control and will have the sole right to conduct, in its sole discretion, all Commercialization activities with respect to the Shared Products in the Territory, except as expressly set forth in the Transition Plan or a CRISPR Activities Plan. Vertex will have the sole right to invoice, sell and book all sales of each Shared Product in the Territory.
- 6.2. **Commercialization Plans.** Reasonably in advance of the anticipated launch of each Shared Product in the first country in the Territory (but in no event less than [***] months before the date of such anticipated launch), Vertex will develop a global Commercialization plan that will set forth at a high level the anticipated Commercialization activities to be conducted for such Shared Product in the Territory and will include a good faith estimate of the costs to be incurred by

Vertex and its Affiliates in the conduct of such Commercialization activities (each such plan, as it may be updated by Vertex from time to time, a “**Global Commercialization Plan**”), and will provide such Global Commercialization Plan to the JOC for discussion. On [***] basis (or more frequently as determined by Vertex), Vertex will update each such Global Commercialization Plan and will provide each such updated Global Commercialization Plan to the JOC for discussion.

- 6.3. **Participation in Significant Commercial Meetings.** Subject to Section 18.6, CRISPR will have the opportunity to designate, by written notice to Vertex, (a) one of its Senior-Level Employees to attend as an observer [***] and (b) one of its Senior-Level Employees to attend as an observer [***]. Vertex will (i) give CRISPR at least [***] Business Days’ prior written notice, to the extent practicable (and, in any event, Vertex will endeavor to provide at least [***] hours’ prior written notice, *provided* that notice provided to CRISPR at the same time as notice provided to other participants in the meetings described in this Section 6.3 shall be deemed to be sufficient prior notice), regarding any of the meetings described in this Section 6.3 and (ii) provide CRISPR access to such portions of any written materials, documents or information prepared in connection with, or to be discussed at, any of the meetings described in this Section 6.3 relating to the Shared Products, either at the time Vertex provides notice of such meetings under Section 6.3(i) or, if not available at such time, immediately before or promptly after such meetings (and in any event within [***] Business Days after the date of such meetings), *provided* that CRISPR shall limit access to any of the materials, documents or information received under this Section 6.3 to the Designated Personnel.
- 6.4. **Reporting.** Vertex will provide the JOC with reasonably detailed summary updates regarding the progress of activities pursuant to each Global Commercialization Plan at each JOC meeting.
- 6.5. **Diligence.** Vertex and its Affiliates will use Commercially Reasonable Efforts to Commercialize the Shared Products in the [***]. Vertex and its Affiliates will conduct their Commercialization activities in compliance with Applicable Law. Notwithstanding anything to the contrary contained herein, Vertex or its Affiliates will not be obligated to undertake or continue any Commercialization activities with respect to any Shared Product if Vertex (or any of its Affiliates) reasonably determines that performance of such Commercialization activity would violate Applicable Law or infringe or misappropriate a Third Party’s intellectual property.

ARTICLE 7 MANUFACTURING

- 7.1. **Transfer of Assigned Contracts to Vertex.** Promptly following the Amendment Effective Date, CRISPR will, if such assignment is requested by Vertex, assign to

Vertex the agreements listed on Schedule D, which represent all agreements between CRISPR and [***] (each such agreement an “Assigned Contract” and, collectively, the “Assigned Contracts”), in accordance with the Transition Plan, including the applicable timelines set forth therein; *provided, however*, that, if a Third Party consent is required in order to effect the assignment of any such Assigned Contract, CRISPR will use Commercially Reasonable Efforts to obtain such Third Party consent (*provided* that CRISPR shall not, in the exercise of such Commercially Reasonable Efforts, be required to pay any amount to any such Third Party in exchange for such consent unless the Parties agree to include such amount as Program Expenses) and, if such consent cannot be obtained, CRISPR will comply with the provisions set forth below in this Section 7.1 as if such Assigned Contract were an Other Manufacturing Contract. Schedule E sets forth a list as of the Amendment Date of all other agreements between CRISPR and [***] (each, an “Other Manufacturing Contract”). At Vertex’s request, [***] listed on Schedule E hereto, in accordance with the Transition Plan, including the applicable timelines set forth therein. To the extent permitted by Applicable Law, the Parties shall, as soon as possible following the Amendment Date, take such actions as are necessary to allow for assignment of the Assigned Contracts as of the Amendment Effective Date and [***] set forth on Schedule E. [***].

- 7.2. **Manufacturing Technology Transfer.** Promptly following the Amendment Effective Date, CRISPR will make available and deliver to Vertex or one or more designated Affiliates (a) [***] and (b) [***], in each case ((a) and (b)), in accordance with the Transition Plan, including the applicable timelines set forth therein. To assist with the transfer [***], CRISPR will make its personnel reasonably available to Vertex during CRISPR’s normal business hours to transfer such [***] under this Section 7.2 and the costs of such assistance at the FTE Rate will be included within the Transition Costs. Notwithstanding anything to the contrary set forth in this Agreement or the Transition Plan, CRISPR shall have no further obligations under this Section 7.2 to provide such assistance from and after the earlier to occur of (i) [***] or (ii) [***]. [***].
- 7.3. **Vertex Manufacturing Responsibilities.** Except as expressly set forth in the Transition Plan or a CRISPR Activities Plan or prior to the assignment of agreements contemplated by Section 7.1, Vertex will control and will have the sole right to conduct, in its sole discretion, all Manufacturing activities with respect to the Shared Products in the Territory and such Manufacturing activities will be conducted using Commercially Reasonable Efforts. For clarity, all Manufacturing Costs with respect thereto will be subject to the sharing of Net Profits/Net Loss pursuant to Section 10.4.

ARTICLE 8
TRANSITION ACTIVITIES

- 8.1. **Transition Plan.** Attached as Schedule F a preliminary transition plan (the “**Preliminary Transition Plan**”) setting forth all activities that are necessary to effectively transfer all of CRISPR’s material ongoing activities, to the extent primarily related to the Shared Products, to Vertex (the “**Transition Activities**”) and the timelines therefor. As soon as possible following the Amendment Date, the Transition Committee will revise and update the Preliminary Transition Plan and submit the same to the Parties for approval (such transition plan, as it may be updated pursuant to this Agreement, the “**Transition Plan**”). The Transition Committee may, from time to time after such approval by the Parties, prepare and submit to the Parties for discussion amendments to the Transition Plan. The Parties will discuss in good faith any amendments to the Transition Plan that are necessary to enable each Party to fully exercise its rights and perform its obligations under this Agreement. If the Parties cannot mutually agree upon the initial Transition Plan or any such amendment thereto reasonably promptly following submission thereof to the Parties for approval, either Party may submit the dispute to the Executive Officers for resolution. If the Executive Officers cannot resolve such dispute within [***] days of submission thereof to the Executive Officers, [***] will have the final decision-making authority, *provided* that [***] shall not (i) have final decision-making authority with respect (a) any item or matter that was set forth in the Preliminary Transition Plan, (b) any item or matter that would cause or is reasonably likely to cause [***] or any of its Affiliates to violate any Applicable Law or be in breach of, or default under, any Third Party agreement existing as of the Amendment Date; or (ii) have the right to amend any provision of this Agreement or any schedule hereto without [***] written consent.
- 8.2. **Transition Activities.** Commencing on the Amendment Effective Date, the Parties will conduct the Transition Activities to effectively transfer all of CRISPR’s material ongoing activities, to the extent related to the Shared Products, to Vertex. The Transition Activities will be conducted for an anticipated period of [***] months following the Amendment Effective Date, in accordance with the Transition Plan, including the timelines set forth therein. Each Party will use Commercially Reasonable Efforts to perform the activities allocated to such Party under the Transition Plan, *provided* that in no event shall Transition Activities be conducted after the date that is [***] months after the Amendment Effective Date (*provided* that CRISPR has complied with its obligations under this Section 8.2 in all material respects) unless the Parties mutually agree in writing. Each Party will provide the other Party with reasonably detailed summary reports with respect to any data or other materials provided to the other Party pursuant to the Transition Plan, for the purpose of aiding in the interpretation of such data or other materials by the other Party. All Transition Costs will be subject to the sharing of Net Profits/Net Loss pursuant to Section 10.4.

**ARTICLE 9
CRISPR ACTIVITIES**

- 9.1. **CRISPR Activities Plan.** Notwithstanding anything to the contrary in this Agreement, the Parties may from time to time decide by mutual agreement to allocate to CRISPR or its Affiliates certain Research, Development, Manufacturing or Commercialization activities with respect to the Shared Products. Any such agreement will be set forth in a writing duly executed by both Parties (each, a “**CRISPR Activities Plan**”), which CRISPR Activities Plan will include an estimate of costs for such activities.
- 9.2. **Diligence.** CRISPR, itself or through its Affiliates, will use Commercially Reasonable Efforts to conduct the activities set forth in each CRISPR Activities Plan in accordance with the timelines set forth therein. CRISPR and its Affiliates will conduct their activities in compliance with Applicable Law. Notwithstanding anything to the contrary contained herein, CRISPR or its Affiliates will not be obligated to undertake or continue any activity under a CRISPR Activities Plan if CRISPR (or any of its Affiliates) reasonably determines that performance of such activity would violate Applicable Law or infringe or misappropriate a Third Party’s intellectual property.
- 9.3. **Reporting.** CRISPR will provide the JOC with reasonably detailed summary updates regarding the progress of activities pursuant to each CRISPR Activities Plan, if any, at each JOC meeting.

**ARTICLE 10
FINANCIAL TERMS; ALLOCATION OF NET PROFIT AND NET LOSS**

- 10.1. **Payments Under Original Agreement.** The Parties acknowledge that Vertex has paid to CRISPR, prior to the Amendment Date, (a) a non-refundable, non-creditable, upfront payment in the amount of Seven Million Dollars (\$7,000,000) and (b) a one-time, non-refundable, non-creditable milestone payment in the amount of Three Million Dollars (\$3,000,000) following the dosing of the second patient in a Clinical Trial with the Initial Shared Product, in each case ((a) and (b)), as required under the Original Agreement. For clarity, CRISPR is solely responsible for all costs and expenses incurred by CRISPR or its Affiliates in connection with the Shared Products prior to the Effective Date.
- 10.2. **Amendment Upfront Payment.** Within [***] Business Days after the Amendment Effective Date, Vertex shall pay to CRISPR a non-refundable, non-creditable, upfront payment in the amount of Nine Hundred Million Dollars (\$900,000,000).
- 10.3. **Milestone Payment.** Following receipt by Vertex or its Affiliates of the first Marketing Approval for the Initial Shared Product from the FDA or the European Commission, Vertex will make a one-time, non-refundable, non-creditable

payment to CRISPR of Two Hundred Million Dollars (\$200,000,000) within [***] days after receipt by Vertex of an invoice for such payment from CRISPR.

- 10.4. **Allocation.** With respect to each Shared Product, starting January 1, 2018, and continuing through the Co-Co Agreement Term, each Party will be entitled to 50% of the Net Profits or will bear 50% of the Net Loss, as applicable; *provided, however*, that, solely with respect to the Initial Shared Product, starting on July 1, 2021 (or, if the Amendment Effective Date has not occurred prior to October 1, 2021, starting on the first day of the Calendar Quarter in which the Amendment Effective Date occurs), and continuing through the Co-Co Agreement Term, subject to the limitations set forth in Section 10.7.2, Vertex will be entitled to 60% of the Net Profits and will bear 60% of the Net Loss, as applicable, and CRISPR will be entitled to 40% of the Net Profits and will bear 40% of the Net Loss, as applicable. Each Party will be solely responsible for any Program Expenses incurred by such Party between the Effective Date and January 1, 2018. If either Party elects to Opt-Out (as defined below), the other Party shall pay royalties to such Party in accordance with Section 17.3 in lieu of sharing of Net Profits/Net Loss pursuant to this Section 10.4.
- 10.5. **Calculation.** [***].
- 10.6. **Payment of Expenses; Summary Statements.** Subject to reconciliation and the limitations provided in Section 10.7, the Party initially incurring Program Expenses will be responsible for and pay for all such Program Expenses so incurred. Each Party will maintain the books and records referred to in Section 10.8. Each Party will report all Program Expenses, Sublicense Revenue and Net Sales in accordance with the terms and conditions hereof and in accordance with GAAP. If any Program Expenses relate to multiple Shared Products, the Parties will work together to determine an equitable allocation of such Program Expenses between such Shared Products. Within [***] Business Days after the end of each Calendar Quarter, each Party will submit to the other a written report reflecting, on a Shared Product-by-Shared Product basis, the estimated Program Expenses, Sublicense Revenue and Net Sales during the just-ended Calendar Quarter, except that each Party's submission for the last month of such Calendar Quarter will be a good faith estimate and not actual amounts (each, a "**Summary Statement**"). Within [***] days after the end of each Calendar Quarter, each Party will submit to the other an updated Summary Statement reflecting, on a Shared Product-by-Shared Product basis, the actual Program Expenses, Sublicense Revenue and Net Sales for the last month of such Calendar Quarter, which Summary Statement will be certified as true and accurate by a representative of such Party that is a Vice President of Finance or more senior representative. Each Summary Statement (after the initial Summary Statement) will reflect an adjustment for the actual amount of the previous Calendar Quarter as needed, *provided* that, if, prior to preparation of a Summary Statement in accordance with the preceding sentence, a Party discovers that actual Program

Expenses, Sublicense Revenue or Net Sales with respect to a Shared Product have deviated materially from any non-binding, good faith estimate of such Program Expenses, Sublicense Revenue or Net Sales submitted to the other Party in accordance with this Section 10.6 (including any deviation in any single Expense or in aggregate Sublicense Revenue or aggregate Net Sales, in each case, of more than \$[***]), then such Party shall promptly notify the other Party of such deviation in advance of delivery of such Summary Statement. Any reporting and reconciliation of variances between estimated and actual Expenses may be delayed by a Calendar Quarter as reasonably necessary in light of a Party's internal reporting procedures. The Parties' respective Summary Statements will serve as the basis of the Reconciliation Reports prepared by [***] pursuant to Section 10.7. The Parties' respective finance departments, coordinated by the Alliance Managers, will meet at least [***] per [***], or as otherwise mutually agreed by the Parties, to discuss any questions or issues arising from the Summary Statements, including the basis for the recognition of specific Program Expenses, review cost estimates and forecasts, and discuss reconciliation and reporting procedures.

10.7. **Reconciliation.**

- 10.7.1. **General Reconciliation.** [***] will prepare a reconciliation report, as soon as practicable, after the receipt of [***] updated Summary Statements, but in any event within [***] days after the end of each Calendar Quarter, accompanied by reasonable supporting documents and calculations sufficient to support each Party's financial reporting obligations, independent auditor requirements and obligations under the Sarbanes-Oxley Act, which reconciles the amounts accrued and reported in each Party's Summary Statements and the share of the Net Profits and Net Losses to be allocated to each of the Parties for such Calendar Year in accordance with Section 10.4, on a Shared Product-by-Shared Product basis and in the aggregate across all Shared Products (such report, the "**Reconciliation Report**").
- 10.7.2. **Excess OPEX Deferral.** Schedule G sets forth the limits on CRISPR's share of the Program Expenses for the Initial Shared Product for each of Calendar Years 2021, 2022, 2023 and 2024 (such limit for the applicable Calendar Year, each an "**Annual OPEX Cap**"). To the extent that the Reconciliation Report for Calendar Years 2021, 2022, 2023 or 2024 indicates that CRISPR's share of the Program Expenses for the Initial Shared Product for such Calendar Year exceeds [***]% of the Annual OPEX Cap for such Calendar Year, CRISPR shall be permitted to defer payment of an amount equal to such excess amount (the "**OPEX Overage**") as set forth in Section 10.7.3.

- 10.7.3. **Payment.** Subject to the limitations provided in this Section 10.7, payment to reconcile aggregate Net Profit or Net Loss, as applicable, across all Shared Products shall be made by the owing Party to the other Party within [***] days after such Reconciliation Report is complete; *provided* that, CRISPR shall be permitted, by written notice to Vertex within such [***]-day period, to defer payment of any OPEX Overage, and such OPEX Overage shall not be currently charged to or payable by CRISPR during or in respect of such Calendar Year and instead will be deducted from Net Profits payable thereafter to CRISPR for the Initial Shared Product, *provided* that, the maximum deduction against such Net Profits for any single Calendar Year for any and all deferred OPEX Overages shall be limited to [***] and, *provided, further*, that any portion of an OPEX Overage which is not deducted from such Net Profits by application of such cap shall be carried forward for deduction against future distributions of such Net Profits until such OPEX Overage amounts have been deducted in full. For the avoidance of doubt, the deductions contemplated by this Section 10.7.3 may only occur in a Calendar Year in which there is a Net Profit payable to CRISPR with respect to the Initial Shared Product.
- 10.8. **Books and Records.** Each Party will keep and maintain accurate and complete records regarding Program Expenses, Sublicense Revenue and Net Sales, as applicable, during the three preceding Calendar Years. Upon [***] days' prior written notice from the Auditing Party, the Audited Party will permit an independent certified public accounting firm of internationally recognized standing, selected by the Auditing Party and reasonably acceptable to the Audited Party, to examine the relevant books and records of the Audited Party and its Affiliates, as may be reasonably necessary to verify the Summary Statements and Reconciliation Reports. An examination by the Auditing Party under this Section 10.8 will occur not more than once in any Calendar Year and will be limited to the pertinent books and records for any Calendar Year ending not more than [***] months before the date of the request. The accounting firm will be provided access to such books and records at the Audited Party's facility or facilities where such books and records are normally kept and such examination will be conducted during the Audited Party's normal business hours. The Audited Party may require the accounting firm to sign a customary non-disclosure agreement before providing the accounting firm access to its facilities or records. Upon completion of the audit, the accounting firm will provide both the Auditing Party and the Audited Party a written report disclosing whether the applicable Summary Statements and Reconciliation Reports are correct or incorrect and the specific details concerning any discrepancies. No other information will be provided to the Auditing Party. If the report or information submitted by the Audited Party results in an underpayment or overpayment, the Party owing underpaid or overpaid amount will promptly pay such amount to the other Party, and if, as a result of such inaccurate report or information, such amount is more

than five percent of the amount that was owed, the Audited Party will reimburse the Auditing Party for the reasonable expense incurred by the Auditing Party in connection with the audit.

10.9. **Payment Method; Currency.**

10.9.1. All payments under this Agreement after the Amendment Effective Date will be paid in U.S. Dollars, by wire transfer (a) in the case of payments to [***], by [***] to an account of [***] designated by [***] (which account [***] may update from time to time in writing) and (b) in the case of payments to [***], by [***] to an account of [***] designated by [***] (which account [***] may update from time to time in writing).

10.9.2. If any amounts that are relevant to the determination of amounts to be paid under this Agreement or any calculations to be performed under this Agreement are denoted in a currency other than U.S. Dollars, then such amounts will be converted to their U.S. Dollar equivalent using the [***] of the official rate of exchange of such domestic currency as quoted by [***], for the Calendar Quarter for which the payment is made.

10.10. **Late Payment.** Any undisputed payments or portions thereof due hereunder that are not paid when due will accrue interest from the due date until paid at an annual rate equal to [***] plus [***] percent (or the maximum allowed by Applicable Law, if less).

10.11. **Capital Equipment.** [***].

**ARTICLE 11
ADVERSE EVENTS**

11.1. **Pharmacovigilance Agreement.** Vertex shall be responsible for all pharmacovigilance activities for the Shared Products in the Territory. The Parties have entered into the Pharmacovigilance Agreement, which contains terms and conditions for the processes and procedures for sharing safety information with respect to the Shared Products. The Transition Plan will provide for the Parties to update the Pharmacovigilance Agreement as may be necessary in light of the allocation of responsibilities contemplated by this Agreement.

11.2. **Global Safety Database.** Vertex will establish and maintain the global database of safety information for each Shared Product (each, a “Global Safety Database”), including adverse events and pregnancy reports for each Shared Product, which will be used for regulatory reporting and responses to safety queries from Regulatory Authorities by Vertex.

11.3. **Access to Safety Information.** The Parties will arrange for [***] to [***] CRISPR, with a format and periodicity agreed upon by both Parties. In response

to [***] from CRISPR, Vertex will [***] to CRISPR within [***] Business Day of a request. In addition, Vertex shall [***] to [***] by CRISPR [***].

- 11.4. **Notice of Certain Events**. Notwithstanding anything to the contrary in this Agreement or the Pharmacovigilance Agreement, Vertex will promptly notify CRISPR (and, in any event, within [***] Business Day), in accordance with the notice procedures set forth in the Pharmacovigilance Agreement, after Vertex or any Affiliate thereof becomes aware of the occurrence of any Specified Clinical Event (as hereinafter defined), and Vertex will provide CRISPR with reasonably detailed information regarding such Specified Clinical Event. Vertex shall provide CRISPR with reasonably detailed updates, in accordance with the notice procedures set forth in the Pharmacovigilance Agreement, about any such Specified Clinical Event. For purposes hereof, the term “**Specified Clinical Event**” shall mean [***].

ARTICLE 12 SUBCONTRACTING

Vertex may subcontract the performance of any activities undertaken by Vertex under this Agreement with respect to the Shared Products to one or more Third Parties of Vertex’s choice (each such Third Party, a “**Subcontractor**”) pursuant to a written agreement in compliance with the terms of this Agreement and the Quality Agreement (a “**Subcontract**”). CRISPR may subcontract the performance of any activities undertaken by CRISPR under this Agreement (including under Section 4.1.2), in accordance with the Transition Plan or the applicable CRISPR Activities Plan, as applicable, to one or more Subcontractors of CRISPR’s choice pursuant to a Subcontract.

ARTICLE 13 LICENSE GRANTS

- 13.1. **Acknowledgment of Option Exercise**. Each Party acknowledges and agrees that, notwithstanding anything to the contrary in the Collaboration Agreement, effective as of the execution of this Agreement, Vertex is deemed to have exercised [***], without any further action on the part of either Party, [***].
- 13.2. **License Grants to Vertex**.
- 13.2.1. **Development and Commercialization License**. Subject to the terms and conditions of this Agreement, CRISPR grants to Vertex Parent and its Affiliates an exclusive license under CRISPR’s and its Affiliates’ interest in the Licensed CRISPR Technology, with the right to Sublicense through multiple tiers (subject to Section 13.5), to Research, Develop, Manufacture, have Manufactured, use, keep, sell, offer for sale, import, export and Commercialize the Shared Products in the Field in the Territory (such license, the “**Exclusive License**”), subject to CRISPR’s retained rights to (a) perform the Transition Activities in accordance with

the Transition Plan and this Agreement and (b) conduct the activities set forth in any CRISPR Activities Plan, as applicable. As of the Amendment Effective Date, this Exclusive License supersedes and replaces the license grant set forth in Section 5.3.1 of the Collaboration Agreement solely with respect to the Shared Targets and the license grant set forth in Section 10.2.1 of the Original Agreement, and shall be deemed to be the “Exclusive License” under the Collaboration Agreement with respect to the Shared Targets.

13.2.2. **Research License.** Subject to the terms and conditions of this Agreement, CRISPR grants to Vertex Parent and its Affiliates an exclusive license under CRISPR’s and its Affiliates’ interest in the Licensed CRISPR Technology to conduct the Research activities with respect to the Shared Products in the Field in the Territory, subject to CRISPR’s retained rights to (a) perform the Transition Activities in accordance with the Transition Plan and this Agreement, (b) conduct the activities set forth in any CRISPR Activities Plan, as applicable and (c) conduct the research contemplated by Section 4.1.2.

13.2.3. **License Conditions; Limitations.** Subject to Section 13.7.2, any rights and obligations hereunder, including the rights granted pursuant to the Exclusive License, are subject to and limited by any applicable [***] of CRISPR to the extent the provisions of such obligations or agreements are specifically disclosed to Vertex in writing: (a) with respect to [***] under a CRISPR In-License Agreement, (i) prior to the Effective Date, in the case of the Initial Shared Product, and (ii) prior to filing of the first IND for the applicable Shared Product, in the case of any other Shared Product; and (b) with respect to [***] under [***] for which CRISPR is the contracting Party, on or prior to the date on which such [***] becomes effective.

13.3. **License Grants to CRISPR.**

13.3.1. **License for Transition Activities and CRISPR Activities.** Subject to the terms and conditions of this Agreement, Vertex grants to CRISPR a non-exclusive license under Vertex’s and its Affiliates’ interest in the Licensed Vertex Technology, without the right to Sublicense (except to permitted Subcontractors), solely to (a) perform the Transition Activities in accordance with the Transition Plan and this Agreement, (b) conduct the activities set forth in any CRISPR Activities Plan, as applicable and (c) conduct the research contemplated by Section 4.1.2.

13.3.2. **License Conditions; Limitations.** Subject to Section 13.7.2, any rights and obligation hereunder are subject to and limited by any applicable [***] of Vertex to the extent the provisions of such obligations or agreements are specifically disclosed to CRISPR in writing: (a) with

respect to [***] under a Vertex In-License Agreement, (i) prior to the Effective Date, in the case of the Initial Shared Product, and (ii) prior to filing of the first IND for the applicable Shared Product, in the case of any other Shared Product; and (b) with respect to [***] under [***] for which Vertex is the contracting Party, on or prior to the date on which such [***] becomes effective.

13.4. **Licenses to Improvements.**

13.4.1. Subject to the terms and conditions of this Agreement, CRISPR hereby grants to Vertex Parent and its Affiliates a perpetual, irrevocable, non-exclusive, royalty-free, fully paid-up, worldwide, sublicensable license to all improvements or modifications to the Vertex Background Know-How or Vertex Background Patents, whether or not patentable, that arise in the course of performing activities under the Global Development Plan or in the course of performing Research activities with respect to the Shared Products or Developing, Manufacturing or Commercializing a Shared Product and are Controlled by CRISPR or its Affiliates to make, have made, use, sell, keep, offer for sale and import products other than the Shared Products.

13.4.2. Subject to the terms and conditions of this Agreement, Vertex hereby grants to CRISPR a perpetual, irrevocable, non-exclusive, royalty-free, fully paid-up, worldwide, sublicensable license to all improvements or modifications to the CRISPR Platform Technology Patents, CRISPR Background Patents [***], Gene Editing System or CRISPR Background Know-How set forth on Schedule F to the Collaboration Agreement (as may be supplemented by mutual written agreement of the Parties from time to time), whether or not patentable, that arise in the course of performing activities under the Global Development Plan or in the course of performing Research activities with respect to the Shared Products or Developing, Manufacturing or Commercializing a Shared Product and are Controlled by Vertex or its Affiliates to make, have made, use, sell, keep, offer for sale and import products other than the Shared Products.

13.5. **Sublicensing.** Subject to the rights granted or retained by the Parties under this Agreement, Vertex may Sublicense (through multiple tiers) to its Affiliates or Third Parties any and all rights granted to it by CRISPR or retained by Vertex with respect to the Research, Development, Manufacture and Commercialization of the Shared Products and, if applicable, [***]. If Vertex grants any such Sublicense it will remain responsible for its obligations under this Agreement and will be responsible for the performance of the relevant Sublicensee.

13.6. **No Implied Licenses.** All rights in and to Licensed CRISPR Technology not expressly licensed or assigned to Vertex under this Agreement or the

Collaboration Agreement are hereby retained by CRISPR or its Affiliates. All rights in and to any Vertex Technology not expressly licensed to CRISPR under this Agreement or the Collaboration Agreement, are hereby retained by Vertex or its Affiliates. Except as expressly provided in this Agreement or the Collaboration Agreement, no Party will be deemed by estoppel or implication to have granted the other Party any licenses or other right with respect to any intellectual property.

13.7. **Third Party Agreements.**

13.7.1. **In-License Agreements.** Any financial obligations arising under any CRISPR In-License Agreement or Vertex In-License Agreement as a result of the Development, Manufacture or Commercialization of any Shared Product under this Agreement will be included in [***].

13.7.2. [***]. If a Party believes, in its reasonable judgment, that it may be necessary to obtain rights under [***] in order [***], such Party will promptly notify the other Party and [***]. Unless otherwise agreed by the Parties in writing, (a) [***] and (b) [***]. [***] (each, a “[***]”) [***] the Parties will [***]. If it is [***] are [***], then the applicable Party shall [***], and the [***] shall be included as [***] under this Agreement. If, within [***] days [***], the applicable Party has not [***], the other Party shall [***], and the [***] shall be included as [***] under this Agreement. If it is [***], then [***], *provided that* the [***] shall not be included as [***] under this Agreement unless otherwise mutually agreed by the Parties in writing. [***] shall [***], and shall not [***].

13.7.3. [***]. Notwithstanding anything to the contrary in Section 13.7.2 of this Agreement, either Party may, in its sole discretion, conduct activities with respect to the research, development, manufacture or commercialization of [***] and enter into agreements for the acquisition of, grant or exercise of a license or similar rights to [***] (each, a “[***]”), subject to the terms of this Section 13.7.3. At each JOC meeting, [***]. [***].

(a) **License Grant.** Effective as of any election by [***] to [***], [***] will grant, and does hereby grant, to [***] and its Affiliates an exclusive license under [***] interest in such [***] with respect to such [***], with the right to Sublicense through multiple tiers (subject to Section 13.5), to Research, Develop, Manufacture and Commercialize such [***].

(b) **Economic Terms.**

(i) [***]. [***] will pay to [***] the following one-time milestone payments with respect to the first achievement

by [***] (itself or through its Affiliates or Sublicensees) of the applicable milestone event with respect to any [***]:

Milestone Number	Event	Milestone Payment	Milestone
1	[***]		[\$***]
2	[***]		[\$***]

[***] will provide [***] with written notice upon the achievement of any of the milestone events set forth in this Section 13.7.3(b) within [***] days after such achievement. Following receipt of such notice, [***] will promptly invoice [***] for the applicable milestone payment and [***] will make such milestone payment within [***] days after receipt of such invoice. The milestones are intended to be successive; if the milestone numbered 2 is achieved with respect to the applicable [***] without the milestone numbered 1 having been achieved with respect to such [***], the corresponding payment for the milestone numbered 1 will be made together with the corresponding payment for the milestone numbered 2.

- (ii) [***]. If [***] (A) [***] or (B) (1) [***], (2) [***] and (3) [***], then, in each case ((A) and (B)), [***] will have the right, [***].
- (iii) **Third Party Payments.** Each Party will be solely responsible for any amounts payable under any [***] entered into by such Party, and such amounts will not constitute [***] and will not be included in [***] under this Agreement, *provided* that [***]. Notwithstanding anything to the contrary in this Agreement, in no event will [***].
- (c) **Intellectual Property Rights.** For purposes of Section 13.4 of this Agreement, (i) any [***], as applicable, and (ii) [***], as applicable.
- (d) **Supply of [***].** With respect to any [***], upon [***] request, the Parties will negotiate in good faith an agreement pursuant to which [***] would provide [***] on [***] terms, at [***], and such cost shall [***].

ARTICLE 14
INTELLECTUAL PROPERTY

The terms of the Collaboration Agreement will apply with respect to any and all Know-How and Patents discovered, developed, invented or created in connection with activities under this Agreement.

ARTICLE 15
REPRESENTATIONS AND WARRANTIES

- 15.1. **Representations and Warranties of Vertex.** Vertex hereby represents and warrants to CRISPR, as of the Effective Date and as of the Amendment Date, that:
- 15.1.1. each of Vertex Parent and Vertex UK is duly organized, validly existing and in good standing under the laws of the jurisdiction of its incorporation or organization and has full corporate power and authority to enter into this Agreement and to carry out the provisions hereof;
 - 15.1.2. each of Vertex Parent and Vertex UK (a) has the requisite power and authority and the legal right to enter into this Agreement and to perform its obligations hereunder and (b) has taken all requisite action on its part to authorize the execution and delivery of this Agreement and the performance of its obligations hereunder;
 - 15.1.3. this Agreement has been duly executed and delivered on behalf of each of Vertex Parent and Vertex UK, and constitutes a legal, valid and binding obligation, enforceable against each of Vertex Parent and Vertex UK in accordance with the terms hereof;
 - 15.1.4. the execution, delivery and performance of this Agreement by each of Vertex Parent and Vertex UK will not constitute a default under or conflict with any agreement, instrument or understanding, oral or written, to which either entity is a party or by which either entity is bound, or violate any law or regulation of any court, governmental body or administrative or other agency having jurisdiction over Vertex Parent or Vertex UK; and
 - 15.1.5. except as contemplated by ARTICLE 2, each of Vertex Parent and Vertex UK has obtained all necessary consents, approvals and authorizations of all Governmental Authorities and other Persons or entities required to be obtained by it in connection with the execution and delivery of this Agreement.

- 15.2. **Representations and Warranties of CRISPR.** Each of the CRISPR Entities, jointly and severally, hereby represents and warrants to Vertex, as of the Effective Date and as of the Amendment Date, except as set forth on Schedule H, that:
- 15.2.1. each of CRISPR AG, CRISPR Inc., CRISPR UK and Tracr is duly organized, validly existing and in good standing under the laws of the jurisdiction of its incorporation or organization and has full corporate power and authority to enter into this Agreement and to carry out the provisions hereof;
 - 15.2.2. each of CRISPR AG, CRISPR Inc., CRISPR UK and Tracr (a) has the requisite power and authority and the legal right to enter into this Agreement and to perform its obligations hereunder and (b) has taken all requisite action on its part to authorize the execution and delivery of this Agreement and the performance of its obligations hereunder;
 - 15.2.3. this Agreement has been duly executed and delivered on behalf of CRISPR, and constitutes a legal, valid and binding obligation, enforceable against it in accordance with the terms hereof;
 - 15.2.4. the execution, delivery and performance of this Agreement by CRISPR will not constitute a default under or conflict with any agreement, instrument or understanding, oral or written, to which it is a party or by which it is bound, or violate any law or regulation of any court, governmental body or administrative or other agency having jurisdiction over it;
 - 15.2.5. except as contemplated by ARTICLE 2, CRISPR has obtained all necessary consents, approvals and authorizations of all Governmental Authorities and other Persons or entities required to be obtained by CRISPR in connection with the execution and delivery of this Agreement;
 - 15.2.6. the Licensed CRISPR Technology constitutes all of the Patents and Know-How Controlled by CRISPR that are necessary to Research, Develop, Manufacture or Commercialize the Shared Products contemplated under this Agreement in the Field in the Territory;
 - 15.2.7. CRISPR is the sole and exclusive owner or exclusive licensee of the CRISPR Platform Technology Patents and CRISPR Background Patents, all of which are free and clear of any liens, charges and encumbrances, and, as of the Effective Date, neither any license granted by CRISPR to any Third Party, nor any license granted by any Third Party to CRISPR, conflicts with the license grants to Vertex hereunder, and CRISPR is entitled to grant all rights and licenses (or sublicenses, as the case may

- be) under such Patents it purports to grant to Vertex under this Agreement;
- 15.2.8. [***], the Research, Development, Manufacture, use, sale, offer for sale, supply or importation by [***];
- 15.2.9. there are no judgments or settlements against or owed by [***], pending or threatened claims or litigation, in either case relating to the Licensed CRISPR Technology;
- 15.2.10. the CRISPR Platform Technology Patents and CRISPR Background Patents are, or, upon issuance, will be, [***]; and
- 15.2.11. Schedule D lists all agreements between CRISPR and its [***] that, in each case, [***]. Schedule E lists all other agreements between CRISPR and [***] that, in each case, [***].
- 15.3. **CRISPR Covenants.** Each of the CRISPR Entities, jointly and severally, hereby covenants to Vertex that, except as expressly permitted under this Agreement:
- 15.3.1. CRISPR will maintain and not breach any CRISPR In-License Agreements or [***] that provide a grant of rights from such Third Party to CRISPR that are Controlled by CRISPR and are licensed or may become subject to a license from CRISPR to Vertex for the Shared Products under this Agreement;
- 15.3.2. CRISPR will promptly notify Vertex of any material breach by one or more CRISPR Entities or a Third Party of any CRISPR In-License Agreements or [***] that provides a grant of rights from such Third Party to one or more CRISPR Entities and are licensed from CRISPR to Vertex under this Agreement, and in the event of a breach by [***], will [***]. CRISPR will [***] as soon as possible, but in no event later than the date on which [***];
- 15.3.3. it will not amend, modify or terminate any CRISPR In-License Agreement or [***] in a manner that would have an adverse effect on Vertex's rights hereunder without first obtaining Vertex's written consent, which consent may be withheld in Vertex's sole discretion;
- 15.3.4. it will not enter into any new agreement or other obligation with any Third Party, or amend an existing agreement with a Third Party, in each case that adversely restricts, limits or encumbers the rights granted to Vertex under this Agreement or the additional rights;
- 15.3.5. it will not, and will cause its Affiliates not to (a) license, sell, assign or otherwise transfer to any Person any Licensed CRISPR Technology (or

agree to do any of the foregoing), *except* as will not adversely restrict, limit or encumber the rights granted to Vertex under this Agreement, or (b) incur or permit to exist, with respect to any Licensed CRISPR Technology, any lien, encumbrance, charge, security interest, mortgage, liability, grant of license to Third Parties or other restriction (including in connection with any indebtedness);

- 15.3.6. it will use Commercially Reasonable Efforts to obtain and maintain the requisite resources and expertise to perform its obligations hereunder;
- 15.3.7. all employees and Subcontractors of CRISPR performing Research or Development activities hereunder on behalf of CRISPR will be obligated to assign to CRISPR all right, title and interest in and to any inventions developed by them, whether or not patentable, or, solely with respect to Subcontractors, grant exclusive license rights to CRISPR with a right to grant sublicenses through multiple tiers;
- 15.3.8. it will not engage, in any capacity in connection with this Agreement, any Person who either has been debarred by the FDA, is the subject of a conviction described in Section 306 of the FD&C Act or is subject to any such similar sanction;
- 15.3.9. CRISPR will inform Vertex in writing promptly if it or any Person engaged by CRISPR or any of its Affiliates who is performing services under this Agreement or any ancillary agreements is debarred or is the subject of a conviction described in Section 306 of the FD&C Act, or if any action, suit, claim, investigation or legal or administrative proceeding is pending or, to CRISPR's Knowledge, is threatened, relating to the debarment or conviction of CRISPR, any of its Affiliates or any such Person performing services hereunder or thereunder; and
- 15.3.10. within [***] days of the Amendment Date, CRISPR will provide or otherwise make available to Vertex [***].

15.4. **Vertex Covenants.** Vertex hereby covenants to CRISPR that, except as expressly permitted under this Agreement:

- 15.4.1. it will use Commercially Reasonable Efforts to obtain and maintain the requisite resources and expertise to perform its obligations hereunder;
- 15.4.2. Vertex will not engage, in any capacity in connection with this Agreement any Person who either has been debarred by the FDA, is the subject of a conviction described in Section 306 of the FD&C Act or is subject to any such similar sanction; and

15.4.3. Vertex will inform CRISPR in writing promptly if it or any Person engaged by Vertex or any of its Affiliates who is performing services under this Agreement or any ancillary agreements is debarred or is the subject of a conviction described in Section 306 of the FD&C Act, or if any action, suit, claim, investigation or legal or administrative proceeding is pending or, to Vertex's knowledge, is threatened, relating to the debarment or conviction of CRISPR, any of its Affiliates or any such Person performing services hereunder or thereunder.

15.5. **Disclaimer.** Except as otherwise expressly set forth in this Agreement, neither Party nor its Affiliates makes any representation or extends any warranty of any kind, either express or implied, including any warranty of merchantability or fitness for a particular purpose. Vertex and CRISPR understand that each Shared Product is the subject of ongoing Research and Development and that neither Party can assure the safety, usefulness or commercial or technical viability of any Shared Product.

ARTICLE 16 INDEMNIFICATION; INSURANCE

16.1. **Indemnification by Vertex.** Vertex will indemnify, defend and hold harmless each CRISPR Indemnified Party from and against any and all Liability that the CRISPR Indemnified Party may be required to pay to one or more Third Parties to the extent resulting from or arising out of:

- (a) [***]; or
- (b) [***];

except, in each case ((a)-(b)), to the extent CRISPR is required to indemnify Vertex pursuant to Section 16.2.

16.2. **Indemnification by CRISPR.** Each CRISPR Entity will jointly and severally indemnify, defend and hold harmless each Vertex Indemnified Party from and against any and all Liabilities that the Vertex Indemnified Party may be required to pay to one or more Third Parties to the extent resulting from or arising out of:

- (a) [***]; or
- (b) [***];

except, in each case ((a)-(b)), to the extent Vertex is required to indemnify CRISPR pursuant to Section 16.1.

16.3. **Procedure.** Each Party will notify the other Party in writing if it becomes aware of a claim for which indemnification may be sought hereunder. In case any proceeding (including any governmental investigation) will be instituted

involving any Indemnified Party, such Indemnified Party will give prompt written notice of the indemnity claim to the Indemnifying Party and provide a copy to the Indemnifying Party of any complaint, summons or other written or verbal notice that the Indemnified Party receives in connection with any such claim. An Indemnified Party's failure to deliver written notice will relieve the Indemnifying Party of liability to the Indemnified Party under this ARTICLE 16 only to the extent such delay is prejudicial to the Indemnifying Party's ability to defend such claim. *Provided* that the Indemnifying Party is not contesting the indemnity obligation, the Indemnified Party will permit the Indemnifying Party to control any litigation relating to such claim and the disposition of such claim by negotiated settlement or otherwise and any failure to contest prior to assuming control will be deemed to be an admission of the obligation to indemnify. The Indemnifying Party will act reasonably and in good faith with respect to all matters relating to such claim and will not settle or otherwise resolve such claim without the Indemnified Party's prior written consent, which will not be withheld, delayed or conditioned unreasonably, other than settlements only involving the payment of monetary awards for which the Indemnifying Party will be fully-responsible. The Indemnified Party will cooperate with the Indemnifying Party in such Party's defense of any claim for which indemnity is sought under this Agreement, at the Indemnifying Party's sole cost and expense.

16.4. **Other Third Party Claims.** If a Third Party brings a claim of any nature arising out of [***], other than [***], the [***]. [***] will [***]. The [***] will [***]. The [***]. If [***].

16.5. **Insurance.**

16.5.1. **Coverage.** From and after the Effective Date, each Party will, at its sole cost and expense, procure and maintain the following policies, each naming the other Party and its Indemnified Parties as additional insureds:

- (a) [***] in amounts not less than \$[***] annual aggregate;
- (b) [***] coverage in amounts not less than \$[***];
- (c) [***] in amounts not less than \$[***] per incident and \$[***] annual aggregate, which policy shall include [***], as applicable, and for [***]; and
- (d) [***] (also called [***]) in amounts not less than \$[***] per claim and annual aggregate, covering [***].

Each such policy will be [***].

16.5.2. **Evidence of Insurance.** Each Party will provide the other Party with evidence of the insurance required under this Section 16.5 upon the other

Party's request. Each Party will provide the other Party with notice at least 30 days prior to the cancellation, non-renewal or material change in such insurance. The cancelling or non-renewing Party will obtain replacement insurance providing comparable coverage prior to the expiration of such 30-day period.

- 16.5.3. **Post-Termination Obligations.** Each Party will maintain the insurance required under this Section 16.5 beyond the expiration or termination of this Agreement for a reasonable period after the period during which either Party or its Affiliates or sublicensees is Developing or Commercializing any Shared Product, which in no event will be less than five years.
 - 16.5.4. **Affiliates, Sublicensees and Distributors.** Each Party will (a) ensure that all applicable Affiliates of such Party are covered under such Party's insurance policies as described in Section 16.5.1 and (b) require all of its sublicensees and Distributors to comply with the provisions and obligations under this Section 16.5 as if such entity were such Party.
 - 16.5.5. **No Limitation.** The minimum amounts of insurance coverage required under this Section 16.5 will not be construed to create a limit of liability with respect to a Party's indemnification obligations under Section 16.1 or 16.2, as applicable, or with respect to such Party's share of any Liabilities under Section 16.4.
 - 16.5.6. **Self-Insurance.** Notwithstanding the foregoing, [***] may self-insure to the extent that it self-insures for its other activities.
- 16.6. **Limitation of Consequential Damages.** Except for (a) claims of a Third Party that are subject to indemnification under this ARTICLE 16, (b) claims arising out of a Party's willful misconduct, or (c) a Party's breach of ARTICLE 18, neither Party nor any of its Affiliates will be liable to the other Party or its Affiliates for any incidental, consequential, special, punitive or other indirect damages or lost or imputed profits or royalties, lost data or cost of procurement of substitute goods or services, whether liability is asserted in contract, tort (including negligence and strict product liability), indemnity or contribution, and irrespective of whether that Party or any representative of that Party has been advised of, or otherwise might have anticipated the possibility of, any such loss or damage.

ARTICLE 17 TERM; TERMINATION

- 17.1. **Co-Co Agreement Term; Expiration.** This Agreement is effective as of the Effective Date and, unless earlier terminated pursuant to the other provisions of this ARTICLE 17, will continue in full force and effect until Vertex is no longer

Developing or Commercializing any of the Shared Products or performing Research regarding any Shared Products in the Territory.

17.2. **Termination of the Agreement.**

17.2.1. **Termination for Failure to Obtain Antitrust Clearance.** If the Amendment Effective Date has not occurred within [***] after the Amendment Date, this Agreement may be terminated by either Party on written notice to the other Party. In such event, neither Party shall have any further obligations under this Agreement, except for such Party's obligations of non-disclosure pursuant to ARTICLE 18, which shall survive for the period set forth therein, and the Original Agreement will remain in full force and effect (including any provisions that had been superseded by this Agreement as of the Amendment Date).

17.2.2. **Vertex's Termination for Convenience.** Vertex will be entitled to terminate this Agreement for convenience, in its entirety or with respect to one or more Shared Product(s), by providing CRISPR 90 days' written notice of such termination; *provided, however*, that if any termination under this Section 17.2.1 with respect to a Shared Product occurs after such Shared Product has received Marketing Approval, Vertex will provide CRISPR no less than 270 days' written notice of such termination.

17.2.3. **Termination for Material Breach.**

(a) **Vertex's Right to Terminate.** If CRISPR (or any CRISPR Entity(ies)) is in material breach of this Agreement, then Vertex may deliver notice of such material breach to CRISPR. If the breach is curable, CRISPR will have [***] days from the receipt of such notice to cure such breach (*except* to the extent such breach involves the failure to make a payment when due, which breach must be cured within [***] Business Days following receipt of such notice). If either CRISPR fails to cure such breach within such [***]-day or [***]-Business Day period, as applicable, or the breach is not subject to cure, Vertex in its sole discretion may either (i) terminate this Agreement (A) if such breach relates solely to a particular Shared Product, with respect to the Shared Product affected by such breach or (B) if such breach relates to this Agreement as a whole, in its entirety, by providing written notice to CRISPR or (ii) elect to exercise the alternative remedy provisions set forth in Section 17.5 (in lieu of termination).

(b) **CRISPR's Right to Terminate.** If Vertex is in material breach of this Agreement, then CRISPR may deliver notice of such

material breach to Vertex. If the breach is curable, Vertex will have [***] days following receipt of such notice to cure such breach (*except* to the extent such breach involves the failure to make a payment when due, which breach must be cured within [***] Business Days following receipt of such notice). If Vertex fails to cure such breach within the [***]-day or [***]-Business Day period, as applicable, or the breach is not subject to cure, CRISPR in its sole discretion may either (i) terminate this Agreement (A) if such breach relates solely to a particular Shared Product, with respect to the Shared Product affected by such breach or (B) if such breach relates to this Agreement as a whole, in its entirety, by providing written notice to Vertex or (ii) elect to exercise the alternative remedy provisions set forth in Section 17.5 (in lieu of termination).

- (c) **Disputes Regarding Material Breach.** Notwithstanding the foregoing, if the Breaching Party in this Section 17.2.3 disputes in good faith the existence, materiality, or failure to cure of any such breach that is not a payment breach, and provides notice to the Non-Breaching Party of such dispute within the relevant cure period, the Non-Breaching Party will not have the right to terminate this Agreement in accordance with this Section 17.2.3, unless and until the relevant dispute has been resolved. It is understood and acknowledged that during the pendency of such dispute, all the terms and conditions of this Agreement will remain in effect and the Parties will continue to perform all of their respective obligations hereunder.

- 17.2.4. **Termination for Patent Challenge.** If a Party (the “**Challenging Party**”) (a) commences or actively and voluntarily participates in any action or proceeding (including any Patent opposition or re-examination proceeding), or otherwise asserts any claim, challenging or denying the validity or enforceability of any claim of any Patent that is licensed to the Challenging Party under this Agreement or (b) actively and voluntarily assists any other Person in bringing or prosecuting any action or proceeding (including any Patent opposition or re-examination proceeding) challenging or denying the validity or enforceability of any claim of any Patent that is licensed to the Challenging Party under this Agreement by the other Party (the “**Non-Challenging Party**”) (each of (a) and (b), a “**Patent Challenge**”), then, to the extent permitted by Applicable Law, the Non-Challenging Party shall have the right, in its sole discretion, to give notice to the Challenging Party that the Non-Challenging Party may terminate the license(s) granted under such Patent to the Challenging Party [***] days following such notice, and, unless the Challenging Party withdraws or causes to be withdrawn all such

challenge(s), or in the case of ex-parte proceedings, multi-party proceedings, or other Patent Challenges that the Challenging Party does not have the power to unilaterally withdraw or cause to be withdrawn, the Challenging Party ceases assisting any other party to such Patent Challenge and, to the extent the Challenging Party is a party to such Patent Challenge, it withdraws from such Patent Challenge within such [***]-day period, the Non-Challenging Party shall have the right to deem the Challenging Party to have exercised an Opt-Out with respect to any Shared Product(s) Covered by a Patent that is the subject of such Patent Challenge, by providing written notice thereof to the Challenging Party, in which case the provisions of Section 17.3 shall apply; *provided, however*, [***]. The foregoing right of the Non-Challenging Party shall not apply with respect to any Patent Challenge where the Patent Challenge is made in defense of an assertion of the relevant Patent that is first brought by the Non-Challenging Party against the Challenging Party. For the avoidance of doubt, any participation by the Challenging Party or its employees in any claim, challenge or proceeding in response to a subpoena or as required under a pre-existing agreement between the Challenging Party's employee(s) or consultant(s) and their prior employer(s) shall not constitute active and voluntary participation or assistance and shall not give rise to the Non-Challenging Party's right to deem the Challenging Party as having exercised an Opt-Out with respect to any Shared Product hereunder.

- 17.2.5. **Termination for Insolvency.** If CRISPR (or any CRISPR Entity(ies)) undergoes any Insolvency Event, then Vertex may terminate this Agreement in its entirety effective immediately upon written notice to CRISPR. If an Insolvency Event occurs with respect to CRISPR (or any CRISPR Entity(ies)):
- (a) All rights and licenses now or hereafter granted by CRISPR to Vertex under or pursuant to this Agreement, including, for the avoidance of doubt, any Exclusive Licenses, are, for all purposes of Section 365(n) of the U.S. Bankruptcy Code, licenses of rights to "intellectual property" as defined in the U.S. Bankruptcy Code. Upon the occurrence of any Insolvency Event with respect to CRISPR (or any CRISPR Entity(ies)), CRISPR agrees that Vertex, as licensee of such rights under this Agreement, will retain and may fully exercise all of its rights and elections under the U.S. Bankruptcy Code. CRISPR will, during the Co-Co Agreement Term, create and maintain current copies or, if not amenable to copying, detailed descriptions or other appropriate embodiments, to the extent feasible, of all intellectual property licensed under this Agreement. Each Party acknowledges and agrees that "embodiments" of intellectual property within the

meaning of Section 365(n) include laboratory notebooks, cell lines, product samples and inventory, research studies and data, all Regulatory Approvals (and all applications for Regulatory Approval) and rights of reference therein, the Licensed CRISPR Technology and all information related to the Licensed CRISPR Technology. If (x) a case under the U.S. Bankruptcy Code is commenced by or against CRISPR (or any CRISPR Entity(ies)), (y) this Agreement is rejected as provided in the U.S. Bankruptcy Code, and (z) Vertex elects to retain its rights hereunder as provided in Section 365(n) of the U.S. Bankruptcy Code, CRISPR (in any capacity, including debtor-in-possession) and its successors and assigns (including a trustee) will:

- (i) provide to Vertex all such intellectual property (including all embodiments thereof) held by CRISPR and such successors and assigns, or otherwise available to them, immediately upon Vertex's written request. Whenever CRISPR or any of its successors or assigns provides to Vertex any of the intellectual property licensed hereunder (or any embodiment thereof) pursuant to this Section 17.2.5(a)(i), Vertex will have the right to perform CRISPR's obligations hereunder with respect to such intellectual property, but neither such provision nor such performance by Vertex will release CRISPR from liability resulting from rejection of the license or the failure to perform such obligations; and
 - (ii) not interfere with Vertex's rights under this Agreement, or any agreement supplemental hereto, to such intellectual property (including such embodiments), including any right to obtain such intellectual property (or such embodiments) from another entity, to the extent provided in Section 365(n) of the U.S. Bankruptcy Code.
- (b) All rights, powers and remedies of Vertex provided herein are in addition to and not in substitution for any and all other rights, powers and remedies now or hereafter existing at law or in equity (including the U.S. Bankruptcy Code) in the event of the commencement of a case under the U.S. Bankruptcy Code with respect to CRISPR. The Parties agree that they intend the following rights to extend to the maximum extent permitted by Applicable Law, and to be enforceable under U.S. Bankruptcy Code Section 365(n):

- (i) the right of access to any intellectual property rights (including all embodiments thereof) of CRISPR, or any Third Party with whom CRISPR contracts to perform an obligation of CRISPR under this Agreement, and, in the case of any such Third Party, which is necessary for the Manufacture, use, sale, import or export of the Shared Products; and
- (ii) the right to contract directly with any Third Party to complete the contracted work.

17.3. **Opt-Out.**

17.3.1. On a Shared Product-by- Shared Product basis, after [***], either Party may opt out of this Agreement with respect to such Shared Product (the “**Opt-Out Shared Product**”) upon [***] days’ notice to the other Party (“**Opt-Out**”). The other Party shall pay such opting out Party royalties on Net Sales (as defined in the Collaboration Agreement) of such Opt-Out Shared Product (“**Opt-Out Royalties**”) in accordance with this Section 17.3, and the terms of Sections 7.5.2, 7.5.3, 7.5.4 and 7.5.5 of the Collaboration Agreement shall apply to such royalties, *mutatis mutandis*. Upon the other Party’s receipt of such notice, all rights and obligations under this Agreement with respect to the Opt-Out Shared Product shall terminate, *except for* the obligations set forth in this Section 17.3.

Net Sales (in Dollars) for such Opt-Out Shared Product in the Territory	Opt-Out Royalty Rates as a Percentage (%) of Net Sales of such Opt-Out Shared Product
[***]	[***]
[***]	[***]
[***]	[***]
[***]	[***]

17.3.2. If the opting out Party is CRISPR, the Opt-Out Shared Product shall be deemed a Shared Product (as defined in the Collaboration Agreement) directed to a Collaboration Target other than a [***] under the Collaboration Agreement, and the terms and conditions of the Collaboration Agreement shall apply with respect to the Opt-Out Shared Product, *provided* that, in lieu of the royalty rates payable under Section 7.5.1 of the Collaboration Agreement Vertex shall pay royalties at the rates set forth in this Section 17.3; and *provided, further*, that Vertex shall have no obligation to pay to CRISPR any milestone payment under

Section 7.3 of the Collaboration Agreement with respect to such Opt-Out Shared Product.

- 17.3.3. If the opting out Party is Vertex, (i) all licenses granted by CRISPR to Vertex under this Agreement with respect to the Opt-Out Shared Product will terminate and Vertex and its Affiliates will cease all Research, Development, Manufacture and Commercialization activities with respect to such Opt-Out Shared Product; and (ii) the Parties shall negotiate in good faith a termination agreement for the Opt-Out Shared Product, including the obligation to pay royalties as set forth in this Section 17.3 and the following provisions:
- (a) CRISPR (acting directly or through one or more Affiliates or sublicensees) will use Commercially Reasonable Efforts to [***] for the [***] in all [***];
 - (b) CRISPR (acting directly or through one or more Affiliates or sublicensees) will use Commercially Reasonable Efforts to [***], the [***] in each [***] where [***];
 - (c) CRISPR will prepare a Development and Commercialization plan setting forth in reasonable detail (which detail shall be at least sufficient for Vertex to evaluate CRISPR's compliance with its obligations under this Agreement) CRISPR's plans for (i) the Development of the Opt-Out Shared Product through [***] and (ii) starting upon [***] for the Opt-Out Shared Product and continuing thereafter until the expiration of the applicable Royalty Term, Commercialization of the Opt-Out Shared Product, as appropriate for the stage of the Opt-Out Shared Product, including a launch plan for each [***]; and
 - (d) following the first sale of the Opt-Out Shared Product giving rise to Net Sales (as defined in the Collaboration Agreement), within [***] days after the end of each Calendar Quarter, CRISPR will deliver a report to Vertex specifying on a country-by-country basis: [***]. All royalty payments due for each Calendar Quarter will be due and payable within [***] days after CRISPR's delivery of the applicable report.
- 17.3.4. Following any Opt-Out with respect to an Opt-Out Shared Product, the opting out Party shall, within a reasonable time as mutually agreed by the Parties, (a) transfer to the other Party all Regulatory Filings with respect to such Opt-Out Shared Product, (b) conduct any technology transfer with respect to such Opt-Out Shared Product as reasonably requested by the non-opting out Party and (c) use reasonable efforts to transfer to the non-opting out Party any existing relationships with key vendors to the

extent relating to such Opt-Out Shared Product. The Expenses of all activities under this Section 17.3.4 shall be shared equally by the Parties.

17.3.5. If the opting out Party is conducting Manufacturing activities with respect to the Opt-Out Shared Product at the time of such Opt-Out, the opting out Party will continue to supply the other Party's requirements of the Opt-Out Shared Product, at the other Party's expense at cost of Manufacturing such Opt-Out Shared Product, until such time as the Parties are able to complete a technology transfer of the applicable Manufacturing technology to the other Party or its designated CMO, and the other Party or such CMO is capable of supplying the other Party's requirements of the Opt-Out Shared Product. The Expenses of technology transfer activities under this Section 17.3.5, including any Expenses incurred in establishing a CMO capable of Manufacturing the Opt-Out Shared Products, shall be shared equally by the Parties.

17.3.6. For the avoidance of doubt, the allocation of [***] and [***] pursuant to Section [***] with respect to an Opt-Out Shared Product shall terminate upon the effectiveness of the Opt-Out for such Opt-Out Shared Product.

17.4. **Consequences of Expiration or Certain Terminations of the Agreement.** If this Agreement expires or is terminated by a Party with respect to one or more Shared Products (each, a "**Terminated Shared Product**") in accordance with Section 17.2 at any time and for any reason, the following terms will apply with respect to each Terminated Shared Product:

17.4.1. The Parties will return (or destroy, as directed by the other Party) all data, files, records and other materials containing or comprising the other Party's Confidential Information with respect to the Terminated Shared Product, unless such Confidential Information also relates to other products that are subject to the Collaboration Agreement or are necessary for a Party to exercise its rights under Section 17.3. Notwithstanding the foregoing, the Parties will be permitted to retain one copy of such data, files, records, and other materials for archival and legal compliance purposes.

17.4.2. Termination or expiration of this Agreement for any reason will be without prejudice to any rights or financial compensation that will have accrued to the benefit of a Party with respect to the Terminated Shared Product prior to such termination or expiration. Such termination or expiration will not relieve a Party from obligations that are expressly indicated to survive the termination or expiration of this Agreement.

17.4.3. Except as may be necessary for a Party to exercise the rights set forth in Section 17.3, all licenses granted by a Party to the other Party under this Agreement with respect to the Terminated Shared Product will terminate

and each Party and its Affiliates will cease all Research, Development, Manufacture and Commercialization activities with respect to the Terminated Shared Product.

17.4.4. Except as may be necessary for a Party to exercise the rights set forth in Section 17.3, Vertex will assign back to the CRISPR Entity designated by CRISPR AG any Patents assigned to Vertex under Section 8.1.3 of the Collaboration Agreement that relate to the Terminated Shared Product to the extent that such Patents do not also relate to other products for which Vertex is retaining an exclusive license under the Collaboration Agreement.

17.4.5. Except as set forth in Section 17.3, neither Party will have any further rights or obligations with respect to the Terminated Shared Product.

17.5. **Alternative Remedies for Material Breach.** If a Party has the right to terminate this Agreement in its entirety or with respect to one or more Shared Products for the other Party's material breach pursuant to Section 17.2.3, [***].

17.6. **Survival.** The following provisions of this Agreement will survive any expiration or termination of this Agreement: ARTICLE 1, ARTICLE 10 (with respect to any amounts owed as of the time of expiration or termination or paid during the Co-Co Agreement Term), Section 13.1, Section 13.4, Section 13.6, Section 13.7.3(c), ARTICLE 14, Section 15.5, ARTICLE 16, Section 17.3, Section 17.4, Section 17.6, the first sentence of Section 18.1, and ARTICLE 19.

ARTICLE 18 CONFIDENTIALITY

18.1. **Confidentiality.** Except as expressly provided herein, the terms of ARTICLE 12 of the Collaboration Agreement will apply with respect to (a) any and all information disclosed by the Disclosing Party to the Receiving Party under this Agreement that meets the definition of Confidential Information under the Collaboration Agreement and (b) the terms of this Agreement, which shall be deemed to be the Confidential Information of both Parties under the Collaboration Agreement. Notwithstanding the foregoing, from and after the Amendment Effective Date, the terms of this ARTICLE 18 will apply with respect to [***] (the "**Specified Shared Product Information**"), and the terms of ARTICLE 12 of the Collaboration Agreement (and any confidentiality obligations under any Other CRISPR-Vertex Agreement) will not apply with respect to the Specified Shared Product Information. For purposes of this ARTICLE 18, all Specified Shared Product Information is hereby deemed to constitute Confidential Information of Vertex following the Amendment Effective Date. Except to the extent expressly authorized by this Agreement or otherwise agreed in writing, CRISPR agrees that, during the Agreement Term and for [***] years thereafter, CRISPR will: (a) keep the Specified Shared Product Information confidential; (b)

not publish, or allow to be published, and will not otherwise disclose, or permit the disclosure of, the Specified Shared Product Information in any manner not expressly authorized pursuant to the terms of this Agreement; and (c) not use, or permit to be used, the Specified Shared Product Information for any purpose other than as expressly authorized pursuant to the terms of this Agreement. Without limiting the generality of the foregoing, to the extent that Vertex or any of its Affiliates provides to CRISPR or any of its Affiliates any Specified Shared Product Information owned by any Third Party, CRISPR will, and will cause its Affiliates to, handle such Specified Shared Product Information in accordance with the terms and conditions of this ARTICLE 18.

18.2. **Authorized Disclosure.** Notwithstanding anything to the contrary set forth in this Agreement or the Collaboration Agreement, CRISPR may disclose the Specified Shared Product Information to the extent such disclosure is reasonably necessary to:

18.2.1. file or prosecute patent applications as contemplated by this Agreement;

18.2.2. prosecute or defend litigation;

18.2.3. exercise its rights and perform its obligations hereunder; or

18.2.4. comply with Applicable Law, including the rules and regulations promulgated by the United States Securities and Exchange Commission or any equivalent governmental agency in any country in the Territory.

If CRISPR deems it reasonably necessary to disclose the Specified Shared Product Information pursuant to this Section 18.2, CRISPR will, to the extent practicable, give reasonable advance written notice of such disclosure to Vertex and will take reasonable measures to ensure confidential treatment of such information.

18.3. **SEC Filings and Other Disclosures.** Each Party may disclose the terms of this Agreement and CRISPR may disclose the Specified Shared Product Information as follows: (a) to the extent required to comply with Applicable Law, including the rules and regulations promulgated by the United States Securities and Exchange Commission or any equivalent governmental agency in any country in the Territory; *provided*, that CRISPR will reasonably consider the comments of Vertex regarding confidential treatment sought for such disclosure; and (b) to its advisors (including financial advisors, attorneys and accountants), actual or potential acquisition partners, strategic partners, collaborators or services providers, actual or potential financing sources or investors and actual or potential underwriters on a need to know basis; *provided* that such disclosure is subject to confidentiality obligations similar to those set forth herein (which may include professional ethical obligations).

18.4. **Public Announcement; Publications.**

- 18.4.1. **Announcements.** The Parties will jointly issue a press release, to be mutually agreed upon and in substantially the same form as Schedule J, regarding the signing of this Agreement on a date to be determined by the Parties within [***] Business Days following the Amendment Date.
- 18.4.2. **Vertex Publications.** Vertex will have the sole right, subject to Section 18.4.3, to make publications, public presentations, press releases and other public announcements related to the Shared Products in the Territory, *provided* [***]. [***].
- 18.4.3. **CRISPR Publications.** Notwithstanding anything to the contrary in this Agreement, CRISPR may make publications, public presentations, press releases and other public announcements related to the Shared Products in the Territory as follows: [***].
- 18.4.4. **Investor Presentations.** Vertex will permit CRISPR to participate in all Third Party-sponsored investor presentations or other updates conducted by Vertex or its Affiliates regarding the Initial Shared Product until [***], *provided* that [***], *provided, further*, that [***]. For clarity, CRISPR's participation right as set forth in this Section 18.4.4 will not apply with respect to general investor presentations of Vertex not specific to the Shared Products.
- 18.4.5. **Communications Coordination.** Each Party's communications or investor relations personnel or Alliance Managers will meet [***] (or more frequently as mutually agreed by the Parties) to review anticipated communications milestones and a calendar of potential communications events relating to activities under this Agreement.

18.5. **Site Media Materials.**

- 18.5.1. The Parties agree that any promotional materials, including images, audio or film captured or recorded by either Party or any permitted contractor, vendor or subsidiary of the Parties or their Affiliates in the course of conducting the Clinical Trials for the Shared Products shall be "**Site Media Materials.**" Site Media Materials includes images, audio or film of a research site, research staff, the employees or contractors of either Party, or of scientific equipment at a research site.
- 18.5.2. Following the Amendment Effective Date, Vertex will have the sole right to produce new Site Media Materials, in its sole discretion.
- 18.5.3. Following the Amendment Effective Date, Vertex may use any and all of the Site Media Materials (whether produced prior to, on or after the

Amendment Effective Date) for any and all purposes without the prior written consent of CRISPR. Following the Amendment Effective Date, CRISPR may (a) use the Site Media Materials produced prior to the Amendment Effective Date for any Approved Actions that have already received the Approvals from Vertex prior to the Amendment Effective Date and (b) subject to the Approvals, use the Site Media Materials produced on or after the Amendment Effective Date, and the Site Media Materials produced prior to the Amendment Effective Date for which a new use has arisen that has not already received the Approvals from Vertex prior to the Amendment Effective Date, solely for the following purposes (each, an “**Approved Action**”): (i) promotional content for CRISPR; (ii) internal use by CRISPR; (iii) use on digital websites, including corporate websites, owned exclusively by CRISPR or jointly by the Parties; (iv) social media accounts operated by CRISPR; (v) use by a Third Party. Approved Actions may not violate applicable rules and regulations relating to data privacy. No Confidential Information of Vertex may be disclosed in connection with an Approved Action. CRISPR agrees that it will not commence any Approved Action without the prior written consent of Vertex, which consent shall consist of written approval (including electronic mail) from each of the following departments of Vertex: (A) corporate communications, (B) legal and (C) clinical development (collectively, the “**Approvals**”). Each such representative of Vertex will have the right to review the content of the relevant Approved Action and Vertex will cause all such reviews to occur in a timely manner (and all such reviews shall take no longer than a total of [***] Business Days after the date on which Vertex received the request for such Approved Action) and Vertex will notify CRISPR of its consent or non-consent of such requested Approved Action by no later than the [***] Business Days after the date on which Vertex received the request for such Approved Action.

18.5.4. All costs incurred in connection with any production of any Site Media Materials in accordance with this Agreement will be included in [***] shared by the Parties pursuant to this Agreement.

18.6. **Confidentiality Obligations of CRISPR Personnel**. With respect to the participation by CRISPR employees in meetings regarding the Shared Products pursuant to Section 4.1.4, Section 4.2.2 and Section 6.3, Vertex may condition such participation upon execution by the applicable employee(s) of a non-disclosure agreement with Vertex in the form attached hereto as Schedule I.

**ARTICLE 19
MISCELLANEOUS**

- 19.1. **Assignment.** Neither this Agreement nor any interest hereunder will be assignable by either Party without the prior written consent of the other Party, except as follows: (a) either Party may, subject to the terms of this Agreement, assign its rights and obligations under this Agreement by way of sale of itself or the sale of the portion of such Party's business to which this Agreement relates, through merger, sale of assets or sale of stock or ownership interest; *provided* that such sale is not primarily for the benefit of its creditors; and *provided, further*, that no CRISPR Entity may assign its rights and obligations hereunder unless all CRISPR Entities are assigning their rights and obligations hereunder to the same Third Party; and (b) either Party may assign its rights and obligations under this Agreement to any of its Affiliates; *provided* that such Party will remain liable for all of its rights and obligations under this Agreement. An assigning Party will promptly notify the other Party of any assignment or transfer under the provisions of this Section 19.1. This Agreement will be binding upon the successors and permitted assigns of the Parties and the name of a Party appearing herein will be deemed to include the names of such Party's successors and permitted assigns to the extent necessary to carry out the intent of this Agreement. Any assignment not in accordance with this Section 19.1 will be void.
- 19.2. **Effects of Change of Control.** If, during the Co-Co Agreement Term, any [***] undergoes a Change of Control, then, [***].
- 19.3. **Force Majeure.** Each Party will be excused from the performance of its obligations under this Agreement to the extent that such performance is prevented by Force Majeure and the nonperforming Party promptly provides notice of the prevention to the other Party. Such excuse will be continued so long as the condition constituting force majeure continues and the nonperforming Party uses Commercially Reasonable Efforts to remove the condition.
- 19.4. **Representation by Legal Counsel.** Each Party hereto represents that it has been represented by legal counsel in connection with this Agreement and acknowledges that it has participated in the drafting hereof. In interpreting and applying the terms and provisions of this Agreement, the Parties agree that no presumption will exist or be implied against the Party that drafted such terms and provisions.
- 19.5. **Notices.** All notices which are required or permitted hereunder will be in writing and sufficient if delivered personally, sent by nationally-recognized overnight courier or sent by electronic mail, confirmation of receipt requested, addressed as follows:

If to Vertex:

Vertex Pharmaceuticals Incorporated
Attn: Business Development
50 Northern Avenue
Boston, Massachusetts 02210
E-mail: [***]

with a copy to:

Vertex Pharmaceuticals Incorporated
Attn: Corporate Legal
50 Northern Avenue
Boston, Massachusetts 02210
E-mail: [***]

and:

Ropes & Gray LLP
Attn: Marc A. Rubenstein
Prudential Tower
800 Boylston Street
Boston, Massachusetts 02199-3600
E-mail: [***]

If to CRISPR:

CRISPR Therapeutics AG
Attn: Chief Executive Officer
Baarerstrasse 14
6300 Zug
Switzerland
Email: [***]

with a copy to:

CRISPR Therapeutics AG
Attn: General Counsel
Baarerstrasse 14
6300 Zug
Switzerland
Email: [***]

and

Goodwin Procter LLP
Attn: Christopher Denn

100 Northern Avenue
Boston, Massachusetts 02210
E-mail: [***]

or to such other address as the Party to whom notice is to be given may have furnished to the other Party in writing in accordance herewith. Any such notice will be deemed to have been given: (a) when delivered if personally delivered on a Business Day (or if delivered or sent on a non-business day, then on the next Business Day); (b) on receipt if sent by overnight courier; or (c) when confirmation of receipt is sent, if sent by electronic mail. Any notices required or permitted under this Agreement that are delivered by Vertex to CRISPR AG pursuant to this Section 19.5 shall be deemed properly delivered hereunder to each of CRISPR UK, CRISPR AG, CRISPR Inc. and Tracr. Notwithstanding the foregoing, for the purposes of Sections 4.1.4, 4.2.2 and 6.3, any notice of a scheduled meeting thereunder may be in the form of an electronic calendar invitation sent to the e-mail address of the relevant designated CRISPR Senior-Level Employee and any such notice will be deemed to have been given when sent.

- 19.6. **Amendment.** No amendment, modification or supplement of any provision of this Agreement will be valid or effective unless made in writing and signed by a duly authorized officer of each of Vertex Parent, Vertex UK and CRISPR AG, CRISPR Inc., CRISPR UK and Tracr.
- 19.7. **Waiver.** No provision of this Agreement will be waived by any act, omission or knowledge of a Party or its agents or employees except by an instrument in writing expressly waiving such provision and signed by a duly authorized officer of the waiving Party. The waiver by either of Vertex or CRISPR of any breach of any provision hereof by the other Party will not be construed to be a waiver of any succeeding breach of such provision or a waiver of the provision itself. Written waiver of any provision of this Agreement by of any one of the CRISPR Entities in accordance with this Section 19.7 shall be binding upon each of CRISPR UK, CRISPR AG, CRISPR Inc. and Tracr.
- 19.8. **Severability.** If any clause or portion thereof in this Agreement is for any reason held to be invalid, illegal or unenforceable, the same will not affect any other portion of this Agreement, as it is the intent of the Parties that this Agreement will be construed in such fashion as to maintain its existence, validity and enforceability to the greatest extent possible. In any such event, this Agreement will be construed as if such clause or portion thereof had never been contained in this Agreement, and there will be deemed substituted therefor such provision as will most nearly carry out the intent of the Parties as expressed in this Agreement to the fullest extent permitted by Applicable Law.

- 19.9. **Descriptive Headings.** The descriptive headings of this Agreement are for convenience only and will be of no force or effect in construing or interpreting any of the provisions of this Agreement.
- 19.10. **Export Control.** This Agreement is made subject to any restrictions concerning the export of products or technical information from the United States of America or other countries that may be imposed upon or related to CRISPR or Vertex from time to time. Each Party agrees that it will not export, directly or indirectly, any technical information acquired from the other Party under this Agreement or any products using such technical information to a location or in a manner that at the time of export requires an export license or other governmental approval, without first obtaining the written consent to do so from the appropriate Governmental Authority.
- 19.11. **Data Privacy Matters.** Prior to the Amendment Date, the Parties have executed a letter agreement dated as of January 20, 2019, addressing certain matters with respect to data privacy (the “**GDPR Letter Agreement**”). The Transition Plan will provide for the Parties to update the GDPR Letter Agreement as may be necessary in light of the allocation of responsibilities contemplated by this Agreement and any changes in Applicable Laws.
- 19.12. **Governing Law.** This Agreement, and all claims arising under or in connection therewith, will be governed by and interpreted in accordance with the substantive laws of The Commonwealth of Massachusetts, without regard to conflict of law principles thereof.
- 19.13. **Entire Agreement.** This Agreement, together with the Collaboration Agreement, the Pharmacovigilance Agreement, the Quality Agreement and the GDPR Letter Agreement, constitutes and contains the complete, final and exclusive understanding and agreement of the Parties and cancels and supersedes any and all prior negotiations, correspondence, understandings and agreements, whether oral or written, between the Parties respecting the subject matter hereof and thereof, including the Original Agreement. For the avoidance of doubt, except as expressly set forth in Section 2.3 with respect to the Amendment Date Provisions, this Agreement shall not terminate any rights or obligations accrued under the Original Agreement prior to the Amendment Effective Date.
- 19.14. **Independent Contractors.** Both Parties are independent contractors under this Agreement. Nothing herein contained will be deemed to create an employment, agency, joint venture or partnership relationship between the Parties hereto or any of their agents or employees, or any other legal arrangement that would impose liability upon one Party for the act or failure to act of the other Party. Neither Party will have any express or implied power to enter into any contracts or commitments or to incur any liabilities in the name of, or on behalf of, the other Party, or to bind the other Party in any respect whatsoever.

- 19.15. **Interpretation.** Except where the context expressly requires otherwise, (a) the use of any gender herein will be deemed to encompass references to either or both genders, and the use of the singular will be deemed to include the plural (and vice versa), (b) the words “include,” “includes” and “including” will be deemed to be followed by the phrase “without limitation,” (c) the word “will” will be construed to have the same meaning and effect as the word “shall,” (d) any definition of or reference to any agreement, instrument or other document herein will be construed as referring to such agreement, instrument or other document as from time to time amended, supplemented or otherwise modified (subject to any restrictions on such amendments, supplements or modifications set forth herein), (e) any reference herein to any Person will be construed to include the Person’s successors and assigns, (f) the words “herein,” “hereof” and “hereunder,” and words of similar import, will be construed to refer to this Agreement in its entirety and not to any particular provision hereof, (g) all references herein to Sections, Schedules or Exhibits will be construed to refer to Sections, Schedules or Exhibits of this Agreement, and references to this Agreement include all Schedules and Exhibits hereto, (h) the word “notice” will mean notice in writing (whether or not specifically stated) and will include notices, consents, approvals and other written communications contemplated under this Agreement, (i) provisions that require that a Party, the Parties or any committee hereunder “agree,” “consent” or “approve” or the like will require that such agreement, consent or approval be specific and in writing, whether by written agreement, letter, approved minutes, e-mail or otherwise (but excluding text messaging and instant messaging), (j) references to any specific law, rule or regulation, or article, section or other division thereof, will be deemed to include the then-current amendments thereto or any replacement or successor law, rule or regulation thereof and (k) the term “or” will be interpreted in the inclusive sense commonly associated with the term “and/or.”
- 19.16. **No Third Party Rights or Obligations.** No provision of this Agreement will be deemed or construed in any way to result in the creation of any rights or obligations in any Person not a Party to this Agreement.
- 19.17. **Further Actions.** Each Party agrees to execute, acknowledge and deliver such further instruments, and to do all such other acts, as may be necessary or appropriate in order to carry out the purposes and intent of this Agreement.
- 19.18. **Counterparts.** This Agreement may be executed in two counterparts, each of which will be an original and both of which will constitute together the same document. Counterparts may be signed and delivered by facsimile or digital transmission (.pdf), each of which will be binding when received by the applicable Party.
- 19.19. **CRISPR Entities.** Notwithstanding anything to the contrary in this Agreement:

- 19.19.1. CRISPR UK, CRISPR AG, CRISPR Inc. and Tracr shall be jointly and severally liable to Vertex for all obligations of CRISPR under this Agreement;
- 19.19.2. Breach or violation of any representation, warranty covenant or other obligation of CRISPR under this Agreement may result from, be caused by or arise from the act or omission of any one or more of the CRISPR Entities;
- 19.19.3. Any particular right or interest of CRISPR under this Agreement shall only be exercisable once by the first CRISPR Entity to exercise such right or interest hereunder on behalf of CRISPR (*i.e.*, Vertex shall not be liable to more than one CRISPR Entity with respect to any particular right or interest of CRISPR hereunder, including any payment obligations of Vertex hereunder); and
- 19.19.4. Any consent or approval of CRISPR permitted or required under this Agreement by any one of CRISPR UK, CRISPR AG, CRISPR Inc. or Tracr shall be binding upon all of the CRISPR Entities.

[SIGNATURE PAGE FOLLOWS]

IN WITNESS WHEREOF, the Parties have caused this Agreement to be executed by their representatives thereunto duly authorized as of the Amendment Date.

**VERTEX PHARMACEUTICALS
INCORPORATED**

By: /s/ Reshma Kewalramani

Name: Reshma Kewalramani

Title: Chief Executive Officer and President

**VERTEX PHARMACEUTICALS (EUROPE)
LIMITED**

By: /s/ Klas Holmlund

Name: Klas Holmlund

Title: Director

CRISPR THERAPEUTICS AG

By: /s/ Rodger Novak

Name: Rodger Novak

Title: President

CRISPR THERAPEUTICS LIMITED

By: /s/ Rodger Novak

Name: Rodger Novak

Title: Director

CRISPR THERAPEUTICS, INC.

By: /s/ Samarth Kulkarni

Name: Samarth Kulkarni

Title: CEO and President

TRACR HEMATOLOGY LTD.

By: /s/ Rodger Novak

Name: Rodger Novak

Title: Director

SCHEDULE A
CRISPR IN-LICENSE AGREEMENTS

[***]

SCHEDULE B
DESIGNATED SHARED PRODUCTS

[***]

SCHEDULE C
VERTEX IN-LICENSE AGREEMENTS

[*]**

SCHEDULE D
ASSIGNED CONTRACTS

[***]

SCHEDULE E
OTHER MANUFACTURING CONTRACTS

[***]

SCHEDULE F
PRELIMINARY TRANSITION PLAN

[***]

SCHEDULE G
ANNUAL OPEX CAP

[***]

SCHEDULE H
CRISPR DISCLOSURE SCHEDULE

[***]

SCHEDULE I
FORM OF NON-DISCLOSURE AGREEMENT

[***]

SCHEDULE J
FORM OF PRESS RELEASE

[***]

Certain confidential information contained in this document, marked by [***], has been omitted because it is not material and would likely cause competitive harm to Vertex Pharmaceuticals Incorporated if publicly disclosed.

EXECUTION COPY

FIFTY NORTHERN AVENUE LLC

AND

VERTEX PHARMACEUTICALS INCORPORATED

**LEASE FOR 50 NORTHERN AVENUE (PARCEL A – FAN PIER)
BOSTON, MASSACHUSETTS**

FIFTY NORTHERN AVENUE LLC

AND

VERTEX PHARMACEUTICALS INCORPORATED

**LEASE FOR 50 NORTHERN AVENUE (PARCEL A – FAN PIER)
BOSTON, MASSACHUSETTS**

TABLE OF CONTENTS

ARTICLE 1.	BASIC TERMS	1
1.01.	Date of Lease:	1
1.02.	Landlord:	1
1.03.	Tenant:	1
1.04.	Address of Property:	1
1.05.	Building, Property and Project:	1
1.06.	Premises:	2
1.07.	Tenant’s Pro Rata Share:	2
1.08.	Term:	2
1.09.	Commencement Date:	2
1.10.	Permitted Uses:	3
1.11.	Broker(s):	4
1.12.	Management Company:	4
1.13.	Security Deposit:	4
1.14.	Parking Access Devices:	4
1.15.	Base Rent:	4
1.16.	Additional Rent:	4
1.17.	Expenses Paid Directly by Tenant:	5
1.18.	Original Address of Landlord for Notices:	5
1.19.	Original Address of Tenant for Notices:	5
1.20.	Finish Work:	6
1.21.	Finish Work Allowance:	6
1.22.	Exhibits:	6
ARTICLE 2.	PREMISES AND APPURTENANT RIGHTS	7
2.01.	Lease of Premises; Appurtenant Rights	7
ARTICLE 3.	LEASE TERM	12
3.01.	Lease Term; Delay in Commencement	12
3.02.	Hold Over	14
3.03.	Right to Extend	15

ARTICLE 4.	RENT		17
4.01.	Base Rent		17
4.02.	Additional Rent		17
4.03.	Late Charge		19
4.04.	Interest		19
4.05.	Method of Payment		19
4.06.	Audit		20
4.07.	Phasing		21
ARTICLE 5.	TAXES		21
5.01.	Taxes		21
5.02.	Definition of "Taxes"		21
5.03.	Personal Property Taxes		22
ARTICLE 6.	UTILITIES		23
6.01.	Utilities		23
ARTICLE 7.	INSURANCE		24
7.01.	Coverage		24
7.02.	Action Increasing Rates		25
7.03.	Waiver of Subrogation		26
7.04.	Landlord's Insurance		26
ARTICLE 8.	OPERATING EXPENSES		27
8.01.	Operating Expenses		27
ARTICLE 9.	USE OF PREMISES		29
9.01.	Permitted Uses		29
9.02.	Indemnification		30
9.03.	Compliance With Legal Requirements		30
9.04.	Hazardous Substances		31
9.05.	Signs and Auctions		34
9.06.	Landlord's Access		35
9.07.	Security		36
ARTICLE 10.	CONDITION AND MAINTENANCE OF PREMISES AND PROPERTY		37
10.01.	Condition of Premises and Property		37
10.02.	Exemption and Limitation of Liability		37
10.03.	Landlord's Obligations		39
10.04.	Tenant's Obligations		39
10.05.	Tenant Work		40
10.06.	Condition upon Termination		45
10.07.	Decommissioning of the Premises		46

ARTICLE 11.	ROOFTOP LICENSE; ANTENNAS	47	
11.01.	Rooftop License	47	
11.02.	Installation and Maintenance of Rooftop Equipment		48
11.03.	Interference by Rooftop Equipment	48	
11.04.	Relocation of Rooftop Equipment	49	
ARTICLE 12.	DAMAGE OR DESTRUCTION; CONDEMNATION		50
12.01.	Damage or Destruction of Premises		50
12.02.	Eminent Domain	52	
ARTICLE 13.	ASSIGNMENT AND SUBLETTING		53
13.01.	Landlord's Consent Required		53
13.02.	Landlord's Consent	54	
13.03.	No Release	55	
13.04.	***	55	
13.05.	***	56	
ARTICLE 14.	EVENTS OF DEFAULT AND REMEDIES		56
14.01.	Covenants and Conditions	56	
14.02.	Events of Default	56	
14.03.	Remedies for Default	57	
ARTICLE 15.	PROTECTION OF LENDERS		59
15.01.	Subordination and Superiority of Lease		59
15.02.	Attornment	60	
15.03.	Rent Assignment	62	
15.04.	Other Instruments	62	
15.05.	Estoppel Certificates	62	
ARTICLE 16.	MISCELLANEOUS PROVISIONS		63
16.01.	Landlord's Consent Fees	63	
16.02.	Notice of Landlord's Default		63
16.03.	Quiet Enjoyment	63	
16.04.	Intentionally Omitted	63	
16.05.	Notices	64	
16.06.	No Recordation	64	
16.07.	Corporate Authority	64	
16.08.	Joint and Several Liability		65
16.09.	Force Majeure	65	
16.10.	Limitation of Warranties		65
16.11.	No Other Brokers	65	
16.12.	Applicable Law and Construction		65
16.13.	Construction on the Property or Adjacent Property		66
16.14.	Confidentiality of Information	67	

16.15.	Equal Employment Opportunity	68
ARTICLE 17.	SECURITY DEPOSIT	68
17.01.	Letter of Credit	68
17.02.	Letter of Credit Pledge	69
17.03.	Transfer of Security Deposit	70
17.04.	Release of the Security Deposit	70
17.05.	Reporting Obligations	70
ARTICLE 18.	GOVERNMENT INCENTIVES	71
18.01.	Government Incentives	71

INDEX OF DEFINED TERMS

—A—

AAA 24
Additional Rent 134
Alternative Extension Term 19
Applicable Preclusion Period 61
Arbitrator 20
Audit Period 23

—B—

BMBL 38
Building 1
Building B 13
Building B Lease 14
Building E 18
Building E Lease 18

—C—

Common Areas and Facilities 8
Comparable Properties 19
Confidential Information 75
Construction Documents 49
control 59
Core Building Systems 48

—D—

Decision Date 19
Decision Notice 19
Declaration 13
Default Rate 22
DEP 13
Development Plan 3
DHHS 38

—E—

Environmental Incidents 38
Environmental Insurance 32
Environmental Law 37
Environmental Reports 39
Estimated Commencement Date 3
Event of Default 64
Existing Mortgage 67

Extension Term 19

—F—

Final Commencement Date 3

Financial Standards 76

First Extension Term 18

Force Majeure 72

FPOC 13

—G—

Governmental Incentives 81

—H—

Hazardous Substances 37

—I—

Indemnitees 35

—L—

Lease 100

Leases 14

LEED 50

Legal Requirement 36

Legal Requirements 36

Letter of Credit 76

Letter of Credit Pledgee 77

Limited Parking Period 12

—M—

Market Rent 19

Material Service Interruption 28

Measurement Standard 13

MIP grant 80

—O—

Occurrences 39

Operating Costs 21

Operating Expenses 32

—P—

Parking Agreement 10

Parking Garage 11

Pedestrian Bridge 75
Percentage Share 32
Permitted Transfer 59
Premises 2
Profits 62
Project 1
Project Document 13
Project Documents 13
Property 1

—R—

Related Entity 51
Reletting Expenses 55
Rent 16
Restricted Parking Rate 9
Rooftop Agreement 46
Rooftop Equipment 46
Rules and Regulations 28

—S—

Security Plan 42
Service Contracts 46
Service Interruption 28
Service Interruption Notice 28
Succession Election Notice 69
Successor 69
Successor Entity 59

—T—

Taxes 25
Tenant Contractor 49
Tenant Environmental Incident 38
Tenant Parties 28
Tenant Party 28
Tenant Property 27
Tenant Work 47
Tenant Work Threshold Amount 48
Tenant's Architect 49
Tenant's Audit Notice 23
Tenant's Damages 15
Tenant's Existing Leases 15
Term 23
Third Arbitrator 20
Total Operating Costs 21

Transfer 59
Transfer Expenses 62
Transferee 59

—U—

Utility Service 27
Utility Service Provider 27
Utility Services 27
Utility Switching Points 27

VERTEX PHARMACEUTICALS INCORPORATED

**LEASE FOR PARCEL A – FAN PIER
BOSTON, MASSACHUSETTS**

**ARTICLE 1.
BASIC TERMS**

The following terms used in this Lease shall have the meanings set forth below.

Date of Lease: May 5, 2011
Landlord: Fifty Northern Avenue LLC, a Delaware limited liability company
Tenant: Vertex Pharmaceuticals Incorporated, a Massachusetts corporation
Address of Property: Parcel A, Fan Pier, Boston, MA, subject to the provisions of Section 2.01(c)

1.05. Building, Property and Project: The 15-story building to be constructed by Landlord and containing, upon completion, approximately [***] rentable square feet (the “Building”) in the City of Boston, Massachusetts, located on a parcel of land described in Exhibit 1.05 attached hereto and known as Parcel A, Fan Pier, Boston, Massachusetts (the Building and such parcel of land hereinafter being collectively referred to as the “Property”). The Property is part of a phased development located in the South Boston waterfront area of Boston, Massachusetts, currently consisting of nine (9) lettered parcels to be developed separately with up to nine (9) new buildings, projected to have an aggregate of approximately [***] square feet of gross floor area dedicated to a mixture of office, laboratory, residential, hotel, retail, civic/cultural uses, accessory parking spaces and maritime uses, together with access roads and landscaped open spaces (as such area is improved from time to time, the “Project”)

1.06. Premises:

Approximately [***] rentable square feet, consisting of all of the second through the fifteenth floors of the Building (including a mechanical floor), a portion of the first floor of the Building, a two-story mechanical penthouse in the Building, and a portion of a 3-level below grade structure, all as further described on Exhibit 1.06 (the “Premises”), based on a modified ANSI/BOMA Z65.1- 1996 method of measurement and as conclusively agreed to by the parties as set forth in Section 2.01(e).

1.07. Tenant’s Pro Rata Share:

[***]

1.08. Term:

Initial Term:

The period commencing on the Commencement Date and expiring on the last day of the fifteenth (15th) Lease Year, determined as set forth in the definition of “Lease Year,” below.

Extension Term:

One (1) additional term of ten (10) years, as further described in, and subject to the provisions of, Section 3.03.

Lease Year:

The first (1st) Lease Year begins on the first Commencement Date to occur and ends on the last day of the twelfth full calendar month after the Final Commencement Date. Each subsequent Lease Year ends twelve months after the preceding one, provided, however, that the fifteenth (15th) Lease Year shall end on the later to occur of (i) the last day of the twelfth month after the fourteenth (14th) Lease Year or (ii) if the Building B Lease (as defined in Section 2.01(g), below) Final Commencement Date (as defined therein) occurs after the Final Commencement Date hereunder, the expiration date of the initial term of the Building B Lease (meaning and intending that the Building B Lease and this Lease be coterminous). The parties acknowledge that the first (1st) Lease Year and the fifteenth (15th) Lease Year each may consist of more than 12 months.

1.09. Commencement Date:

The earlier of (i) the date Tenant has occupied any portion of the Premises for the conduct of its business, as opposed to occupying any portion of the Premises for the installation of the FF&E Work, as defined in Section 4 of Exhibit 10.03, or (ii) the Substantial Completion Date (as defined in Section 12.01 of Exhibit 10.03). Pursuant to Section 4.07 of this Lease, the Commencement Date may occur in one or more Phases. The Commencement Date shall be determined separately for each Phase and Rent shall be pro-rated based on the ratio of occupied floors to total floors of the Premises (excluding mechanical floors and penthouses in each case) to reflect Tenant's partial occupancy of the Premises until such time as the Commencement Date occurs with respect to the entire Premises. The Commencement Date upon which the remainder of the Premises is delivered to Tenant shall constitute the "Final Commencement Date".

The "Estimated Commencement Date" shall mean the date that is 30 months from the issuance of the first building permit for any portion of the Building.

1.10. Permitted Uses:

Office Uses and Research Center Uses as defined in and limited by the Development Plan for the Fan Pier Development, Planned Development Area #54 approved by the Boston Redevelopment Authority on November 14, 2001, and adopted by the Boston Zoning Commission on February 27, 2002, effective February 28, 2001, as amended by First Amendment to the Development Plan for the Fan Pier Development, Planned Development Area #54 approved by the Boston Redevelopment Authority on December 20, 2007, and adopted by the Boston Zoning Commission on January 30, 2008, effective January 30, 2008 (collectively, the "Development Plan"), and customary uses accessory to Office Uses and Research Center Uses as permitted under the Development Plan. Use of the mechanical penthouse, mechanical rooms, the mechanical floor, telephone closets, storage areas, and similar accessory areas of the Premises constructed as part of the Base Building Work, as defined in Exhibit 10.03, to the extent each are included within the Premises, shall be further limited to the purposes for which they have been constructed.

1.11. Broker(s):

CB Richard Ellis – N.E. Partners, LP

1.12. Management Company:

Fallon Management Company LLC
c/o The Fallon Company LLC
One Marina Park Drive
Boston, Massachusetts 02210
Attn: Joseph F. Fallon

1.13. Security Deposit:

\$[***], if, as and when required pursuant to the terms of Article 17.

1.14. Parking Access Devices:

[***], subject to the provisions of Section 2.01(d). [***].

1.15. Base Rent:

Initial Term:

From and after the Commencement Date through the end of the fifth (5th) Lease Year, [***] per annum ([***] per rentable square foot for [***] rentable square feet of the Premises and [***] per rentable square foot for [***] rentable square feet of the Premises designated as storage space on Exhibit 1.06 (the "Storage Space")), [***].

From and after the first (1st) day of the sixth (6th) Lease Year through the end of the tenth (10th) Lease Year, [***] per annum ([***] per rentable square foot for [***] rentable square feet of the Premises and [***] per rentable square foot for the Storage Space).

From and after the first (1st) day of the eleventh (11th) Lease Year through the end of the Initial Term, [***] per annum ([***] per rentable square foot for [***] rentable square feet of the Premises and [***] per rentable square foot for the Storage Space).

Extension Terms:

Base Rent shall be [***] of the Market Rent, as determined pursuant to Section 3.03.

1.16. Additional Rent:

All amounts payable by Tenant under this Lease other than Base Rent, including without limitation:

- (i) Tenant's Pro Rata Share of Taxes (Article 5);
- (ii) Utility expenses for the Premises under Article 6 to the extent paid by or to Landlord;
- (iii) Tenant's Pro Rata Share of Operating Expenses (Article 8) (see Section 4.02);
- (iv) Payment of the parking contract amounts due pursuant to Section 2.01(d).

1.17. Expenses Paid Directly by Tenant:

All utilities (except as set forth in Article 6) and services to the Premises.

1.18. Original Address of Landlord for Notices:

Fifty Northern Avenue LLC
c/o The Fallon Company LLC
One Marina Park Drive
Boston, Massachusetts 02210
Attn: Joseph F. Fallon

and:

Cornerstone Real Estate Advisers LLC
180 Glastonbury Boulevard, Suite 200
Glastonbury, Connecticut 06033
Attn: Linda Houston

With a copy to:

DLA Piper LLP (US)
33 Arch Street
Boston, MA 02110
Attn: John E. Rattigan, Esquire

With a copy to:

Day Pitney LLP
242 Trumbull Street
Hartford, CT 06103
Attn: James A. McGraw, Esquire

1.19. Original Address of Tenant for Notices:

Vertex Pharmaceuticals Incorporated
130 Waverly Street
Cambridge, Massachusetts 02139
Attn: Alfred Vaz

With a copy to:

Bowditch & Dewey, LLP
175 Crossing Boulevard
Suite 500
Framingham, MA 01702
Attn: Paul C. Bauer, Esquire

1.20. Finish Work:

All to be designed and constructed by Landlord, pursuant to Tenant's Program, as further set forth in Section 10.03 and Exhibit 10.03.

1.21. Finish Work Allowance:

***] (calculated on the basis of ***] per rentable square foot times ***] rentable square feet plus ***], subject to adjustment pursuant to Article 18.

1.22. Exhibits:

Exhibit 1.05: Property
Exhibit 1.06: Premises
Exhibit 2.01(e): Measurement Standard
Exhibit 2.01(f): Permitted Encumbrances
Exhibit 2.01(g): Schedule of Reimbursable Expenditures
Exhibit 3.01(a): Form of Confirmation of Commencement Date
Exhibit 3.01(b): Tenant's Existing Lease Terms
Exhibit 3.03(b) Parcels B and E Description
Exhibit 9.01: Rules and Regulations
Exhibit 9.04: Environmental Reports
Exhibit 9.05 Retail Signage
Exhibit 10.03: Work Letter
Exhibit 10.05(b): Construction Documents
Exhibit 10.05(c): Tenant Work Insurance Schedule
Exhibit 10.06: Items That Must Remain On the Premises
Exhibit 15.01: Form of Lender's Subordination, Nondisturbance and Attornment Agreement
Exhibit 17.01: Form of Letter of Credit
Exhibit 18.01(f): Alternate Economic Benefit Standards

**ARTICLE 2.
PREMISES AND APPURTENANT RIGHTS**

2.01. Lease of Premises; Appurtenant Rights. Landlord hereby leases the Premises to Tenant, and Tenant hereby leases the Premises from Landlord, for the Term. Tenant shall be permitted access to the Building, the Premises and the Parking Garage on a 24 hour per day, 7 day per week basis, subject to the Rules and Regulations, Force Majeure (as hereinafter defined) and Landlord's reasonable security measures.

(a) Exclusions. The Premises exclude Common Areas and Facilities of the Property, as defined in Section 2.01(b), and exterior walls, the roof, the stairways and stairwells to the Parking Garage, the portion of the Building identified as "future retail tenants" on Exhibit 1.06, retail loading dock, and pipes, ducts, conduits, wires and appurtenant fixtures located within the Premises but serving other parts of the Property (exclusively or in common). If the Premises include less than the entire rentable area of any floor from time to time, then the Premises also exclude the common corridors, lobbies, elevator lobby, and lavatories located on such floor.

(b) Appurtenant Rights. Tenant shall have, as appurtenant to the Premises, rights, in common with others (subject to the Rules and Regulations), to use the Common Areas and Facilities of the Property, to contracts for parking set out in Section 2.01(d), to the signage rights as set out in Section 9.05, to use the rooftop as set out in Article 11, and the exclusive right to access and egress from the Pedestrian Bridge (as set forth in Section 16.13, below). As used herein, "Common Areas and Facilities" is defined as (i) the common stairways and access ways, lobbies, hallways, entrances, stairs, elevators and any passageways thereto, other areas or facilities within the Building for the general use, convenience and benefit of Tenant and other tenants and occupants of the Building and the common pipes, ducts, conduits, wires, telephone and electrical closets (except on floors leased entirely by Tenant), and appurtenant equipment serving the Premises; (ii) the common exterior walkways located on the Property and associated with the Building, and (iii) any other common areas and facilities from time to time designated as such by Landlord (provided that no areas initially designated as part of the Premises on Exhibit 1.06 may be designated as a common area).

(c) Reservations. In addition to other rights reserved herein or by law, Landlord reserves the right from time to time, without unreasonable (except in emergency) interference with Tenant's rights hereunder, including without limitation Tenant's use of and access to the Premises: (i) to make additions to or reconstructions of the Building and to install, use, maintain, repair, replace and relocate for service to the Premises and other parts of the Building, or either, pipes, ducts, conduits, wires and appurtenant fixtures, wherever located in the Premises, the Building, or elsewhere in the Property, provided, however, such installation, reconstruction or relocation shall not materially reduce the usable floor area of the Premises (other than a temporary reduction to accommodate installation, repair, replacement, maintenance and relocation) without the consent of Tenant, which may be granted or withheld in Tenant's sole discretion and if granted, the Base Rent and Tenant's Pro Rata Share shall be proportionately reduced; (ii) to alter or relocate any portion of the Common Areas and Facilities, including the lobbies and entrances (provided that (A) Tenant's rights under this Lease are not adversely affected in any material respect and (B) with respect to any relocation of the lobby or entrance to the Building or the Premises, other than a temporary relocation to accommodate required work, any such relocation shall be subject to Tenant written approval, in Tenant's sole discretion), (iii) to grant easements and other rights with respect to the Property, provided such grants do not materially and adversely affect Tenant's rights under this Lease, and (iv) to change the street address of the Property prior to the date that Landlord commences the Finish Work (and, thereafter, with Tenant's written consent, not to be unreasonably withheld, conditioned or delayed). Installations, replacements and relocations within the Premises referred to in clause (i) shall be located as far as practicable in the core areas of the Building, above ceiling surfaces, below floor surfaces or within perimeter walls of the Premises and Landlord shall minimize the disruption to the Tenant to the degree reasonably practicable.

For the purposes of separately owning and/or financing the portions of the Building comprising retail space and/or the Parking Garage below the Building from the remainder of the Building, the Property may be subdivided into separate lots, submitted to a condominium regime or divided into separate leasehold lots by ground leases to permit such separate ownership and financing of portions of the Property, provided that (a) Tenant's rights and obligations under this Lease shall not be diminished or negatively affected in anything more than a de minimis manner, (b) there shall not be material interference with (I) access to the Premises from Northern Avenue, (II) Tenant's ability to otherwise use the number of parking spaces as provided under Section 2.01(d) below, or (III) the ability to use and occupy the Premises for the Permitted Uses, and (c) if the Property is submitted to a condominium regime, the entire Premises shall be contained within a single condominium unit. In the event the Property, as originally defined herein, is subdivided, then the term "Property" shall be deemed to refer only to the portions of the parcel or parcels of land or air rights on which the Building is located and, at the request of either Landlord or Tenant, Exhibit 1.05 and any Notice of Lease recorded pursuant Section 16.06 shall be amended accordingly. In the event the Property is submitted to a condominium regime, the Property shall be deemed to be the condominium unit in which the Premises are located (but any such condominium unit shall have the appurtenant rights to which Tenant expressly is entitled under this Lease) and, at the request of either Landlord or Tenant, Exhibit 1.05 and any Notice of Lease recorded pursuant Section 16.06 shall be amended accordingly. Tenant agrees to enter into any instruments reasonably requested by Landlord in connection with the foregoing, so long as the same are not inconsistent with the rights of Tenant under this Lease and are otherwise reasonably acceptable to Tenant. Without limiting the generality of the foregoing, such instruments may include a subordination of this Lease to a ground lease or documents creating a condominium on the Property, provided that in the case of a condominium Tenant's rights under this Lease are not materially affected and that in the case of a ground lease Tenant shall receive a non-disturbance agreement reasonably acceptable to Tenant from any ground lessor having a priority interest over this Lease. If the Property is subject to a condominium regime under this paragraph, then Landlord shall not exercise its right to vote as a member of the owner's association of the condominium in a manner that materially and adversely affects Tenant's rights under this Lease without Tenant's prior written consent, which consent shall not be unreasonably withheld, conditioned or delayed, and, so long as Tenant is not in default of any of its payment obligations under this Lease, Landlord shall promptly pay all assessments against the condominium unit containing the Premises (which assessments shall be includable within Operating Costs) within the period required under the condominium regime so that no liens for unpaid assessments attach to the Premises. In the event of any failure by Landlord to pay condominium assessments for any reason (other than Tenant's failure to pay Operating Costs) such that the condominium association commences an enforcement process against the condominium unit containing the Premises, Tenant shall have the right to pay such assessments directly (and shall provide evidence of such payments

to Landlord) and Tenant may offset such expenditures against the next payment or payments of Additional Rent under this Lease. Following any such event, to the extent permissible under law, the condominium documents shall either be revised to provide for provision of copies of any notice of default to Tenant or Landlord shall otherwise require the condominium association to copy Tenant as a notice party in addition to Landlord, and thereafter copies of invoices for condominium assessments or other material notices that Landlord receives from the condominium association shall be delivered to Tenant and Landlord. Landlord shall promptly provide Tenant with copies of any notice of nonpayment of condominium assessments (provided that Landlord shall not be in default of this sentence if such amounts are paid by Landlord prior to the exercise of any remedies against the condominium unit containing the Premises).

(d) Parking. During the Term, Landlord shall cause the Parking Garage operator to enter into contracts with Tenant for the number of parking access devices set forth in Section 1.14, permitting the parking of such number of vehicles in unreserved parking spaces in the Parking Garage. In furtherance of such rights, Landlord has entered into and recorded that certain Garage Reciprocal Easement Agreement (the "Parking Agreement") described on Exhibit 2.01(f). Landlord covenants that it shall not grant any other tenant in the Building the right to park exclusively in the portion of the Parking Garage located beneath the Building unless such rights affect a de minimis number of parking spaces for the benefit of the retail tenants in the Building and Landlord offers comparable rights to Tenant. The monthly rate to be paid by Tenant and its employees under such contracts shall be the prevailing monthly parking rate charged by the Parking Garage operator at the Parking Garage (or surface parking, as applicable), which parking rate may change at any time and from time to time, as determined by such Parking Garage operator, [***]. Tenant shall have the right to provide Landlord with recommendations from time to time regarding the exercise of the Landlord's rights to approve the parking garage operator under the Parking Agreement, and Landlord agrees that it shall not vote such rights in favor of employing any particular parking garage operator to which Tenant has bona fide, good faith objections as reasonably and previously described to Landlord in writing (Tenant acknowledging that the Parking Garage requires a parking operator and that Tenant shall reasonably cooperate with Landlord to identify viable recommended candidates for the parking operator position). [***].

[***]

"Parking Garage" shall collectively mean (i) the three (3) level subterranean parking garage located below the Building and constructed as part of the Base Building Work, and (ii) such other parking garages as may be constructed from time to time within the Project and subsequently made available to the Building under reciprocal easement agreements, operating agreements or other such agreements now or hereafter in effect. Payments under the parking contracts shall constitute Additional Rent for purposes of this Lease. Payments under this Section shall be

made directly to the Parking Garage or applicable parking operator in accordance with the provisions of the parking contracts. Without limiting Landlord's other remedies under this Lease, if Tenant shall fail to pay the amounts due under any parking contract for more than ten (10) days after notice of such failure given by Landlord or the applicable parking operator, or if Tenant shall cease to contract for any access device for more than 60 consecutive days, or if Tenant relinquishes in any manner any parking contract(s), then Landlord may permanently terminate Tenant's rights to the applicable number of access devices immediately upon notice by Landlord to Tenant (such terminations, if any, to be applied first to parking contracts for surface parking hereunder and then to parking contracts in the Parking Garage). Tenant may irrevocably relinquish any such parking contract(s) on 30 days' prior written notice to Landlord (in which event the number of parking access devices specified in Section 1.14 shall be deemed to have been reduced accordingly). If Landlord shall fail to provide any or all of the parking spaces for Tenant parking hereunder other than due to (i) temporary interruptions of not more than one (1) business day, (ii) the operation of the South Boston Parking Freeze Regulations as set forth in the following paragraph or (iii) Tenant's default as specified in the preceding sentence, then Tenant shall not be required to make payments under the parking contracts for such parking spaces during the period in which such parking spaces are unavailable. The Parking Garage operator's failure to provide the Parking Spaces to Tenant, other than in the event of a temporary closure of the Parking Garage due to casualty, governmental action or other cause beyond Landlord's and such Parking Garage operator's reasonable control, or as otherwise permitted hereunder, shall constitute a default by Landlord hereunder, subject to applicable notice and cure periods.

Tenant acknowledges that the Parking Garage and any such surface parking areas are subject to the provisions of the South Boston Parking Freeze Regulations and to one or more Parking Freeze Permits issued thereunder by the City of Boston Air Pollution Control Commission, which regulations and permits require that 20% of the total parking supply in the Parking Garage be set aside for Off-Peak use, and not be available weekdays between 7:30 a.m. and 9:30 a.m. Tenant acknowledges that the administration of such requirement may from time to time limit the ability of certain of the parking access device holders to enter the Parking Garage or the surface parking areas between 7:30 a.m. and 9:30 a.m. (the "Limited Parking Period"). [***].

Tenant's rights under this Section 2.01(d) shall not be assigned or sublicensed except in connection with an assignment or sublease permitted under Article 13.

(e) Measurement. The parties acknowledge and agree that the square footages set forth herein have been conclusively determined pursuant to a modified ANSI/BOMA Z65.1-1996 method of measurement for useable space in office buildings and consistent as set forth on Exhibit 2.01(e) attached (the "Measurement Standard").

(f) Matters to Which Lease is Subject. This Lease, and Tenant's rights hereunder, are subject and subordinate to the matters listed on Exhibit 2.01(f) and all Legal Requirements, including, without limitation: (i) that certain Declaration of Covenants, Easements and Restrictions by and between Fan Pier Development LLC, a Delaware limited liability company, and Fan Pier Owners Corporation, a Massachusetts corporation ("FPOC"), dated January 31, 2008 and recorded with the Suffolk County Registry of Deeds in Book 43059, Page 1, as amended by that certain First Amendment dated as of the date hereof, to be recorded in the Suffolk County Registry of Deeds, as the same may be further amended from time to time (the "Declaration"), and any rules or regulations promulgated by or on behalf of the "Developer" or "FPOC" under the Declaration, whether recorded or unrecorded, to the extent of and in accordance with the provisions of the next succeeding sentence, (ii) Consolidated Written Determination dated June 28, 2002 (final decision dated November 21, 2002) issued by issued by the Massachusetts Department of Environmental Protection ("DEP") for the Fan Pier Project, as extended by letter from DEP dated April 18, 2007, and the Chapter 91 license for the Building to be issued by DEP, and Chapter 91 License No. 11907 issued by DEP for all of the public realm areas of the Fan Pier Project, recorded with the Suffolk Registry of Deeds in Book 42568, Page 89; (iii) the Development Plan, and (iv) all agreements with the BRA or the City of Boston relating to the Building or the Project (collectively, and as may be amended or supplemented from time to time, the "Project Documents," and each individually a "Project Document"). There are no existing rules or regulations promulgated under the Declaration as of the date of this Lease and Landlord shall not promulgate such rules or regulations nor enter into an amendment to the Declaration nor shall Landlord enter into any new Project Document or any amendment, termination, cancellation, revision or modification to an existing Project Document that materially, adversely affects Tenant's rights or privileges under this Lease without the written consent of Tenant, which consent may be granted or withheld in Tenant's sole discretion. Landlord shall not be liable to Tenant for any injury, loss, costs, expenses, liabilities, claims or damage (including attorneys' fees and disbursements) to any person or property arising from or in any related to the proper exercise of the rights of the Developer or FPOC under the Declaration. Tenant shall cooperate with Landlord as reasonably requested from time to time in order to permit Landlord or its affiliates to meet reporting requirements under the Project Documents, including without limitation under the Transportation Access Plan Agreement for the Project or the Building, as they may be amended.

(g) Lease Contingency. Simultaneously with the execution of this Lease, Tenant and an affiliate of Landlord ("Building B Landlord") are entering into a lease for a building to be constructed on Parcel B of the Project (such building to be referred to as "Building B", as such Parcel B is more particularly described on Exhibit 3.03(b), attached, and any such lease of Building B to be referred to as the "Building B Lease"). This Lease and the Building B Lease (together, the "Leases") are each contingent upon the issuance of an "approval letter" by the Federal Drug

Administration (the “FDA”) of Tenant’s new drug application for telaprevir as a so-called “listed drug”, as such terms are defined in 21 C.F.R. 314.3 (the “Telaprevir Approval”). If the Telaprevir Approval is not issued by the FDA, or the FDA issues a written refusal to approve telaprevir, on or before December 31, 2011, then this Lease shall terminate and be of no further force and effect as of December 31, 2011 except for the obligations that expressly survive the termination hereof.

[***].

[***].

ARTICLE 3.
LEASE TERM

3.01. Lease Term; Delay in Commencement.

(a) The Initial Term of this Lease is set forth in Article 1. Following each Commencement Date, Landlord and Tenant shall enter into a recordable instrument confirming the occurrence of the applicable Commencement Date in the form of Exhibit 3.01(a), attached (provided, however, that the failure to enter into such instrument shall not be deemed to delay the occurrence of the applicable Commencement Date).

(b) Landlord shall endeavor in good faith to Substantially Complete (as defined in Exhibit 10.03) the Landlord Work (as defined in Exhibit 10.03) such that the Final Commencement Date will occur on or before the Estimated Commencement Date, subject to extension for Force Majeure and Tenant Delays (as defined in Exhibit 10.03). If the Final Commencement Date has not occurred by the Estimated Commencement Date, as extended by Tenant Delay (but not for Force Majeure), then, as Tenant’s sole remedy at law or equity (except as provided in Sections 3.01(c), below), Tenant shall receive a credit against Base Rent in an amount equal to Tenant’s Damages. “Tenant’s Damages” shall mean [***]. Responsibility for Tenant’s Damages shall be allocated between the Landlord and the Building B Landlord pursuant to this Section 3.01(b) and Section 3.01(b) of the Building B Lease in proportion to the respective rentable square feet of the premises under such leases. [***].

(c) Tenant shall have the right to terminate this Lease in accordance with the provisions of this Subsection 3.01(c) if any of the following milestones are not met: (i) if Landlord has not closed a construction loan to finance construction of the Building on or before the later of (A) the date Tenant delivers to Landlord the Security Deposit if any to the extent required pursuant to Section 17.01, or (B) the date that is ninety (90) days following the Telaprevir Approval for any reason (including without limitation Force Majeure) other than Tenant Delays; (ii) a building permit is not issued for the Building on or before the later of (A) the date Tenant

delivers to Landlord the Security Deposit if and to the extent required pursuant to Section 17.01, or (B) the date that is ninety (90) days following the Telaprevir Approval for any reason (including without limitation Force Majeure) other than Tenant Delays (clauses (i) and (ii) above, the “Building A Initial Construction Milestones”); or (iii) the Building B Landlord does not meet all the Building B Initial Construction Milestones, as defined in the Building B Lease. In the event that any of the foregoing milestones are not met, then Tenant may terminate this Lease upon thirty (30) days’ prior written notice (provided that such termination will not take effect if the construction loan closing, issuance of a building permit and compliance with the Building B Initial Construction Milestones’, to the extent any such milestone had not been met prior to the Tenant’s termination notice hereunder, occurs within such 30 day period), as Tenant’s sole remedy at law or equity. In the event Tenant terminates this Lease pursuant to the provisions of this Subsection 3.01(c), Tenant shall terminate the Building B Lease and that certain lease (the “Building F Lease”) by and between Tenant and an affiliate of Landlord dated as of the date hereof with respect to the building known as One Marina Park Drive and located on Parcel F (as described in Exhibit 3.03(b)). Notwithstanding anything to the contrary in this Lease, Landlord shall have no obligation to apply for a building permit or to commence construction of the Landlord Work prior to the date of Telaprevir Approval. To advance the Final Completion Date, Tenant may elect by written notice (the “Acceleration Notice”) to Landlord to cause Landlord to apply for the building permit prior to Telaprevir Approval by agreeing in such notice to include 100% of the cost of the building permit for the Building as a Reimbursable Expenditure and increase the cap on Reimbursable Expenditures by an equivalent amount; provided, however, that such notice shall only have force and effect if Tenant simultaneously gives an Acceleration Notice to the landlord under the Building B Lease pursuant to Section 3.01(c) of the Building B Lease.

(d) Intentionally Omitted.

(e) The foregoing remedies are Tenant’s sole remedies in the event of a delay in the construction of the Landlord Work, except that if construction of the Landlord Work is materially abandoned for a period of (x) at least ninety (90) consecutive days or (y) at least ninety (90) days in any one-hundred twenty (120) day period, in each case after excavation for the Building foundation commences (for reasons other than Tenant Delays or Force Majeure), then Landlord shall be deemed to be in default under this Lease subject to Landlord’s right to notice and cure under Section 16.02 of this Lease, with a copy of any such default notice simultaneously being delivered to Landlord’s construction lender (the cessation of such abandonment within the period required by Section 16.02 being deemed to be a cure of such default). Tenant’s sole remedies at law or equity for any default pursuant to the immediately preceding sentence beyond applicable notice and cure periods shall be (x) termination of this Lease by thirty (30) days’ prior written notice to Landlord if such default first arises prior to the time that either Landlord first commences the erection of structural steel

for the Building or the Building B Landlord first commences the erection of structural steel for Building B, and/or (y) a claim for actual, direct damages.

3.02. Hold Over. If Tenant (or anyone claiming through Tenant) shall remain in occupancy of the Premises or any part thereof after the expiration or early termination of the Term without a written agreement therefor executed and delivered by Landlord, then, without limiting Landlord's other rights and remedies, the person remaining in possession shall be deemed a tenant at sufferance, and Tenant shall thereafter pay monthly rent (pro rated for such portion of any partial month as Tenant shall remain in possession) at a rate equal to the higher of 125% for the first 30 days, and 150% thereafter, of (x) the Base Rent rate applicable during the last monthly period immediately preceding such expiration or termination or (y) the fair market rent for Base Rent (which shall be determined on a so-called "triple net" basis), in each case with all Additional Rent also payable as provided in this Lease. The foregoing provisions shall not serve as permission for Tenant or anyone claiming by, through, or under Tenant to hold-over, nor serve to extend the Term (although Tenant shall remain bound to comply with all provisions of this Lease until Tenant vacates the Premises) and Landlord shall have the right at any time after the expiration or earlier termination of this Lease to enter and possess the Premises and remove all property and persons therefrom or to require Tenant to surrender possession of the Premises as provided in this Lease upon the expiration or earlier termination of the Term. If Tenant fails to surrender the Premises upon the expiration or termination of this Lease, Tenant agrees to indemnify, defend and hold harmless Landlord from all costs, loss, expense or liability, including without limitation, claims made by any succeeding tenant and real estate brokers' claims and attorneys' fees. No acceptance by Landlord of any Rent during or for any period following the expiration or termination of this Lease shall operate or be construed as an extension or renewal of this Lease. Should Tenant remain in the Premises on a month-to-month basis with Landlord's prior and express written approval, such month-to-month tenancy may be cancelled by either party with thirty (30) days' prior written notice or such lesser time period as may be permitted by Law. In any case, Tenant shall be liable to Landlord for all damages actually resulting from any failure by Tenant to vacate the Premises or any portion thereof when required hereunder. The provisions of this Section 3.02 shall survive the termination or earlier expiration of this Lease.

3.03. Right to Extend.

(a) First Extension Term. This Lease may be extended for one (1) additional ten-year period (the "First Extension Term") by unconditional written notice from Tenant to Landlord delivered at least twenty (20) months before the end of the Initial Term, time being of the essence. If Tenant does not timely exercise this option, or if on the date of such notice or at the beginning of the First Extension Term an Event of Default is then continuing, then Tenant's right to extend the Term pursuant to this Section 3.03(a) shall irrevocably lapse, Tenant shall have no further right to extend, and this Lease shall expire at the end of the Initial Term.

(b) Alternative Extension Term. Simultaneously herewith, Tenant has entered into an agreement (the "Parcel E Agreement") with an affiliate of Landlord for certain rights to lease a building that is contemplated for construction on Parcel E of the Project (such building to be referred to as "Building E"), as such Parcel E is more particularly described on Exhibit 3.03(b), attached. If Tenant enters into a lease for Building E pursuant to the Parcel E Agreement (such lease of Building E to be referred to as the "Building E Lease"), then Tenant shall have the following additional extension option with respect to the Building: (a) if Tenant's right to extend the term of the Building E Lease in compliance with the terms of the Parcel E Agreement has expired without exercise or has been waived, then Tenant may elect to extend the Term of this Lease for such period as will result in the Term of this Lease being coterminous with the term of the Building E Lease, or (b) if Tenant shall have exercised the First Extension Option, and Tenant has extended the term of the Building E Lease in compliance with its terms for a period of ten (10) years, then Tenant may elect to extend the First Extension Term of this Lease for such period as will result in the Term of this Lease being coterminous with the term of the Building E Lease, as so extended, in each case by unconditional written notice from Tenant delivered to Landlord at least twenty (20) months before the end of the Initial Term (with respect to option (a)) or the First Extension Term (with respect to option (b)), time being of the essence (either such extended term being referred to as the "Alternative Extension Term"). If Tenant does not timely exercise the options set forth in this paragraph, or if on the date of such notice or at the beginning of the Alternative Extension Term an Event of Default is then continuing, Tenant's right to extend pursuant to this Section 3.03(b) shall irrevocably lapse, Tenant shall have no further right to extend, and this Lease shall expire at the end of the Initial Term or First Extension Term, as applicable.

All references to the Term shall mean the Initial Term as it may be extended by the First Extension Term and/or the Alternative Extension Term, if any (each, an "Extension Term"). Each Extension Term shall be on all the same terms and conditions applied to the Initial Term (including without limitation the obligation to pay Additional Rent) except that the Base Rent for each Extension Term shall be as set forth below and Tenant shall have no further right to extend the term of this Lease except as expressly set forth in subparagraph (b), above.

(c) Market Rent. If Tenant gives Landlord timely notice of its intention to extend the then-current Term of this Lease, whether for the First Extension Term or the Alternative Extension Term, then at least nineteen (19) months before the end of the then-scheduled expiration Term, Landlord shall give Tenant written notice of the then applicable market rent for Tenant's space, based on similar space in similar Class A office and laboratory buildings in the Seaport District or the Longwood Medical Area (excluding owner-occupied space) of the City of Boston, Massachusetts (such buildings, the "Comparable Properties," and such rent, the "Market Rent"), taking into account all of the factors that a landlord and tenant would consider in negotiating an arms-length rent for a lease (including without limitation whether or

not a brokerage fee is payable in connection therewith). Base Rent for any Extension Term shall be established as [***] of the Market Rent. Within thirty (30) days after Tenant receives such notice, Tenant shall notify Landlord of its agreement with or objection to Landlord's determination of the Market Rent, whereupon, if the Tenant objects to such determination, the Market Rent shall be determined in the manner set forth below. If Tenant does not notify Landlord within such thirty (30) day period of Tenant's agreement with or objection to Landlord's determination of the Market Rent, then the Market Rent for the applicable Extension Period shall be deemed to be Landlord's determination of the Market Rent as set forth in the notice from Landlord described in this subsection and Tenant shall be irrevocably bound to lease the Premises for the applicable Extension Term. In the event Tenant's notice objects to such determination, from the date Tenant provides such notice through the date that is seventeen (17) months before the end of the then scheduled expiration Term (the "Decision Date"), Landlord and Tenant shall negotiate in an attempt to reach agreement on the Base Rent for the applicable Extension Period. Prior to the Decision Date, Tenant shall send a notice rescinding its exercise of the right to extend or requesting arbitration pursuant to Section 3.03(d) below (a "Decision Notice"). If Tenant fails to send such Decision Notice prior to the Decision Date or sends a notice requesting arbitration pursuant to Section 3.03(d) below, then Tenant shall be irrevocably bound to lease the Premises for the applicable Extension Term and the Market Rent for such Extension Term shall be determined by arbitration in the manner set forth in Section 3.03(d).

(d) Arbitration of Market Rent. If Tenant notifies Landlord of Tenant's objection to Landlord's determination of Market Rent and sends a Decision Notice requesting arbitration under the preceding subsection, such Decision Notice shall also set forth a request for arbitration and Tenant's appointment of an MAI appraiser having at least ten (10) years' experience in the Class A office and laboratory leasing market in the Seaport District or the Longwood Medical Area of the City of Boston, Massachusetts, and who shall not be affiliated with either Landlord or Tenant and has not worked for either party or its affiliates at any time during the prior five (5) years (an "Arbitrator"). Within five (5) days thereafter, Landlord shall by notice to Tenant appoint a second Arbitrator having such experience. Each Arbitrator shall be advised to determine the Market Rent for the applicable Extension Term within thirty (30) days after Landlord's appointment of the second Arbitrator. On or before the expiration of such thirty-(30)-day period, the two Arbitrators shall confer to compare their respective determinations of the Market Rent. If the difference between the amounts so determined by the two Arbitrators is less than or equal to ten percent (10%) of the lower of said amounts, then the final determination of the Market Rent shall be equal to the average of said amounts. If such difference between said amounts is greater than ten percent (10%), then the two Arbitrators shall have ten (10) days thereafter to appoint a third Arbitrator (the "Third Arbitrator"), who shall be instructed to determine the Market Rent for the applicable Extension Term within ten (10) days after its appointment by selecting one of the amounts determined by the

other two Arbitrators. Each party shall bear the cost of the Arbitrator selected by such party. The cost for the Third Arbitrator, if any, shall be shared equally by Landlord and Tenant. Failure of the Arbitrators, singly or collectively, to complete this process within the time frame set forth (i) shall not terminate the Tenant's exercise of the applicable Extension Term, or (ii) cause the arbitration process to end; the parties shall thereafter continue to work in good faith to conclude the arbitration process.

ARTICLE 4. RENT

4.01. Base Rent. On the Commencement Date and thereafter on the first day of each month during the Term, Tenant shall pay Landlord the monthly installment of Base Rent in the manner and as further provided in Section 4.05, below. If the Commencement Date occurs in Phases, then Tenant shall be entitled to a credit against Base Rent due for the period (the "Early Access Period") beginning with the first Commencement Date to occur and ending on the day immediately preceding the Final Commencement Date in the amount of any Phasing Premium actually paid by Tenant on account of Finish Work Changes for Phasing under the Work Letter (provided, however, that no such credit shall be due to Tenant from and after the Final Commencement Date, and in no event shall such credit be deemed to exceed the total Base Rent due with respect to the Early Access Period).

4.02. Additional Rent.

(a) General. "Additional Rent" has the meaning set forth in Section 1.16. "Rent" means Base Rent and Additional Rent. Landlord shall estimate in advance (i) all Taxes under Article 5, (ii) all utility costs (unless separately metered to or separately contracted for by Tenant) under Article 6, (iii) all insurance premiums to be paid by Landlord under Article 7, and (iv) all Operating Expenses under Section 8.01 (individually all such items in clauses (i) through (iv) being "Operating Costs" and collectively, "Total Operating Costs") and, commencing on the Commencement Date Tenant shall pay one-twelfth of Tenant's Pro Rata Share of such estimated Total Operating Costs monthly in advance together with Base Rent. Landlord shall provide Tenant with such estimate on or before the Commencement Date and on or before each subsequent December 1, for the next ensuing calendar year, during the term of the Lease. Landlord may adjust its estimates of Total Operating Costs at any time based upon its experience and reasonable anticipation of costs. Such adjustments shall be effective as of the next Rent payment date after notice to Tenant. On or before each December 1 following the Commencement Date, Landlord shall provide Tenant with a reasonably detailed statement of the Total Operating Costs paid or incurred by Landlord during the then-current fiscal year (including an estimate on an accrual basis for the period, if any, of such fiscal year following December 1) and Tenant's Pro Rata Share of such expenses and shall provide Tenant with a final statement within 60 days after the end of each such fiscal

year of the Property during the Term (Tenant acknowledging that any Operating Costs on account of the Declaration shall be reconciled separately following Landlord's receipt of annual accountings thereunder during the term and need not be provided within such 60 day period, but Landlord shall endeavor to provide Tenant with a reconciliation statement for such charges as soon as reasonably practicable following receipt of the annual statement, or any permitted subsequent billing or adjustment, under the Declaration). Within the next thirty (30) days following delivery of such statements, Tenant shall pay Landlord any underpayment, or Landlord shall credit against Additional Rent next due any overpayment, of Tenant's Pro Rata Share of such Total Operating Costs. If the Term expires or this Lease is terminated as of a date other than the last day of a fiscal year, Tenant's payment of Additional Rent pursuant to this Section 4.02(a) for such partial fiscal year shall be based on Landlord's best estimate of the items otherwise includable in Total Operating Costs and shall be made on or before the later of (a) thirty (30) days after Landlord delivers such estimate to Tenant or (b) the last day of the Term, with an appropriate payment or refund to be made upon Tenant's receipt of Landlord's statement of Total Operating Costs for such fiscal year. This Section 4.02(a) shall survive expiration or earlier termination of the Term.

This Lease requires Tenant to pay directly to suppliers, vendors, carriers, contractors, etc., certain insurance premiums, utility costs, personal property taxes, maintenance and repair costs and other expenses. If Landlord pays any of these amounts in accordance with this Lease, Tenant shall reimburse such costs in full upon demand with the next monthly Rent payment. Unless this Lease provides otherwise, Tenant shall pay all Additional Rent then due on or before the date for the next monthly Rent payment. In no event shall Landlord's failure to demand payment of Additional Rent be deemed a waiver of Landlord's right to such payment.

(b) Allocation of Certain Operating Costs. If at any time during the Term, Landlord provides services only with respect to particular portions of the Building or incurs other Operating Costs allocable to particular portions of the Building, then such Operating Costs shall be charged entirely to those tenants, including Tenant, if applicable, of such portions, notwithstanding the provisions hereof referring to Tenant's Pro Rata Share. In furtherance of and not in limitation of the foregoing, if it is feasible to differentiate between Taxes allocable to (i) the retail portion of the Building and (ii) the Parking Garage, on the one hand, and Taxes allocable to the remainder of the Building, on the other hand, based on the records of the City of Boston assessors' office, then Landlord shall allocate such Taxes accordingly such that the retail tenants shall pay 100% of the Taxes allocable to retail space, the Parking Garage owner shall pay 100% of the Taxes allocable to the Parking Garage, and Tenant shall pay 100% of the Taxes allocable to the remainder of the Building. Landlord acknowledges that it shall use commercially reasonable efforts to have the retail portion of the Building and the Parking Garage assessed separately from the remainder of the Building for the purposes of facilitating the allocation set forth in the

immediately preceding sentence (provided that nothing in this sentence shall require Landlord to subject the Building to a condominium or subdivision).

4.03. Late Charge. Tenant acknowledges that if it pays Rent late, Landlord shall incur unanticipated costs, which shall be extremely difficult to ascertain exactly. Such costs include processing and accounting charges, and late charges that may be imposed on Landlord by any mortgage on the Property. Accordingly, if Landlord does not receive any Rent payment within five (5) days following its due date, Tenant shall pay Landlord a late charge equal to five (5%) percent of the overdue amount. The parties agree that this late charge represents a fair and reasonable estimate of the costs Landlord shall incur by reason of Tenant's payment default. Payment of the late charge shall not cure Tenant's payment default or prevent Landlord from exercising other rights and remedies. No late charges under this Section 4.03 shall accrue until Landlord provides notice of such late payment to Tenant and five (5) days elapse from such notice without Tenant having made such payment; provided, however, that Landlord shall not be required to give such notice more than two times in any 12-month period.

4.04. Interest. Any late Rent shall bear interest from the date due until paid at the annual rate of the Bank of America (or its successor) prime rate of interest plus four percent (4%) per annum (the "Default Rate") except to the extent such interest would cause the total interest to be in excess of that legally permitted. Payment of interest shall not cure Tenant's payment default or prevent Landlord from exercising other rights and remedies. No interest under this Section 4.04 shall accrue until Landlord provides notice of such late payment to Tenant and five (5) days elapse from such notice without Tenant having made such payment; provided, however, that Landlord shall not be required to give such notice more than one time in any 12-month period.

4.05. Method of Payment. Tenant shall pay the Base Rent to Landlord in advance in equal monthly installments by the first of each calendar month during the Term and the monthly installment of Tenant's Pro Rata Share of Total Operating Costs as provided in Section 4.02, without offset, deduction or prior demand, except as otherwise expressly set forth herein. Tenant shall make a ratable payment of Base Rent and Additional Rent for any period of less than a month at the beginning or end of the Term. All payments of Base Rent, Additional Rent and other sums due shall be paid, without demand, set-off or other deduction, except as otherwise expressly set forth herein, in current U.S. exchange by check drawn on a clearinghouse bank at the Original Address of Landlord or such other place as Landlord may from time to time direct. Tenant acknowledges that the initial monthly periodic payments under the Lease, including without limitation Base Rent, Taxes and Operating Expenses, will all be made by electronic fund transfer pursuant to wire instructions to be provided by Landlord unless and until otherwise directed by Landlord.

Without limiting the foregoing, except as expressly provided in the immediately following sentence, Tenant's obligation to pay Rent shall be absolute, unconditional, and independent of any Landlord covenants and shall not be discharged or otherwise affected

by any law or regulation now or hereafter applicable to the Premises, or any other restriction on Tenant's use, or, except as expressly provided herein, any casualty or taking, or any failure by Landlord to perform or other occurrence; and Tenant waives all rights now or hereafter existing to quit or surrender this Lease or the Premises or any part thereof, or to assert any counterclaim or defense in any action seeking to recover Rent (unless such counterclaim or defense would be lost by Tenant if not raised in such proceeding). Notwithstanding the foregoing to the contrary, nothing in this paragraph shall be deemed to limit Tenant's express right to an abatement of Rent or to terminate the Lease, as applicable, on the terms and conditions set forth in Sections 3.01(c), 3.01(e), 6.01, 10.03(c), and 15.02 and Article 12 of this Lease. Subject to the provisions of this Lease, however, Tenant shall have the right to seek judgments for direct money damages occasioned by Landlord's breach of its Lease covenants (but may not set-off any such judgment against any Rent or other amount owing hereunder).

It is intended that Base Rent payable hereunder shall be a net return to Landlord throughout the term of this lease, as it may be extended (the "Term"), free of expense, charge, offset, diminution or other deduction whatsoever (except as expressly provided herein) on account of the Premises (excepting Landlord's financing expenses, federal and state income taxes of general application, and those expenses that this Lease expressly makes the responsibility of Landlord), and all provisions hereof shall be construed in light of such intent.

4.06. Audit. Landlord shall keep books and records regarding Total Operating Costs. All records shall be retained for at least three (3) years. At the request of Tenant ("Tenant's Audit Notice") given within one hundred eighty (180) days after Landlord delivers Landlord's statement of Total Operating Costs with respect to any fiscal year during the Term, Tenant (at Tenant's expense) shall have the right to examine Landlord's books and records applicable to Total Operating Costs for such fiscal year. Such right to examine the records shall be exercisable: (i) upon reasonable advance notice to Landlord and at reasonable times during Landlord's business hours and (ii) only during the 60-day period (the "Audit Period") following Tenant's Audit Notice. Landlord shall make such books and records available at Landlord's office in Massachusetts or at the Property, or in electronically accessible form. [***] conducted by either a certified public accountant from a nationally-recognized accounting firm or a nationally-recognized commercial real estate services firm, in either case as approved by Landlord for such purpose (such approval not to be unreasonably withheld, conditioned or delayed), [***] Tenant may submit the dispute for determination by an arbitration conducted by the Boston Office of the American Arbitration Association ("AAA") in accordance with the AAA's commercial real estate arbitration rules. The arbitrator shall be selected by AAA and shall be a certified public accountant with at least ten (10) years of experience in auditing Class A commercial office and laboratory buildings and who shall not be affiliated with either Landlord or Tenant and has not worked for either party or its affiliates at any time during the prior five (5) years. [***]. Any auditing firm retained by Tenant pursuant to this paragraph shall not be compensated on a contingent fee basis. [***].

As a condition precedent to performing any such examination of Landlord's books and records, Tenant's examiners shall be required to execute and deliver to Landlord an agreement in form reasonably acceptable to Landlord agreeing to keep confidential any non-public, confidential information that they discover about Landlord or the Building or the Property in connection with such examination and not to disclose the results of such examination except as required by law. Notwithstanding any prior approval of any examiners by Landlord, Landlord shall have the right to rescind such approval at any time if in Landlord's reasonable judgment the examiners have breached any confidentiality undertaking to Landlord or cannot provide reasonably acceptable assurances and procedures to maintain confidentiality.

4.07. Phasing. [***].

ARTICLE 5. TAXES

5.01. **Taxes.** Tenant covenants and agrees to pay to Landlord as Additional Rent Tenant's Pro Rata Share of the Taxes for each fiscal tax period, or ratable portion thereof, included in the Term. If Landlord receives a refund of any such Taxes, Landlord shall credit against Additional Rent next due or, at Landlord's election, pay Tenant its Pro Rata Share of the refund, in each case after deducting Landlord's reasonable costs and expenses incurred in obtaining the refund (to the extent such costs and expenses were not previously included in Operating Expenses or Taxes), but in any event such refund to Tenant shall not exceed amounts paid by Tenant for Taxes on account of the period subject to such refund. Upon Tenant's request, Landlord shall furnish Tenant with copies of the applicable real estate tax bill. Tenant shall make estimated payments on account of Taxes in monthly installments on the first day of each month, in amounts reasonably estimated from time to time by Landlord pursuant to Section 4.02(a).

5.02. **Definition of "Taxes".** "Taxes" means all taxes, assessments, betterments, excises, user fees and all other governmental charges and fees of any kind or nature, or impositions or agreed payments in lieu thereof or voluntary payments made in connection with the provision of governmental services or improvements of benefit to the Building or the Property, and all penalties and interest thereon (if due to Tenant's failure to make timely payments), assessed or imposed against the Premises or the Property (including without limitation any personal property taxes levied on the Property or on fixtures or equipment used in connection therewith), other than a federal or state income tax of general application. Taxes shall not include: any of the foregoing which are levied or assessed against the Property to the extent not attributable to the Term; inheritance, estate, gift, excise, franchise, income, gross receipts, capital levy, revenue, rent, state, payroll, stamp or profit taxes, however designated; or any interest or penalties resulting from the late payment of taxes by Landlord (except to the extent due to Tenant's failure to make timely payments), any environmental assessments, charges or liens arising in connection with the remediation of Hazardous Substances (as hereinafter defined) from the Premises or Building, the causation of which arose prior to the Commencement Date

of this Lease, or to the extent caused by Landlord, its agents, employees or contractors or any tenant of the Building (other than Tenant or its sublessees or assignees); costs or fees payable to public authorities in connection with any future construction, renovation and/or improvements to the Premises or Building other than the Finish Work, the Tenant Work or improvements to the Premises made by or for Tenant, including fees for transit, housing, schools, open space, child care, arts programs, traffic mitigation measures, environmental impact reports, traffic studies, and transportation system management plans (except to the extent included in the CAM Charges under the Declaration or in the definition of Operating Expenses); reserves for future Taxes; or Taxes allocable to the Parking Garage. If during the Term the present system of taxation of real or personal property shall be changed so that, in lieu of or in addition to the whole or any part of such tax there shall be assessed, levied or imposed on such property or Premises or on Landlord any kind or nature of federal, state, county, municipal or other governmental capital levy, income, sales, franchise, excise or similar tax, assessment, levy, charge or fee (as distinct from the federal and state income tax in effect on the Date of Lease) measured by or based in whole or in part upon Building valuation, mortgage valuation, rents, services or any other incidents, benefits or measures of real property or real property operations, then any and all of such taxes, assessments, levies, charges and fees shall be included within the term of Taxes; provided, however, that Tenant's obligation with respect to such substitute taxes shall be limited to the amount thereof as computed at the rates that would be payable if the Building and Property were the only property of Landlord. Taxes shall also include reasonable expenses, including reasonable fees of attorneys, appraisers and other consultants, incurred by Landlord in connection with any efforts to obtain abatements or reduction or to assure maintenance of Taxes for any year wholly or partially included in the Term, whether or not successful and whether or not such efforts involved filing of actual abatement applications or initiation of formal proceedings. Landlord shall endeavor to have the Property separately assessed from the remainder of the Project by subdivision, condominium regime, or otherwise. In the event that the Building is not taxed separately from the remainder of the Project, Landlord will allocate the taxes on a square footage basis or on such other basis that is reasonably appropriate and equitable. Any exemption from real property taxes for the Property due to any Tax Increment Financing Agreement entered into by the Tenant and the City of Boston shall be allocated entirely to Tenant (i.e. not Tenant's Pro Rata Share) so that Taxes payable by Tenant reflects such exemption.

Landlord shall, upon the written request of Tenant, commence a proceeding for abatement of real estate Taxes, provided Landlord shall thereafter have the right to settle such proceeding for the benefit of tenants in its reasonable discretion. [***]. In the event of any abatement of Taxes for a period occurring during the term of this Lease, Tenant shall be entitled to Tenant's Pro Rata Share of any refund (after deducting Landlord's or Tenant's, as applicable, reasonable cost in obtaining an abatement, if any, to the extent not previously included in Operating Expenses) but in any event such refund to Tenant shall not exceed the amounts on account of Taxes actually paid by Tenant with respect to the period subject to the abatement.

5.03. Personal Property Taxes. Tenant shall pay directly all taxes charged against Tenant's trade fixtures, furnishings, equipment, inventory, or other personal property (collectively, "Tenant Property"). Tenant shall use its best efforts to have Tenant Property taxed separately from the Property. Landlord shall notify Tenant if any of Tenant Property is taxed with the Property, and Tenant shall pay such taxes to Landlord within thirty (30) days of such notice.

ARTICLE 6. UTILITIES

6.01. Utilities. Tenant shall pay all charges for water, sewer, gas, electricity and other utilities or like services used or consumed on the Premises (each, a "Utility Service" and collectively the "Utility Services"), and used or consumed by all mechanical equipment serving the Premises, wherever located, whether called use charge, tax, assessment, fee or otherwise as the same become due. It is understood and agreed that Landlord shall be responsible for bringing each Utility Service described in the Base Building Work to a common switching point(s) at the Building as shown on the Base Building Work Plans (as defined in the Work Letter)(collectively, the "Utility Switching Points"). As part of the Base Building Work, Landlord shall install a direct meter to measure electricity serving the Premises and, with respect to all other Utility Services being installed as Base Building Work, a direct, sub- or "check" meter for measuring Tenant's consumption of such Utility Service. Tenant shall pay all costs and expenses associated with any separately metered utilities (such as electricity and telephone) directly to the applicable service provider. Tenant shall pay all costs and expenses associated with utility charges that are based on a check- or sub-metering metering installation, based on Landlord's reading of such meters, directly to Landlord at the same rate paid by Landlord to the provider thereof. Additional Rent for any check- or sub-metered utilities may be reasonably estimated monthly by Landlord, based on actual readings of sub – and "check" meters where applicable, and shall be paid monthly by Tenant within thirty (30) days after being billed with a final accounting based upon actual bills received from the utility providers following the conclusion of each fiscal year of the Building. Tenant shall pay for any and all costs to install and connect Utility Services from the Utility Switching Points to the Premises. Landlord shall be under no obligation as to any Utility Services beyond the foregoing responsibility to bring such Utility Services to the Utility Switching Points and as required in the completion of the Finish Work and Landlord shall not be liable for any interruption or failure in the supply of any utilities or Utility Services, except to the extent expressly set forth below.

To the extent permitted by law, Landlord shall have the right at any time and from time to time during the Term to contract for or purchase one or more Utility Services not being obtained directly by Tenant from any company or third party providing Utility Services ("Utility Service Provider"), subject to Tenant approval of the proposed Utility Service Provider, such approval not to be unreasonably withheld, conditioned or delayed, and provided that such alternate Utility Service Provider shall be retained on market terms and conditions. In requesting Tenant consent to a proposed Utility Service

Provider, Landlord shall provide Tenant with reasonable documentation regarding the proposed contract to permit Tenant to determine whether such terms meet the foregoing standard. The parties acknowledge that, initially, the only Utility Services not being obtained directly by Tenant are water, sewer and gas, and the City of Boston and Boston Gas Company are the approved initial providers of such respective Utility Services. Provided there shall be no unreasonable interference with Tenant's operations within the Premises, Tenant agrees reasonably to cooperate with Landlord and the Utility Service Providers and at all times as reasonably necessary, and on reasonable advance notice, shall allow Landlord and the Utility Service Providers reasonable access to any utility lines, equipment, feeders, risers, fixtures, wiring and any other such machinery or personal property within the Premises and associated with the delivery of Utility Services.

***].

***].

ARTICLE 7. INSURANCE

7.01. Coverage. Tenant shall maintain during the Term insurance for the benefit of Tenant and Landlord (as their interests may appear) from insurers rated at least A-/X by A. M. Best (subject to the provisions of Section 7.02, below), with terms and coverages reasonably satisfactory to Landlord and with such increases in limits as Landlord may from time to time reasonably request consistent with requirements at other Comparable Properties. Initially, Tenant shall maintain the following:

(a) Commercial general liability insurance naming Landlord, Landlord's management agents and Landlord's mortgagee(s) from time to time as additional insureds, with coverage for premises/operations, personal injury, and contractual liability with combined single limits of liability of not less than \$10,000,000 for bodily injury and property damage per occurrence with a per location aggregate.

(b) Property insurance that shall be primary on the Tenant Work and Finish Work and Tenant's property, including its laboratory equipment, office furniture, trade fixtures, office equipment, inventory, merchandise and all other items of Tenant Property, in an amount adequate to cover their replacement cost, including a vandalism and malicious mischief endorsement, and sprinkler leakage coverage; business interruption insurance, loss of income and extra expense insurance covering all perils covered by a standard, "Special Form" (as defined from time-to-time by the insurance industry) property insurance policy. Such insurance, with respect only to Tenant Work, Finish Work, and Tenant's BBW, as defined in Exhibit 10.03, shall name Landlord, and Landlord's mortgagee(s) from time to time as additional loss payees as their interests may appear. Such insurance shall cover special perils including theft and such other risks Landlord may from time to time reasonably

designate if such risks are required by landlords to be insured by tenants of similar properties under similar circumstances, for the full replacement cost value of the covered items and in amounts that meet any co-insurance clause of the policies of insurance, with a deductible amount not to exceed [***].

(c) Workers' compensation insurance with statutory benefits and employers' liability insurance in the following amounts: each accident, \$1,000,000; disease (policy limit), \$1,000,000; disease (each employee), \$1,000,000.

In addition, Tenant shall carry such other coverages, and in such amounts, as are required by Landlord from time to time, so long as such coverages and amounts are consistent with Comparable Properties. Prior to the Date of Lease and on each anniversary of that date (or on the policy renewal date), Tenant shall give Landlord certificate(s) evidencing such coverage and with an affirmative statement of the agent issuing such certificate that it may not be canceled or coverage limits reduced without at least thirty (30) days' prior written notice to Landlord and Tenant. Liability insurance maintained by Tenant shall be deemed to be primary insurance, and any liability insurance maintained by Landlord shall be deemed secondary to it.

Tenant may use blanket or excess umbrella coverage to satisfy any of the requirements of this Section 7.01 provided that the Premises is specifically named in any blanket coverage and the limits thereon are available on a per property basis and on such basis comply with the required limits set out herein and that any umbrella coverage is provided on a "following form" basis.

7.02. Action Increasing Rates. Tenant shall comply with Sections 9.01, 9.02, 9.03, and 9.04 and in addition shall not, directly or indirectly, use the Premises in any way that is prohibited by law (nothing in this sentence being deemed to relieve Landlord of its obligations under Sections 9.02 and 9.03). If Tenant, directly or indirectly, uses the Premises in any way that jeopardizes any insurance coverage carried by Landlord or Tenant as reasonably documented by evidence provided by Landlord to Tenant, then Tenant shall, if such use is in violation of the other terms and conditions of this Lease, promptly stop such use. Tenant shall, in any event, reimburse Landlord upon demand for all of Landlord's costs incurred in providing any insurance to the extent attributable to any special endorsement or increase in premium resulting from the particular business or operations of Tenant, and any special or extraordinary risks or hazards resulting therefrom, including without limitation, any risks or hazards associated with the generation, storage and disposal of so-called biohazards or medical waste. Notwithstanding the foregoing, Tenant's use of the Premises for the Permitted Uses, generally (as opposed to Tenant's particular use) in compliance with the terms and conditions of this Lease shall not be deemed legally prohibited or dangerous to people or property for the purposes of this Section 7.02. Tenant shall cure any breach of this Lease on account of Tenant's failure to carry the insurance required by this Section 7.02 within ten (10) days after notice from Landlord and Tenant shall have no further notice or cure right under Article 14 for any such breach.

The parties acknowledge and agree that, as of the date hereof, their respective insurers maintaining the property and commercial general liability insurers coverages required hereunder currently have an A.M. Best rating of [***] (i.e. in excess of the requirement otherwise set forth in this Article Seven). If at any time during the term of this Lease the Landlord's or Tenant's applicable insurance carriers no longer meet the [***] standard (but otherwise meets the [***] standard set forth herein), then, upon at least 30 days' prior written notice from the other party, such party shall use commercially reasonable efforts to obtain such coverages from an insurer meeting the [***] standard at the sole cost and expense of the requesting party (to the extent that any such change in carrier results in additional costs) provided that nothing in this sentence shall obligate either party to change its insurance carrier if it would adversely affect coverages being provided to any other property under any blanket policy, result in a default under any other agreement to which the insured is a party, or otherwise be prohibited by the terms of the applicable insurance policy (and provided that in no event can any such request be made more than once in any 12-month period). [***].

The parties shall direct the Boston office of the AAA to appoint an arbitrator who shall have [***] and who has provided such services to buildings and property [***] and who shall not be affiliated with either Landlord or Tenant and has not worked for either party or its affiliates at any time during the prior five (5) years. [***].

The arbitration shall be conducted in accordance with the expedited commercial arbitration rules of the AAA insofar as such rules are not inconsistent with the provisions of this Lease (in which case the provisions of this Lease shall govern). [***].

[***]. The arbitrator's decision shall be final and binding on the parties.

7.03. Waiver of Subrogation. Landlord and Tenant each waive any and every claim for recovery from the other for any and all loss of or damage to the Property or any part of it, or to any of its contents, to the extent such loss or damage is covered by property insurance or would have been covered by property insurance required hereunder. Landlord waives any and every such claim against Tenant that would have been covered had the insurance policies required to be maintained by Landlord by this Lease been in force, to the extent that such loss or damage would have been recoverable under such policies. Tenant waives any and every such claim against Landlord that would have been covered had the insurance policies required to be maintained by Tenant under this Lease been in force, to the extent that such loss or damage would have been recoverable under such policies. This mutual waiver precludes the assignment of any such claim by subrogation (or otherwise) to an insurance company (or any other person), and Landlord and Tenant each agree to give written notice of this waiver to each insurance company that has issued or shall issue any property insurance policy to it, and to have the policy properly endorsed, if necessary, to prevent invalidation of the insurance coverage because of this waiver.

7.04. Landlord's Insurance. Landlord shall purchase and maintain during the Term with insurance companies rated at least [***] by A.M. Best (subject to the provisions of Section 7.02, above) the following: (i) commercial general liability insurance for incidents occurring in the common areas, with coverage for premises/operations, personal and advertising injury, products/completed operations and contractual liability with combined single limits of liability of not less than \$10,000,000 for bodily injury and property damage per occurrence; and (ii) All Risk property insurance covering property damage to the Building (other than Tenant Work), and loss of rental income (covering off-site events to the extent then available, if such coverage is available at commercially reasonable rates), covering special perils including theft for the full replacement cost value of the Building above foundation walls, [***], with co-insurance waived by inclusion of an agreed amount endorsement together with such other coverages and risks as Landlord shall reasonably decide or a mortgagee or ground lessor may require. As set forth in Section 4.02(a), a portion of the cost thereof shall be borne by Tenant. In addition, Landlord shall name Tenant as an additional insured (except with respect to acts of Tenant Parties) on its Pollution Legal Liability policy and any replacement policy obtained by Landlord from time to time during the term hereof (any such policy being referred to herein as "Environmental Insurance").

**ARTICLE 8.
OPERATING EXPENSES**

8.01. Operating Expenses. "Operating Expenses" shall mean all costs and expenses associated with the operation, management, maintenance and repair of the Property, together with the Building's share of costs associated with the operation, management, maintenance and repair of the common areas of the Project. Operating Expenses include without limitation costs of: compliance with Landlord's obligations under Section 10.03(c); planting and landscaping; snow removal; utility, water and sewage services; maintenance of signs (other than tenants' signs); supplies, materials and equipment purchased or rented; total wage and salary costs paid to, and all contract payments made on account of, all persons engaged in the operation, maintenance, security, cleaning and repair of the Property, including Social Security, old age and unemployment taxes and so-called "fringe benefits" prorated to the extent engaged in such services to or for the Building; services furnished to tenants of the Property, generally; maintenance, repair and replacement of Building equipment and components; utilities consumed and expenses incurred in the operation, maintenance and repair of the Property including, without limitation, oil, gas, hot/chilled water, and electricity (other than electricity to tenants in their demised premises if Tenant is directly responsible for payment under this Lease on account of electricity consumed by Tenant); workers' compensation insurance and property, liability and other insurance premiums; personal property taxes; rental or lease payments paid by Landlord for rented or leased personal property used in the operation or maintenance of the Property; fees for required licenses and permits; refuse removal; security; an administrative fee in the initial amount of [***] per rentable square foot, increasing by [***] per rentable square foot after the third (3rd) Lease Year and every third (3rd) Lease Year thereafter, subject to a cap of [***] per rentable square foot during

the initial term of this Lease and then increasing to a flat [***] per rentable square foot (i.e. without further increases) effective on the commencement of the Extension Term; Landlord's "Percentage Share" of "CAM Charges" (as defined in the Declaration); any periodic assessments, both regular and special, for which Landlord is or becomes responsible under the Project Documents; and costs incurred by Landlord to comply with the terms and conditions of any governmental approvals affecting operations of the Property (including without limitation the Project Documents). Landlord may use third parties or affiliates to perform any of these services (subject to the limitations on Operating Expenses attributable to services performed by affiliates expressly set forth in the immediately following paragraph), and the cost thereof shall be included in Operating Expenses, provided that Operating Expenses shall not include any property management fee, other than the administrative fee described above. Landlord shall reasonably allocate the cost of any Operating Expenses incurred jointly for the Property and any other property. In addition, if Landlord from time to time repairs or replaces any existing improvements or equipment or installs any new improvements or equipment to the Building (including without limitation energy conservation improvements or other improvements), then the cost of such items that are treated as capital expenses pursuant to generally accepted accounting principles (to the extent not excluded below) shall be amortized over their useful life, as reasonably determined by Landlord, together with interest at an actual or imputed interest rate (at the prime rate of interest then being charged by the Bank of America or its successors, plus 4%) and included in Operating Expenses.

Notwithstanding the foregoing, Operating Expenses shall not include: the cost of designing and constructing the Landlord Work; the costs of initial contributions, exactions, and costs of a capital nature, for which Landlord is or becomes responsible under the Project Documents (except (i) housing exactions in the amount of \$5.49 per square foot of gross floor area, as defined in the Boston Zoning Code, of the Building, payable in 12 equal annual installments following the issuance of a certificate of occupancy in accordance with the "Development Impact Project Agreement" listed on Exhibit 2.01(f) and (ii) such costs to the extent included in the CAM Charges paid to FPOC for administration of the Common Areas and Facilities); and costs incurred by Landlord in order to construct the Building and any other improvements at the Property and Project in compliance with the terms and conditions of any governmental approvals affecting operations of the Property (including without limitation the Project Documents), the cost of casualty repairs to the extent covered by insurance (except for reasonable deductibles paid by Landlord under insurance policies maintained by Landlord); costs associated with the operation of the business of Landlord and/or the sale and/or financing of the Property, as distinguished from the cost of Property operations, maintenance and repair; any ground or underlying lease rental; costs of disputes between Landlord and its employees, tenants or contractors; bad debt expenses and interest, principal, points and fees on debts or amortization on any mortgage or other debt instrument encumbering the Building or the Property; costs incurred by Landlord to the extent that Landlord is reimbursed by insurance proceeds or is otherwise reimbursed by third parties; expenses in

connection with services or other benefits that are not offered to Tenant or to the extent that any other tenant is charged for directly; management fees paid or charged by Landlord in connection with the management of the Building; amounts paid to Landlord or to subsidiaries or affiliates of Landlord for goods and/or services in the Building to the extent the same exceeds the costs of such goods and/or services rendered by unaffiliated third parties on a competitive basis; costs associated with the operation of the business of the entity which constitutes Landlord as the same are distinguished from the costs of operation of the Building, including accounting and legal matters; costs of selling, syndicating, financing, mortgaging or hypothecating any of Landlord's interest in the Building; salaries of executives and owners not directly employed in the management/operation of the Building; the cost of work done (including without limitation leasehold improvements and redecoration work) or services furnished by Landlord exclusively for a particular tenant; the cost of soil and groundwater testing, remediation and other response actions, except to the extent the need therefor arises from any negligence or willful misconduct of Tenant or Tenant's employees, agents or contractors, or any default of Tenant under this Lease; advertising and other fees and costs (including without limitation legal, architectural and brokerage fees and tenant improvement allowances) incurred in procuring tenants; costs incurred in connection with causing the Base Building Work to comply with Legal Requirements existing as of the Commencement Date; repairs, alterations, additions, improvements or replacements made to rectify or correct any defect in the design, materials or workmanship of the Base Building Work or common areas during any warranty period (to the extent covered by warranty) or to comply with any requirements of any governmental authority in effect as of the Commencement Date; costs of repairs, restoration, replacements or other work occasioned by (i) fire, windstorm or other casualty and either (a) paid by insurance required to be carried by Landlord under this Lease, or (b) otherwise paid by insurance (not including any deductible paid by Landlord) then in effect obtained by Landlord, (ii) the exercise by governmental authorities of the right of eminent domain, whether such taking be total or partial, to the extent that Landlord is compensated by such governmental authority for such repairs, restoration, replacements or other work, or (iii) the act of any other tenant in the Building, or any other tenant's agents, employees, licensees or invitees to the extent the applicable cost is recovered from such person; Landlord's general overhead and administrative expenses not related to the Building; non-cash items, such as deductions for depreciation and amortization of the Building (except with respect to capital expenditures as specified above) and the Building equipment, or interest on capital invested; costs incurred due to violation by Landlord or any other tenant in the Building of the terms and conditions of any lease; salaries, wages, or other compensation to any employee of Landlord to the extent not assigned to the operation, management, maintenance, or repair of the Building, including accounting or clerical personnel and other overhead expenses of Landlord (except to the extent providing services, such as accounting, for which Landlord would otherwise use a third-party provider); costs of the initial construction of the Base Building Work; repair of defects in the Base Building Work identified in the one year period after substantial completion of the Base Building Work; any expenses related to real estate taxes,

insurance, and all expenses for the construction, operation, repair and maintenance of the Parking Garage. None of the foregoing exclusions from Operating Expenses shall be deemed to entitle Tenant to an exclusion on account of any portion of CAM Charges, Tenant acknowledging that Landlord may vote as part of FPOC on matters affecting the CAM Charges but does not control FPOC. [***].

Tenant shall pay Tenant's Pro Rata Share of Operating Expenses in accordance with Section 4.02.

**ARTICLE 9.
USE OF PREMISES**

9.01. Permitted Uses. Tenant may use the Premises only for the Permitted Uses described in Section 1.10. Tenant shall keep the Premises equipped with appropriate safety appliances to the extent required by applicable laws or insurance requirements relating to Tenant's use of the Premises. Tenant shall comply with Landlord's rules and regulations (the "Rules and Regulations") promulgated from time to time, provided the same are not inconsistent with or in limitation of the provisions of this Lease and are reasonable, and Tenant shall use reasonable efforts to cause its agents, contractors, customers and business invitees to comply therewith. Landlord's initial Rules and Regulations are attached hereto as Exhibit 9.01.

9.02. Indemnification. From and after the Commencement Date, Tenant shall assume exclusive control of all areas of the Premises, including all improvements, utilities, equipment, and facilities therein. Tenant is responsible for the Premises and all of Tenant's improvements, equipment, facilities and installations, wherever located on the Property and all liabilities, including without limitation tort liabilities incident thereto. Tenant shall indemnify, save harmless and defend Landlord, and its members, managers, officers, directors, mortgagees, and employees (collectively, "Indemnitees") from and against any and all claims, damages, losses, penalties, costs, expenses and fees (including reasonable attorneys' fees) arising in whole or in part out of (i) any injury, loss, theft or damage (except to the extent due to the negligence or willful misconduct of the Indemnitees and their respective agents, contractors or Landlord or its employees) to any person or property while on or about the Premises or, to the extent caused by the negligence or willful misconduct of Tenant, the Property; (ii) any condition within the Premises, or, to the extent caused by the negligence or willful misconduct of Tenant, the Property and, in each, except for conditions existing prior to the date that Tenant first takes occupancy of the Premises; and (iii) the use of the Premises by, or any act or omission of, Tenant or persons claiming by, through or under Tenant, or any of its agents, employees, independent contractors, suppliers or invitees.

Landlord shall indemnify, save harmless and defend Tenant, and its members, managers, officers, directors, and employees from and against any and all claims, damages, losses, penalties, costs, expenses and fees (including without limitation reasonable legal fees) arising in whole or in part out of any injury, loss, theft or damage

(except to the extent due to the negligent acts or omissions of Tenant, its employees, contractors or agents) to any person or property while on or about the common areas of the Property to the extent resulting from the negligent acts or omissions or willful misconduct of Landlord, its employees, agents or contractors.

The provisions of this Section 9.02 shall survive the expiration or earlier termination of this Lease.

9.03. Compliance With Legal Requirements. Tenant shall not cause or permit the Premises, or cause (or permit Tenant Parties to cause) the portions of the Property other than the Premises, to be used in any way that violates any law, code, ordinance, restrictive covenant, encumbrance, governmental regulation, order, permit, approval, Project Document, or any provision of this Lease (each a "Legal Requirement", and collectively the "Legal Requirements"), or constitutes a nuisance or waste, and shall comply with all Legal Requirements applicable to the Premises and Property. Tenant shall obtain and pay for all permits and shall promptly take all actions necessary to comply with all Legal Requirements, including without limitation the Occupational Safety and Health Act, applicable to Tenant's use of the Premises. Notwithstanding the foregoing two sentences to the contrary, Landlord shall be responsible for the compliance of the Base Building Work and the Finish Work with all Legal Requirements as of the Commencement Date. Tenant shall maintain in full force and effect all certifications or permissions required for Tenant's operations at the Premises. Tenant shall be solely responsible for procuring and complying at all times with any and all necessary permits, certifications, permissions and the like and complying with all reporting requirements directly relating or incident to: the conduct of its activities on the Premises; its scientific experimentation; transportation, storage, handling, use and disposal of any chemical or radioactive or bacteriological or pathological substances or organisms or other hazardous wastes or environmentally dangerous substances or materials or medical waste. Within ten (10) days of a request by Landlord, which request shall be made not more than once during each period of twelve (12) consecutive months during the Term hereof, unless otherwise requested by any mortgagee of Landlord, Tenant shall furnish Landlord with copies of all such permits that Tenant possesses or has obtained together with a certificate certifying that such permits are all of the permits that Tenant possesses or has obtained with respect to the Premises. Tenant shall promptly give notice to Landlord of any written orders, warnings or violations relative to the above received from any federal, state, or municipal agency or by any court of law and shall promptly comply with and cure the conditions causing any such violations in accordance with applicable Legal Requirements. Tenant shall not be deemed to be in default of its obligations under the preceding sentence to promptly cure any condition causing any such violation in the event that, in lieu of such cure, Tenant shall contest the validity of such violation by appellate or other proceedings permitted under applicable law, provided that: (i) any such contest is made reasonably and in good faith, (ii) Tenant makes provisions, including, without limitation, posting bond(s) or giving other security, reasonably acceptable to Landlord to protect Landlord, the Building and the Property from any liability, costs, damages or expenses arising in connection with such violation and failure

to cure, (iii) Tenant shall agree to indemnify, defend (with counsel reasonably acceptable to Landlord) and hold Landlord harmless from and against any and all liability, costs, damages, or expenses arising in connection with such condition and/or violation, (iv) Tenant shall promptly cure any violation in the event that it exhausts all available appeals without success, and (v) Tenant shall certify to Landlord's reasonable satisfaction that Tenant's decision to delay such cure shall not result in any actual or threatened bodily injury or property damage to Landlord, any tenant or occupant of the Building or the Property, or any other person or entity.

Landlord shall be responsible for the compliance of the structural elements, roof and building systems to the Utility Switching Points of the Building, and the common areas of the Building and the Property, with all Legal Requirements except to the extent compliance is required due to Tenant's particular use of the Premises, as opposed to the Permitted Uses generally.

9.04. Hazardous Substances. "Environmental Law" means all statutes, laws, rules, regulations, codes, ordinances, authorizations and orders of federal, state and local public authorities pertaining to any Hazardous Substances or to environmental compliance, contamination, cleanup or disclosures of any release or threat of release to the environment, of any Hazardous Substances, including, without limitation, the Toxic Substances Control Act, 15 U.S.C. § 2601, et seq.; the Clean Water Act, 33 U.S.C. § 1251, et seq.; the Clean Air Act, 42 U.S.C. § 7401, et seq.; the Safe Drinking Water Act, 42 U.S.C. § 300f-300j, et seq.; the Federal Water Pollution Control Act, 33 U.S.C. § 1321, et seq.; the Solid Waste Disposal Act, 42 U.S.C § 6901, et seq.; the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. Section 9601 et seq.; the Federal Resource Conservation and Recovery Act, 42 U.S.C. Section 6901 et seq.; the Superfund Amendments and Reauthorization Act of 1986, Public Law No. 99-499 (signed into law October 17, 1986); M.G.L. c.21C; and oil and hazardous materials as defined in M.G.L. c.21E, as any of the same are from time to time amended, and the rules and regulations promulgated thereunder, and any judicial or administrative interpretation thereof, including any judicial or administrative orders or judgments, and all other federal, state and local statutes, laws, rules, regulations, codes, ordinances, standards, guidelines, authorizations and orders regulating the generation, storage, containment or disposal of any Hazardous Substances, including but not limited to those relating to lead paint, radon gas, asbestos, storage and disposal of oil, biological, chemical, radioactive and hazardous wastes, substances and materials, and underground and above-ground oil storage tanks; and any amendments, modifications or supplements of any of the foregoing.

"Hazardous Substances" means, but shall not be limited to, any hazardous substances, hazardous waste, environmental, biological, chemical, radioactive substances, oil, petroleum products and any waste or substance, which because of its quantitative concentration, chemical, biological, radioactive, flammable, explosive, infectious or other characteristics, constitutes or may reasonably be expected to constitute or contribute to a danger or hazard to public health, safety or welfare or to the environment, including

without limitation any asbestos (whether or not friable) and any asbestos-containing materials, lead paint, waste oils, solvents and chlorinated oils, polychlorinated biphenyls (PCBs), toxic metals, etchants, pickling and plating wastes, explosives, reactive metals and compounds, pesticides, herbicides, radon gas, urea formaldehyde foam insulation and chemical, biological and radioactive wastes, or any other similar materials that are regulated by any Environmental Law.

Tenant may generate, produce, bring upon, use, store or treat Hazardous Substances in the Premises in connection with its operations at the Premises provided that (x) such use is in compliance with all applicable Legal Requirements, including without limitation Environmental Laws, and in compliance with the terms and conditions of this Lease, (y) as to any Hazardous Substances, processes, or procedures not then subject to Legal Requirements, such activities are conducted in accordance with standard laboratory practices for tenants conducting similar operations in Comparable Properties, and do not endanger or create a hazard to public health, safety or welfare or to the environment, within the Building or in the area of the Property, generally, and (z) in no event shall Tenant generate, produce, bring upon, use, store or treat Hazardous Substances with a risk category higher than Biosafety Level 2 as established by the Department of Health and Human Services (“DHHS”) and as further described in the DHHS publication Biosafety in Microbiological and Biomedical Laboratories (5th Edition) (as it may be or may have been further revised, the “BMBL”) or such nationally recognized new or replacement standards as may be reasonably selected by Landlord if applicable to similar facilities in the City of Boston, provided that such new or replacement standards may update requirements but shall not be materially more restrictive on Tenant’s use than Biosafety Level 2 as of the Date of Lease. In all events Tenant shall comply with all applicable provisions of the BMBL. Furthermore, beginning on the Commencement Date, on an annual basis or upon Landlord’s request following the occurrence of any Environmental Incident, or on no more than one additional occasion during any year if reasonably requested by Landlord’s mortgagee(s) in connection with any financing or refinancing of the Property, Tenant shall provide Landlord with a list detailing the types and amounts of all Hazardous Substances being generated, produced, brought upon, used, stored, treated or disposed of by or on behalf of Tenant in or about or on the Premises, Building or Property and, upon Landlord’s request, copies of any manifests or other federal, state or municipal filings by Tenant with respect to such Hazardous Substances (redacted to protect confidential information to the extent such redactions are permitted by the applicable federal, state or municipal authorities having jurisdiction over such filings). Tenant agrees to pay the reasonable cost of any environmental inspection or assessment requested by any lender that holds a security interest in the Property or this Lease, or by any insurance carrier, to the extent that such inspection or assessment pertains to any release, reasonable threat of release, contamination, or a loss or damage or determination of condition related to the foregoing (together, “Environmental Incidents”) in the Premises other than Environmental Incidents arising prior to the Commencement Date or migrating to the Premises from some other part of the Building or Property due to

environmental conditions existing prior to the Commencement Date or through no fault, act or omission of Tenant.

If any transportation to or from, or any storage, use or disposal of Hazardous Substances on or about, the Property by any Tenant Party results in any escape, or release, reasonable threat of release, contamination of the soil or surface or ground water or any loss or damage to person or property (any such event, a "Tenant Environmental Incident"), Tenant agrees to: (a) notify Landlord immediately of the occurrence; (b) after consultation with Landlord, clean up the occurrence in full compliance with all applicable Environmental Laws and (c) indemnify, save harmless and defend the Indemnitees from and against any and all claims, damages, losses, penalties, costs, expenses and fees (including reasonable attorneys' fees) arising in whole or in part out of such occurrence. In the event of such occurrence, Tenant agrees to cooperate fully with Landlord and provide such documents, affidavits, and information and take such actions as may be requested by Landlord from time to time (1) to comply with any Environmental Law or Legal Requirement, (2) to comply with any request of any mortgagee, insurer or tenant, and/or (3) for any other reason deemed necessary by Landlord in its sole discretion. In the event of any such occurrence that is required to be reported to a governmental authority under any Environmental Law or Legal Requirement, Tenant shall simultaneously deliver to Landlord copies of any notices given or received by Tenant and shall promptly pay when due any fine or assessment against Landlord, Tenant, or the Premises or Property relating to such occurrence.

Tenant acknowledges that it has received and reviewed certain environmental reports listed on Exhibit 9.04 (the "Environmental Reports") regarding the condition of the Property and that, upon the Commencement Date, subject to the provisions of this paragraph, Tenant shall accept the Premises in the condition existing as of the date of this Lease with respect to the presence of Hazardous Substances. [***]. For the purposes of this paragraph, "response" has the meaning set forth in Section 2 of Chapter 21E of the Massachusetts General Laws. Expenses, losses and liabilities, as described above, shall include, without limitation (i) any and all expenses that Tenant may incur to comply with any Environmental Laws on account of such Occurrences; (ii) any and all costs that Tenant may incur in studying or remedying any Occurrences at or arising from the Premises, Building or the Property; (iii) any and all costs that Tenant may incur in studying, removing, disposing or otherwise addressing any Hazardous Substances on account of such Occurrences; (iv) any and all fines, penalties or other sanctions assessed upon Tenant on account of such Occurrences; (v) any and all reasonable legal and professional fees and costs incurred by Tenant in connection with the foregoing; and (vi) losses due to bodily injury or physical damage to property incurred by Tenant due to Landlord's failure to undertake response actions required pursuant to, and within time periods required by, Legal Requirements on account of any such Occurrences. Tenant's right to the foregoing indemnities shall be conditioned on Tenant giving prompt written notice to Landlord of any claim, demand or threat of claim or demand made upon Tenant by any governmental agency or other person. Landlord shall have the right, but not any obligation, to control the defense of any such matter which could result in an

indemnification obligation by Landlord under this provision. Landlord shall be subrogated to any and all claims, rights and defenses Tenant has against other persons with respect to any such matter, and Tenant shall not settle, compromise or adjust any such claim or right or any indemnified matter without the prior written consent of Landlord.

The provisions of this Section 9.04 shall survive the expiration or earlier termination of this Lease.

9.05. Signs and Auctions. Tenant, at Tenant's expense and subject to Landlord's reasonable approval with respect to the location and design, shall have the exclusive right to install and maintain (i) reasonable amounts of non-retail signage in the Building lobby identifying Tenant and (ii) reasonable amounts of non-retail exterior signage on the Building identifying Tenant to the extent permitted by all Legal Requirements. Tenant shall be entitled, at Tenant's sole cost and expense, to Tenant's Pro Rata Share of any monument signage to which the Building has rights in the Project. Tenant shall not conduct or permit any auctions or sheriff's sales at the Property. Landlord shall have the reserved right to install directional signage in the main lobby of the Building to direct visitors to the Parking Garage, [***] and to install signage identifying Landlord and Landlord's property manager at the Building (but not within the Premises). Landlord shall cooperate with Tenant as is reasonably required, in Landlord's capacity as owner of the Building, to apply for and obtain approvals from municipal authorities for any exterior signage pursuant to clause (ii) above, without any obligation for Landlord to incur any out-of-pocket expenses on account of such cooperation except to the extent that Tenant reimburses Landlord for the same.

9.06. Landlord's Access. Landlord or its agents may enter the Premises at all reasonable times (i) to show the Premises to potential and actual buyers, investors, lenders, or, in the last eighteen (18) months of the Term (provided that Tenant has not timely exercised its right to extend the Term pursuant to Section 3.03), prospective tenants; (ii) to inspect and monitor Tenant's compliance with Legal Requirements governing Hazardous Substances, and to inspect the Premises to determine whether Tenant is in compliance with the terms of this Lease, but any entries pursuant to this clause (ii) shall require at least two (2) business days' prior notice, shall be during normal business hours (unless otherwise agreed by Tenant) and shall not occur more often than once annually during the term of this Lease except where a notice of default has been provided to Tenant or where such inspections are required by Landlord's mortgagees or insurers; (iii) for purposes described in Sections 2.01(c), 9.04 and/or 10.04(b), or (iv) for any other purpose Landlord reasonably deems necessary in connection with the exercise of Landlord's rights and obligations under this Lease. Landlord shall give Tenant reasonable prior notice (which shall be not less than 24 hours and may be via e-mail to vertex_operations@vrtx.com or an alternative e-mail address provided to Landlord in writing from time to time) of such entry. Landlord shall cooperate with Tenant to schedule any such entry and activity at a time designed to reduce any inconvenience to Tenant. Tenant shall have the right to have a representative of Tenant accompany

Landlord during any such entry, but entry shall not be prohibited if Tenant fails to provide an accompanying representative (in the event of which failure, Landlord shall attempt at least one phone call to each Tenant's Designated Representative (as defined below), if any then exists, to notify Tenant of such failure prior to any entry). However, in case of emergency, Landlord may enter any part of the Premises with such notice as is reasonably practicable or without prior notice if notice is impracticable and without Tenant's representative, if necessary, and shall, if no notice was provided (Landlord agreeing that it shall endeavor to provide an e-mail notice to the e-mail address provided above), promptly notify Tenant of the nature and extent of such entry. During Landlord's access of the Premises, Landlord shall comply with reasonable security provisions required by Tenant to preserve the confidential nature of information in whatever form maintained within the Premises. For safety, security, confidentiality or compliance with law purposes, Tenant may designate certain limited areas as limited access areas to be shown on plans provided by Tenant to Landlord and updated by Tenant as reasonably necessary in the future to which Landlord and related parties shall not have access except in an emergency or as otherwise reasonably necessary and then only in accordance with a mutually agreed-upon plan to protect Tenant's reasonable concerns regarding safety, security and confidentiality, provided that such limited access areas shall be reasonably identified and necessary to protect the health of persons or security of confidential and proprietary information. Landlord and Tenant will develop a protocol limiting and controlling the distribution of Landlord's keys or other access devices to the Premises. "Tenant's Designated Representative" shall mean (a) a person with an office at the Premises identified by Tenant in writing to Landlord from time to time as the primary point of contact for Landlord's access to the Premises and (b) the on-site supervisor of Tenant's private security, if any, that is then on duty. Tenant shall provide Landlord with a phone number for Tenant's Designated Representative with any notice designating such person, and any change in the identification of Tenant's Designated Representative shall take effect five (5) business days following delivery of such notice to Landlord.

9.07. Security. Tenant shall be solely responsible, at Tenant's sole cost and expense, to provide any security measures that Tenant requires within, and at the entries to, the Premises. Tenant shall provide Landlord with a written description of its security plan from time to time, outlining Tenant's security measures to the extent applicable to visitors, guests, and others entitled to access the Premises (Tenant being permitted to redact from such security plan any Confidential Information, as defined in Section 16.14). Tenant's security plan shall include the designation of a person or persons who shall be on the Premises 24 hours, seven days a week to the extent required for the purposes of fulfilling municipal fire command obligations (Landlord acknowledging that such person may be a third-party contractor or designee thereof). Tenant shall have reasonable access to the Property outside the Premises to install and operate any such security measures, including installation of security video cameras in the Premises and Common Areas and Facilities located on the Property (and the retail loading docks on the Property), subject to Landlord's reasonable approval. In no event may Tenant's security measures restrict or impede access to the Parking Garage through the main lobby of the Building.

Landlord shall develop, or cause to be developed by FPOC, jointly with Tenant and subject to Tenant approval, such approval not to be unreasonably withheld, conditioned or delayed, a commercially reasonable security and operations plan (the "Security Plan") for the exterior perimeter and common areas of the Building and the Parking Garage. Operating Costs of security outside of the Premises related to Tenant's use of the Premises that are in excess of those typically anticipated for the other uses at the Project will be allocated entirely to Tenant. Landlord shall provide for security to the Property in accordance with the Security Plan. Notwithstanding the fact that Landlord provides security services at the Property at any time during the Term, to the extent permitted by applicable law, Landlord shall not be deemed to owe Tenant, or any person claiming by, through or under Tenant, any special duty or standard of care as a result of Landlord's provision of such security services other than the duty or standard of care that would have applied without such services and in no event shall Landlord be responsible for the efficacy of any such security measures.

Tenant acknowledges and agrees that all maintenance, repair, replacement, operation and administration of the "Fan Pier Project Common Areas and Facilities" (as defined in the Declaration) are under the control of the Developer or FPOC and that the Developer's or FPOC's election to provide mechanical surveillance or to post security personnel in the Fan Pier Project Common Areas and Facilities is subject to the Developer's or FPOC's sole discretion. Landlord will provide, and cause Landlord affiliates owning parcels within the Project to provide, in the Declaration a definition of "First Class Standard" for the maintenance and operation of Fan Pier Project Common Areas and Facilities, as follows: "the standard according to which first class multi-use developments including office, research laboratory, hotel and residential buildings therein of a size and otherwise reasonably comparable to the Project are then being maintained in major urban areas within the United States. Without limiting the generality of the foregoing, with respect to the level of security in the Fan Pier Project Common Areas and Facilities, First Class Standard shall not be less than the following from and after the Substantial Completion of the Building: a sufficient number of trained security personnel shall patrol the Fan Pier Common Areas and Facilities so as to walk the perimeter of all of the Initial Improvements (as defined in the Declaration) and through the Open Space Areas (as defined in the Declaration) at intervals of approximately every hour on a 24 hour/7 days per week basis. Such security personnel shall be equipped with communication equipment for contacting 911 in case of emergency, and shall log their rounds using fobs such as Detex system." The Landlord shall exercise reasonable efforts to prevent future amendment of the Declaration to reduce this level of security. Notwithstanding anything to the contrary contained in this Lease, Landlord's sole responsibility with respect to the maintenance, repair, replacement, operation, administration or the provision of surveillance or security in the Fan Pier Project Common Areas and Facilities shall be to use commercially reasonable efforts to enforce the obligations of the Developer or FPOC under the Declaration. Tenant shall hold Landlord harmless from any claim concerning the failure to maintain any portion of the Fan Pier Project Common Areas and Facilities, other than a failure of Landlord to use

commercially reasonable efforts to enforce the Developer or FPOC's obligations under the Project Documents or to the extent such failure results from a failure to fund Landlord's share of assessments under the Declaration (other than as a result of Tenant's default).

ARTICLE 10.
CONDITION AND MAINTENANCE OF PREMISES AND PROPERTY

10.01. Condition of Premises and Property. Tenant acknowledges that except for any express representations in this Lease, neither Landlord nor any person acting under Landlord has made any representation as to the condition of the Property or the suitability of the Property for Tenant's intended use. Tenant represents and warrants that Tenant has made its own inspection and inquiry regarding the Property and is not relying on any representations of Landlord or any Broker or persons acting under either of them except for any express representations in this Lease.

10.02. Exemption and Limitation of Liability.

(a) Exemption from Liability. Tenant shall insure its personal property under a "Special Form" (as defined by the insurance industry). Landlord shall not be liable for any damage or injury to the person, property or business (including loss of revenue, profits or data) of any Tenant Party except to the extent of any damage or injury to persons or property arising from Landlord's negligence or willful misconduct (but subject to the provisions of Section 7.03 and exclusions from liability set forth in Section 10.02(c), and nothing in this sentence shall be construed to limit Tenant's express remedies pursuant to Sections 6.01 and 12.01 of this Lease). Except as otherwise expressly provided in this Lease, this exemption shall apply whether such damage or injury is caused by (among other things): (i) fire, steam, electricity, water, gas, sewage, sewer gas or odors, snow, ice, frost or rain; (ii) the breakage, leaking, obstruction or other defects of pipes, faucets, sprinklers, wires, appliances, plumbing, windows, air conditioning or lighting fixtures or any other cause; (iii) any other casualty or any Taking; (iv) theft; (v) conditions in or about the Property or from other sources or places; or (vi) any act or omission of any other tenant.

(b) Limitations On Liability. Tenant agrees that Landlord shall be liable only for breaches of its covenants occurring while it is owner of the Property (provided, however, that if Landlord from time to time is lessee of the ground or improvements constituting the Building, then Landlord's period of ownership of the Property shall be deemed to mean only that period while Landlord holds such leasehold interest). Upon any sale or transfer of the Building (or Landlord's interest as ground lessee, as applicable), the transferor Landlord (including any mortgagee) shall be freed of any liability or obligation thereafter arising to the extent that such liabilities and

obligations are assumed by such transferee and, thereafter, Tenant shall look solely to the transferee Landlord as aforesaid for satisfaction of such liability or obligation. Tenant and each person acting under Tenant agrees to look solely to Landlord's interest from time to time in the Property, including the rents, insurance proceeds and condemnation proceeds therefrom, for satisfaction of any claim against Landlord. No owner, trustee, beneficiary, partner, member, manager, agent, or employee of Landlord (or of any mortgagee or any lender or ground or improvements lessor) nor any person acting under any of them shall ever be personally or individually liable to Tenant or any person claiming under or through Tenant for or on account of any default by Landlord or failure by Landlord to perform any of its obligations hereunder, or for or on account of any amount or obligations that may be or become due under or in connection with this Lease or the Premises; nor shall it or they ever be answerable or liable in any equitable judicial proceeding or order beyond the extent of their interest in the Property. No owner, trustee, beneficiary, partner, member, manager, agent or employee of Tenant nor any person acting under any of them shall ever be personally or individually liable to Landlord or any person acting under or through Landlord for or on account of any default by Tenant or failure by Tenant to perform any of its obligations that may be or become due under or in connection with this Lease or the Premises. No deficit capital account of any member or partner of Landlord shall be deemed to be a liability of such member or partner or an asset of Landlord.

(c) No Indirect or Consequential Damages. In no event shall Landlord or Tenant ever be liable to the other for indirect or consequential damages (including loss of revenue, profits, or data); provided, however, that no remedies or damages expressly provided in this Lease shall be considered indirect or consequential, and that the provisions of this Section 10.02(c) shall not apply to Sections 3.02 and 9.04 of this Lease.

10.03. Landlord's Obligations.

(a) Base Building Work. Landlord shall construct the Base Building Work as further set forth on Exhibit 10.03, attached.

(b) Finish Work. Landlord shall construct the Finish Work as further set forth in Exhibit 10.03, attached. Payments for such Finish Work and other provisions relating to Finish Work will be as provided in Exhibit 10.03.

(c) Repair and Maintenance. Subject to the provisions of Article 12, and except for damage caused by any act or omission of Tenant or persons acting under Tenant, Landlord shall make such repairs and replacements to the roof structure and roof membrane; exterior walls; floor slabs, footings, foundations, columns, and other structural components of the Building; glass in exterior windows and exterior doors of the Building; and other Building systems up to the Utility Switching Points, as may be necessary to properly maintain them in good repair and condition. Landlord shall

have no obligation to repair or maintain any portion of the Premises or perform any service, except as specifically set forth in this paragraph. Tenant shall promptly report in writing to Landlord any defective condition known to it that Landlord is required to repair. Tenant waives the benefit of any present or future law that provides Tenant the right to repair the Premises or Property at Landlord's expense or to terminate this Lease because of the condition of the Property or Premises (but nothing in this sentence shall be deemed to limit Tenant's exercise of the remedies expressly provided in the immediately following paragraph).

***].

***].

10.04. Tenant's Obligations.

(a) Repair and Maintenance. Except for work that Section 10.03 or Article 12 requires Landlord to do, Tenant at its sole cost and expense shall keep the Premises including without limitation all elevators; elevator shafts; heating, ventilation and air conditioning equipment; fixtures, systems and equipment of any type serving the Premises, and now or hereafter on the Premises, or elsewhere serving the Premises, in good order, condition and repair (and at least as good order, condition and repair as they are in on the Commencement Date or may be put in during the Term), normal wear and tear, casualty and condemnation (to the extent the responsibility of Landlord pursuant to Article 12 hereof) excepted; shall keep in a safe, secure and sanitary condition all trash and rubbish temporarily stored at the Premises; and shall make all repairs and replacements and do all other work necessary for the foregoing purposes whether the same may be ordinary or extraordinary, foreseen or unforeseen. The foregoing shall include without limitation Tenant's obligation to repair, maintain, and replace floors and floor coverings, to paint and repair walls and doors, to replace and repair all glass in windows and doors of the Buildings (except glass in the exterior walls of the Buildings and in exterior doors), ceiling tiles, lights and light fixtures, pipes, conduits, wires, drains and the like in the Premises and to make as and when needed as a result of misuse by, or neglect or improper conduct of Tenant or any Tenant Party or otherwise, all repairs necessary, which repairs and replacements shall be in quality and class equal to the original work. Tenant shall secure, pay for, and keep in force third-party maintenance and service contracts with appropriate and reputable service companies approved by Landlord (such approval not to be unreasonably withheld, conditioned or delayed) providing for the regular maintenance of all elevators, elevator shafts, heating, ventilation and air conditioning equipment, Building systems, the Building life safety system including the emergency generator connected to the Building life safety system and the fire command center; and other elements of the Premises within Tenant's repair and maintenance responsibility that landlords of Comparable Properties typically service by use of third-party service companies (collectively, the "Service Contracts"), copies of which shall be provided to Landlord, and Tenant shall provide to Landlord in a timely manner such periodic

inspection reports (but no less frequently than annually) as are prepared by the service providers under the Service Contracts.

Without limitation, Tenant shall be responsible for heating, ventilating and air-conditioning systems to the extent exclusively serving the Premises and Utility Services serving the Premises from the Utility Switching Points. If anything required pursuant to this Section 10.04(a) to be repaired cannot be fully repaired or restored, Tenant upon prior notice to Landlord shall replace it at Tenant's cost, even if the benefit or useful life of such replacement extends beyond the Term provided, however that if, in the last three years of the Term, (i) the replacement has been approved in advance and in writing by Landlord, not to be unreasonably withheld, and (ii) the property subject to replacement will become the property of Landlord pursuant to the terms of this Lease at the conclusion of the Term, then within ninety (90) days after the expiration of the Term, Landlord shall reimburse Tenant for the unamortized portion of the capital replacement calculated as follows: upon receipt of notice from Tenant of the need for such capital replacement, Landlord and Tenant shall cooperate to determine the estimated cost of such replacement. The actual cost of the replacement, as documented by Tenant and subject to Landlord's approval (which shall not be unreasonably withheld), shall be amortized over the useful life of such replacement as reasonably determined by Landlord on a straight line basis together with interest at the prime interest rate from time to time announced by Bank of America (or any successor financial institution). Tenant shall transfer to Landlord all of its rights and interests in any warranties, together with copies of the same, related to said replacement at the conclusion or earlier expiration of the Term. Tenant acknowledges that Landlord has the right, but not the obligation, to reduce the amount payable at the conclusion of the Term to Tenant pursuant to this paragraph by any amounts of Rent then due and payable to Landlord.

Tenant shall hire its own cleaning contractor for the Premises. Notwithstanding anything to the contrary in this Lease, it is expressly understood and agreed that Landlord shall have no liability or responsibility for the storage, containment or disposal of any Hazardous Substances generated, stored or contained by Tenant, Tenant hereby agreeing to store, contain and dispose of any and all such Hazardous Substances at Tenant's sole cost and expense in accordance with the provisions of Article 9 hereof.

Tenant acknowledges that the Parking Garage is open to the general public and that access to the Parking Garage must be maintained open to the public through the main Building lobby and the common stairways and stairwells providing access to the Parking Garage from the lobby at all times during the Term, subject to matters described in Article 12. Stairways and stairwells and elevators serving the Parking Garage shall be differentiated and secured from stairways, stairwells and elevators serving the Building so that there is no direct access from the Parking Garage to the upper floors of the Building without entering the lobby. Notwithstanding anything to the contrary herein, such lobby shall be maintained by Tenant in a condition

consistent with main building lobbies in Class A office buildings in the Seaport District of the City of Boston, Massachusetts.

(b) Landlord's Right to Cure. If Tenant does not perform any of its obligations under Section 10.04(a), Landlord upon twenty (20) days' prior notice to Tenant (or without prior notice in the case of an emergency) may perform such maintenance, repair or replacement on Tenant's behalf, and Tenant shall reimburse Landlord for all costs reasonably incurred, plus an administrative charge of ten percent (10%) of such costs, within thirty (30) days following invoice from Landlord.

(c) Other Tenant Work. Tenant shall perform all work, other than the Landlord Work, required to prepare the Premises for Tenant's use and occupancy.

10.05. Tenant Work.

(a) General. "Tenant Work" shall mean all work, including demolition, improvements, additions and alterations, in or to the Premises other than the Landlord Work. Without limitation, Tenant Work includes any penetrations in the walls, partitions, ceilings or floors and all attached carpeting, all signs visible from the exterior of the Premises, and any change in the exterior appearance of the windows in the Premises (including shades, curtains and the like). All Tenant Work shall be subject to Landlord's prior written approval and shall be arranged and paid for by Tenant all as provided herein; provided that any interior, non-structural Tenant Work (including any series of related Tenant Work projects) that (a) costs less than [***] (the "Tenant Work Threshold Amount" , (b) does not adversely affect any fire-safety, telecommunications, electrical, mechanical, or plumbing systems of the Building ("Core Building Systems") (it being agreed that the mere use of such Core Building Systems in a manner within the designed load and capacity of such Core Building Systems, and in accordance with applicable operating specifications, is not deemed to have an adverse affect in and of itself), and (c) does not adversely affect any penetrations in or otherwise affect any walls, floors, roofs, or other structural elements of the Building or any signs visible from the exterior of the Premises or any change in the exterior appearance of the windows in the Premises (including shades, curtains and the like) shall not require Landlord's prior approval if Tenant delivers the Construction Documents (as defined in Section 10.05(b)) for such work to Landlord at least five (5) business days' prior to commencing such work. When Tenant requests Landlord's approval pursuant to the foregoing sentence with respect to Tenant Work requiring Landlord's prior written approval, such approval shall be granted or denied by Landlord within ten (10) business days after Landlord's actual receipt of such request provided that Tenant indicates in a prominent location and in prominent bold type, that Landlord is obligated to respond to such request within ten (10) business days. Landlord shall not unreasonably withhold, condition or delay Landlord's approval of Tenant Work, but Landlord's disapproval of proposed Tenant Work shall not be unreasonable where, in Landlord's reasonable judgment, such proposed Tenant Work (i) adversely affects any structural component of the Building,

(ii) would be incompatible with the Core Building Systems, (iii) affects the exterior or the exterior appearance of the Building or common areas within or around the Building or other property than the Premises, (iv) diminishes the value of the Premises or the Property, or (v) requires any unusual expense to readapt the Premises. Landlord shall cooperate with Tenant, at no cost and liability to Landlord, to execute any permit applications requiring execution by the Building owner in connection with Tenant Work. Prior to commencing any Tenant Work affecting air disbursement from ventilation systems serving the Premises or the Building, including without limitation the installation of Tenant's exhaust systems, Tenant shall provide Landlord with a third party report from a consultant, and in a form, reasonably acceptable to Landlord, showing that such work will not adversely affect the ventilation systems of the Building (or of any other tenant in the Building) and shall, upon completion of such work, provide Landlord with a certification reasonably satisfactory to Landlord from such consultant confirming that no such adverse effects have resulted from such work. In its grant of approval of any Tenant Work, in order to require that Tenant remove at Tenant's cost such Tenant Work at the end of the Term, Landlord must notify Tenant of such restoration requirement contemporaneously with Landlord's approval of the plans and specifications for such Tenant Work. If Tenant Work did not require prior approval by Landlord, Landlord may require that such Tenant Work be removed at the end of the Term if such Tenant Work is not readily useable for first class office and laboratory purposes.

(b) Construction Documents. No Tenant Work shall be effected except in accordance with complete, coordinated construction drawings and specifications ("Construction Documents") prepared in accordance with Exhibit 10.05(b). Before commencing any Tenant Work requiring Landlord's approval hereunder, Tenant shall obtain Landlord's prior written approval of the Construction Documents for such work, which approval shall not be unreasonably withheld, conditioned or delayed. The Construction Documents shall be prepared by an architect or, where applicable, a qualified engineer (in either case, "Tenant's Architect") registered in the Commonwealth of Massachusetts, experienced in the construction of tenant space improvements in comparable buildings in the area where the Premises are located and, if the value of such Tenant Work will equal or exceed the Tenant Work Threshold Amount or will affect any Core Building Systems or structural components of the Building, the identity of such Tenant's Architect shall be approved by Landlord in advance, such approval not to be unreasonably withheld. Tenant shall be solely responsible for the liabilities associated with and expenses of all architectural and engineering services relating to Tenant Work and for the adequacy, accuracy, and completeness of the Construction Documents even if approved by Landlord (and even if Tenant's Architect has been otherwise engaged by Landlord in connection with the Building). The Construction Documents shall set forth in detail the requirements for construction of the Tenant Work and shall show all work necessary to complete the Tenant Work including all cutting, fitting, and patching and all connections to the mechanical, electrical, and plumbing systems and components of the Building.

Submission of the Construction Documents to Landlord for approval shall be deemed a warranty that, except as is specifically and expressly set forth therein, all Tenant Work described in the Construction Documents (i) complies with all applicable laws, regulations, building codes, and highest design standards, (ii) does not materially and adversely affect any structural component of the Building, (iii) is compatible with and does not adversely affect the Core Building Systems, (iv) does not affect any property other than the Premises, and (v) conforms to floor loading limits specified by Landlord. The Construction Documents shall comply with Landlord's requirements for the uniform exterior appearance of the Building. Landlord's approval of Construction Documents shall signify only Landlord's consent to the Tenant Work shown and shall not result in any responsibility of Landlord concerning compliance of the Tenant Work with laws, regulations, or codes, or coordination or compatibility with any component or system of the Building, or the feasibility of constructing the Tenant Work without damage or harm to the Building, all of which shall be the sole responsibility of Tenant.

(c) Performance. The identity of any person or entity (including any employee or agent of Tenant) performing or designing any Tenant Work ("Tenant Contractor") shall, if the cost of such work in any instance is in excess of the Tenant Work Threshold Amount or will affect any Core Building Systems or structural components of the Building or involves any work other than interior, nonstructural alterations, be approved in advance by Landlord, such approval not to be unreasonably withheld. Once any Tenant Contractor has been approved, then the same Tenant Contractor may thereafter be used by Tenant for the same type of work until Landlord notifies Tenant that such Tenant Contractor is no longer approved. Tenant shall procure at Tenant's expense all necessary permits and licenses before undertaking any Tenant Work. Tenant shall perform all Tenant Work at Tenant's risk in compliance with all applicable laws and in a good and workmanlike manner employing new materials of good quality and producing a result at least equal in quality to the other parts of the Premises. When any Tenant Work is in progress, Tenant shall cause to be maintained insurance as described in the Tenant Work Insurance Schedule attached as Exhibit 10.05(c) and such other insurance as may be reasonably required by Landlord covering any additional hazards due to such Tenant Work, and, if the cost of such Tenant Work exceeds [***] also such bonds or other assurances of satisfactory completion and payment as Landlord may reasonably require, in each case for the benefit of Landlord. If the Tenant Work in any instance requires Landlord's approval hereunder, Tenant shall reimburse Landlord for Landlord's reasonable third party, out of pocket costs of reviewing the Construction Documents and proposed Tenant Work and inspecting installation of the same, such reimbursement to be made within thirty (30) days after submission by Landlord of invoices for such costs and expenses. So long as the Construction Documents and Tenant Work comply with the requirements of this Lease, Tenant's obligation to reimburse Landlord pursuant to the immediately preceding sentence for review of Construction Documents shall not exceed [***], which amount shall be increased

annually to reflect increases in the Consumer Price Index for all Urban Wage Earners and Clerical Workers, All Items, for Boston, Massachusetts published by the Bureau of Labor Statistics of the United States Department of Labor (base year 1982-84 = 100), with respect to any one project. At all times while performing Tenant Work, Tenant shall require any Tenant Contractor to comply with all applicable Legal Requirements and Landlord's Rules and Regulations relating to such work. Each Tenant Contractor working on the roof of the Building shall coordinate with Landlord's roofing contractor, shall comply with its requirements and shall not violate existing roof warranties. Each Tenant Contractor shall work on the Premises without causing delay to or impairing of any guaranties, warranties or the work of any other contractor.

(d) Payment. Tenant shall pay the entire cost of all Tenant Work, including without limitation any services provided to Tenant or those claiming by or through Tenant in connection with Tenant Work giving rise to a lien pursuant to the Massachusetts General Laws, so that the Premises, including Tenant's leasehold, shall always be free of liens for labor or materials or as otherwise provided under such statutes. If any such lien is filed, then Tenant shall promptly (and always within twenty (20) days) discharge the same.

(e) LEED Certification. The Base Building Work has been registered to qualify for Leadership in Energy and Environmental Design ("LEED") Core & Shell status as established by the U.S. Green Council based on the LEED Core & Shell standards in effect as of the date of such registration. Any Tenant Work shall comply with the standards necessary to maintain the applicable LEED Core & Shell certification of the Building.

(f) Other. Tenant must schedule and coordinate all aspects of Tenant Work with the Landlord's property manager or designated representative. If an operating engineer is required by any union regulations, Tenant shall pay for such engineer. If shutdown of risers and mains for electrical, mechanical and plumbing work is required, such work shall be supervised by Landlord's representative (the reasonable costs of which shall be included in Operating Expenses, notwithstanding anything to the contrary set forth in Section 8.01). No work shall be performed to portions of Building systems that serve other tenants without Landlord's approval, which approval shall not be unreasonably withheld, conditioned or delayed, and all such work shall be performed under Landlord's supervision. Except in case of emergency, at least two (2) business days' prior notice must be given to the Building management office prior to the shutdown of fire, sprinkler and other alarm systems, and in case of emergency, prompt notice shall be given. In the event that such work unintentionally alerts the Fire or Police Department or any private alarm monitoring company through an alarm signal, Tenant shall be responsible for any fees or charges levied in connection with such alarm. Tenant shall pay to Landlord such charges as may from time to time be in effect with respect to any such shutdown. All demolition, installations, removals or other work that is reasonably likely to inconvenience other

tenants of the Building or disturb Building operations must be scheduled with the Building manager at least twenty-four (24) hours in advance.

Each Tenant Contractor and Tenant shall assure that any Tenant Work is carried out without disruption from labor disputes arising from whatever cause, including disputes concerning union jurisdiction and the affiliation of workers employed by said Tenant Contractor or its subcontractors. Tenant shall be responsible for, and shall reimburse Landlord for, all actual costs and expenses, including reasonable attorneys' fees incurred by Landlord in connection with the breach by any Tenant Contractor of such obligations. If Tenant does not promptly resolve any labor dispute caused by or relating to any Tenant Contractor, Landlord may in its sole discretion request that Tenant remove such Tenant Contractor from the Property, and if such Tenant Contractor is not promptly removed, Landlord may prohibit such Tenant Contractor from entering the Property.

Upon completion of any Tenant Work, Tenant shall give to Landlord (i) a permanent certificate of occupancy and any other final governmental approvals required for such work, (ii) copies of "as built" plans, (iii) proof of payment for all labor and materials, and (iv) an assignment of all warranties for such Tenant Work to the extent such warranties extend beyond the then-scheduled expiration of the Term in compliance with, and subject to the terms of, such contracts or warranties.

10.06. Condition upon Termination. At the expiration or earlier termination of the Term, Tenant (and all persons claiming through Tenant) shall without the necessity of notice deliver the Premises broom-clean, in compliance with the requirements of Section 10.07 and in good and tenantable condition, reasonable wear and tear and (subject to the provisions of Article 12) damage by casualty or taking excepted. As part of such delivery, Tenant shall also provide keys (or lock combinations, codes or electronic passes) to any locks in and to the Premises to Landlord; provide Landlord with copies of any owners' manuals or software required for the operation of equipment or systems remaining in the Premises; remove all signs installed by Tenant wherever located (other than those that are required under applicable laws, such as exit signs), all Tenant Work or Finish Work designated by Landlord for removal by Tenant at the time of approval of such Tenant Work or Finish Work or, with respect to work not requiring Landlord's approval, at the time Tenant gives notice to Landlord that Tenant is undertaking such work pursuant to this Article 10 (provided, however, that Landlord may only require the removal of Finish Work that results in changes to the structural components (including without limitation columns and floor slabs), exterior walls, and, other than Rooftop Equipment and related Finish Work that is integral to the function of Finish Work installations, equipment or systems that will remain in the Premises in compliance with this Lease, the roof of the Building); and remove all Tenant Property and other personal property whether or not bolted or otherwise attached (provided, however, that in no event shall the items described on Exhibit 10.06, attached, be considered Tenant Property or personal property, and such items shall remain in the Premises notwithstanding anything to the contrary in this Lease). [***]. Tenant shall

repair all damage that results from such removal and restore the Premises substantially to the condition it was in prior to installation of the removed property (including the filling of all floor and wall holes, the removal of all disconnected wiring back to junction boxes and the replacement of all damaged ceiling tiles). Any property not so removed shall be deemed abandoned, shall at once become the property of Landlord, and may be disposed of in such manner as Landlord shall see fit; and Tenant shall pay the cost of removal and disposal to Landlord upon demand to the extent such cost exceeds the value received, if any, from any sale of such property. The covenants of this Section shall survive the expiration or earlier termination of the Term.

10.07. Decommissioning of the Premises. Prior to the expiration of this Lease (or within sixty (60) 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 and/or serving the Premises, and all exhaust or other ductwork in and/or serving the Premises, in each case which has carried or released or been exposed to any Hazardous Substances (as defined in Section 9.04 hereof), and shall otherwise clean the Premises so as to permit the report hereinafter called for by this Section 10.07 to be issued. Prior to the expiration of this Lease (or within sixty (60) 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 that is designated by Tenant and acceptable to Landlord in Landlord's reasonable discretion, which report shall be based on the environmental engineer's inspection of the Premises and shall show:

(a) that the Hazardous Substances described in the first sentence of the immediately preceding paragraph, to the extent, if any, existing prior to such decommissioning, have been removed in accordance with applicable Environmental Laws; and

(b) that Hazardous Substances described in the first sentence of this Section 10.07, if any, have been removed in accordance with applicable Environmental 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 reused by a subsequent tenant or disposed of in compliance with applicable Environmental Laws (as defined in Section 9.04 hereof) without incurring special costs or undertaking special procedures for demolition, disposal, investigation, assessment, cleaning or removal of such Hazardous Substances and without giving notice in connection with such Hazardous Substances; and

(c) that the Premises may be reoccupied for office or laboratory use, as applicable, demolished or renovated without incurring special costs or undertaking special procedures for disposal, investigation, assessment, cleaning or removal of Hazardous Substances and without incurring regulatory requirements or giving notice in connection with Hazardous Substances.

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 Substances as Hazardous Substances instead of non-hazardous materials (and in no event shall “special costs” or “special procedures” mean costs or procedures incurred in the removal of any materials, property or equipment that (i) contain Hazardous Substances as a component material, or which component materials are inherently hazardous (i.e., copper piping/wiring), and (ii) are ordinarily and customarily used in connection with first class office use, such as the component parts of light bulbs, joint compounds, ordinary building materials and the like). The report shall include reasonable detail concerning the clean-up location, the tests run and the analytic results.

If Tenant fails to perform its obligations under this Section 10.07, 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 promptly reimburse Landlord upon demand for all costs and expenses incurred by Landlord in connection with such work. In addition, any such reimbursement shall include a [***] administrative fee [***] to cover Landlord’s overhead in undertaking such work. Tenant’s obligations under this Section 10.07 shall survive the expiration or earlier termination of this Lease.

ARTICLE 11. ROOFTOP LICENSE; ANTENNAS

11.01. Rooftop License. Effective as of the Commencement Date and subject to Legal Requirements, including without limitation Federal Aviation Administration height restrictions, Landlord grants Tenant the appurtenant and irrevocable (except upon the expiration or earlier termination of this Lease) rights at no additional rental charge, but otherwise subject to the terms and conditions of this Lease, to install, operate, maintain, repair, replace, upgrade and remove, at no additional cost to Tenant and solely for accessory use to operations within the Premises, certain equipment customarily installed on rooftops at Class A office and laboratory buildings in the City of Boston including, without limitation, cable, wiring, rooftop antennae, satellite dishes, microwave dishes and other equipment associated with telecommunications on the roof of the Building (the “Rooftop Equipment”) in locations reasonably approved by Landlord (Tenant acknowledging that Landlord requires certain rooftop areas on the roof of the upper mechanical penthouse of the Building for use by other tenants in the Building and for use by Landlord) and as necessary to connect such equipment, in the common areas of the Building.

11.02. Installation and Maintenance of Rooftop Equipment. Tenant shall install the Rooftop Equipment at its sole cost and expense (except as otherwise provided with respect to the Finish Work), at such times and in such manner as Landlord may reasonably designate and in accordance with all of the applicable provisions of this Lease regarding Tenant Work. Tenant shall not install or operate the Rooftop Equipment until

it receives prior written approval of the Construction Documents in accordance with Section 10.05(a). Landlord may withhold approval of the installation or operation of the Rooftop Equipment if the same reasonably would be expected to damage the structural integrity of the Building or interfere with Building operations or systems.

Tenant shall engage Landlord's roofer (or another roofing contractor reasonably approved by Landlord and approved by Landlord's roof manufacturer) before beginning any rooftop installations or repairs of the Rooftop Equipment, whether under this Article 11 or otherwise, and shall always comply with the roof warranty governing the protection of the roof and modifications to the roof. Tenant shall obtain a letter from Landlord's roof manufacturer following completion of such work stating that the roof warranty remains in effect, if required pursuant to the terms of the roof warranty. Tenant, at its sole cost and expense, shall inspect areas on the rooftop where the Rooftop Equipment is located at least twice annually and correct any loose bolts, fittings or other appurtenances and shall repair any damage to the roof caused by the installation or operation of the Rooftop Equipment. Tenant covenants that the installation, existence, maintenance and operation of the Rooftop Equipment shall not violate any Legal Requirements or constitute a nuisance under law. Tenant shall pay Landlord on demand (i) all applicable taxes or governmental charges, fees, or impositions imposed on Landlord because of Tenant's use of the Rooftop Equipment under this Article 11 and (ii) the amount of any increase in Landlord's insurance premiums as a result of the installation or existence of the Rooftop Equipment. Landlord shall provide in every other lease of space in the Building that permits rooftop access, and in every license or other agreement regarding use of the roof of the Building, (any of the foregoing, a "Rooftop Agreement") that if such other tenant's rooftop equipment interferes with Tenant's Rooftop Equipment, such other tenant will remove or relocate its equipment as necessary to avoid such interference. Landlord assumes no responsibility for interference in the operation of the Rooftop Equipment caused by other tenants' equipment, or for interference in the operation of other tenants' equipment caused by the Rooftop Equipment, but Landlord shall reasonably cooperate with Tenant (at no cost to Landlord) to resolve any such interference and shall use commercially reasonable efforts to (at no cost to Landlord) enforce Landlord's rights under any Rooftop Agreements to prevent such interference.

11.03. Interference by Rooftop Equipment. If Tenant's Rooftop Equipment (i) causes physical damage to the structural integrity of the Building, or (ii) materially, adversely interferes with any of the Building's mechanical or other systems, Tenant shall within five (5) business days of notice (which may be by e-mail if given to vertex_operations@vrtx.com or an alternative e-mail address provided to Landlord in writing from time to time) of a claim of interference or damage reasonably cooperate with Landlord to determine the source of the damage or interference and effect a prompt solution at Tenant's expense (if Rooftop Equipment caused such interference or damage). In the event Tenant disputes Landlord's allegation that Rooftop Equipment is causing a problem with the Building (including, but not limited to, the electrical, HVAC, and mechanical systems of the Building), in writing delivered within five (5) days of

receiving Landlord's notice claiming such interference, then Landlord and Tenant shall meet to discuss a solution, and if within seven (7) days of their initial meeting Landlord and Tenant are unable to resolve the dispute, then the matter shall be submitted to arbitration in accordance with the provisions set forth below.

The parties shall direct the Boston office of the AAA to appoint an arbitrator who shall have a minimum of ten (10) years' experience in commercial real estate disputes and who shall not be affiliated with either Landlord or Tenant and has not worked for either party or its affiliates at any time during the prior five (5) years. Both Landlord and Tenant shall have the opportunity to present evidence and outside consultants to the arbitrator.

The arbitration shall be conducted in accordance with the expedited commercial arbitration rules of the AAA insofar as such rules are not inconsistent with the provisions of this Lease (in which case the provisions of this Lease shall govern). The cost of the arbitration (exclusive of each party's witness and attorneys' fees, which shall be paid by such party) shall be borne equally by the parties. Any such arbitration shall be commenced within ten (10) days after demand (or, if later, appointment of the arbitrator).

Within ten (10) days of appointment, the arbitrator shall determine whether or not the Rooftop Equipment is causing a problem with the Building or Property and/or any other tenants' equipment in the Building or Property as set forth above, and the appropriate resolution, if any. The arbitrator's decision shall be final and binding on the parties. If Tenant shall fail to cooperate with Landlord in resolving any such interference or if Tenant shall fail to implement the arbitrator's decision within twenty (20) days after it is issued, Landlord may at any time thereafter and at Tenant's sole costs and expense relocate the item(s) of the Rooftop Equipment in dispute in a manner consistent with the arbitral decision in addition to pursuing any other remedies under this Lease.

11.04. Relocation of Rooftop Equipment. Based solely on Landlord's good faith determination that such a relocation is necessary for the use of the upper penthouse roof for retail and restaurant tenants of the Building, Landlord reserves the right to cause Tenant to relocate any (x) Rooftop Equipment or (y) any other pipes, ducts, conduits, wires and appurtenant fixtures, in each case to the extent necessary for use of, and access to, the lower penthouse roof to comparably functional space on the roof, penthouse, or Premises, as applicable (which space shall be subject to the prior written approval of Tenant, which approval shall not be unreasonably withheld, conditioned or delayed) by giving Tenant prior notice of such intention to relocate. If within thirty (30) days after receipt of such notice Tenant has not agreed with Landlord on the space to which such equipment is to be relocated, the timing of such relocation, and the terms of such relocation, then the parties may arbitrate the dispute in accordance with the process set forth in Section 11.03 above. Landlord agrees to pay the reasonable cost of moving such equipment to such other space, taking such other steps necessary to ensure comparable functionality of equipment, and finishing such space to a condition comparable to the then condition of the current location of such equipment. Tenant shall arrange for the

relocation of the affected equipment within sixty (60) days after a comparable space is agreed upon or selected by Landlord. Any actions by Landlord in connection with a relocation under this Section 11.04 shall be performed in a manner designed to minimize interference with Tenant's business.

**ARTICLE 12.
DAMAGE OR DESTRUCTION; CONDEMNATION**

12.01. Damage or Destruction of Premises. If the Premises or any part thereof shall be damaged by fire or other insured casualty, then, subject to the last paragraph of this Section, Landlord shall proceed with diligence, subject to then applicable Legal Requirements, and at the expense of Landlord (but only to the extent of insurance proceeds made available to Landlord by any mortgagee of the Building and any ground lessor) to repair or cause to be repaired such damage (other than any Tenant Work). In no event shall Landlord be responsible for contributing more than [***] of any deductible or co-payment towards the completion of such repairs unless (a) (i) Tenant and any mortgagee of the Property have agreed that Landlord may carry a larger deductible and (ii) Tenant pays its Pro Rata Share of the amount of any such deductible or co-payment in excess of [***] (it being the intent that Tenant shall share in the payment of such increased deductible in consideration for any savings of Operating Expenses that would result) or (b) Landlord is then maintaining a higher deductible in violation of the provisions of Section 7.04. All such repairs made necessary by the negligence or willful misconduct of Tenant shall be made at the Tenant's expense to the extent that the cost of such repairs are less than the deductible amount in Landlord's insurance policy. The cost of any repairs performed under this Section by Landlord at Tenant's expense (including costs of design fees, financing, and charges for administration, overhead and construction management services by Landlord and Landlord's contractor) shall constitute Additional Rent hereunder. All repairs to and replacements of Tenant's personal property shall be made by and at the expense of Tenant, and Tenant shall promptly restore any Tenant Work, or, if the Lease has been terminated pursuant to the provisions of this Section 12.01, demolish and remove any damaged Tenant Work prior to surrendering the Premises (but in any event only to the extent of insurance proceeds received by Tenant or, if Tenant fails to carry any required insurance hereunder, the insurance proceeds that would have been received by Tenant if Tenant had been maintaining the required coverages). If the Premises or any part thereof shall have been rendered unfit for use and occupation for the Permitted Use hereunder by reason of such damage, the Base Rent, Tenant's Pro Rata Share of Total Operating Costs, and (other than then-outstanding amounts of Rent and reimbursements or payments that are not in the nature of an occupancy charge, such as applicable reimbursements of Landlord's third-party costs under Section 10.05, allocations of excess security services under Section 9.07, reimbursements of Tenant Shortfall under Section 18.01(b), reimbursements under Section 10.04(b), or Additional Rent payable under this Article 12) all other Additional Rent, or a just and proportionate part thereof, according to the nature and extent to which the Premises shall have been so rendered unfit, shall be abated until the Premises (except as to Tenant Property, and any Tenant Work) shall have been restored as nearly as

practicable to the condition in which they were immediately prior to such fire or other casualty, plus an additional thirty (30) day period. Landlord shall not be liable for delays in the making of any such repairs that are due to Force Majeure, nor shall Landlord be liable for any inconvenience or annoyance to Tenant or injury to the business of Tenant resulting from delays in repairing such damage, provided, however, that Base Rent, Tenant's Pro Rata Share of Total Operating Costs, and all other Additional Rent (other than then-outstanding amounts of Rent and reimbursements or payments that are not in the nature of an occupancy charge, such as applicable reimbursements of Landlord's third-party costs under Section 10.05, allocations of excess security services under Section 9.07, reimbursements of Tenant Shortfall under Section 18.01(b), reimbursements under Section 10.04(b), or Additional Rent payable under this Article 12) shall be abated to the extent set forth above during any delay not caused by Tenant.

If (i) the Premises are so damaged by fire or other casualty (whether or not insured) at any time during the last eighteen (18) months of the Term, as the Term may have been extended, that the cost to repair such damage is reasonably estimated to exceed one-half of the total Base Rent payable hereunder for the period from the estimated completion date of repair until the end of the Term, (ii) Legal Requirements prohibit Landlord from restoring the Building to the condition substantially existing prior to such casualty, or (iii) at any time damage to the Building occurs by fire or other insured casualty and any mortgagee or ground lessor shall refuse to permit insurance proceeds to be utilized for the repair or replacement of such property and Landlord determines not to repair such damage, then and in any of such events, this Lease and the term hereof may be terminated at the election of Landlord by a notice from Landlord to Tenant within sixty (60) days, or such longer period as is required to complete arrangements with any mortgagee or ground lessor regarding such situation, following such fire or other casualty; the effective termination date pursuant to such notice shall be not less than thirty (30) days after the day on which such termination notice is received by Tenant. If any mortgagee or ground lessor refuses to permit insurance proceeds to be applied to replacement of the Premises, and neither Landlord, such mortgagee or ground lessor has commenced such replacement within three (3) months following adjustment of such casualty loss with the insurer, then Tenant may, until any such replacement commences, terminate this Lease by giving at least thirty (30) days prior written notice thereof to Landlord and such termination shall be effective on the date specified if such replacement has not then commenced. In the event of any termination, the Term shall expire as though such effective termination date were the date originally stipulated in Article 1 for the end of the Term and the Base Rent and Additional Rent (to the extent not abated as set forth above) shall be apportioned as of such date.

If less than eighteen (18) months remain in the Term at the time of such casualty [***] (ii) in Landlord's reasonable estimate the time to restore the Premises will take more than one-half of the then remaining Term, then Tenant may upon thirty (30) days' prior written notice terminate this Lease provided that such termination election shall be null and void if Landlord completes such restoration within thirty (30) days of such

notice or if Tenant exercises its right to extend the term pursuant to Section 3.03(a) of this Lease.

12.02. Eminent Domain. In the event that all or any substantial part of the Premises or the Building or the common areas at the Property necessary for use and operation of the Premises or Building are taken (other than for temporary use, hereafter described) by public authority under power of eminent domain (or by conveyance in lieu thereof), then by notice given within three months following the recording of such taking (or conveyance) in the appropriate registry of deeds, this Lease may be terminated at either party's election thirty (30) days after such notice, and Rent shall be apportioned as of the date of termination. If this Lease is not terminated as aforesaid, subject to the rights of mortgagees Landlord shall within a reasonable time thereafter, diligently restore what may remain of the Premises (excluding any personal property of Tenant, Tenant Work or other items installed or paid for by Tenant that Tenant is permitted or may be required to remove upon expiration) to a tenantable condition for occupancy by Tenant for the Permitted Uses. In the event some portion of rentable floor area of the Premises is taken (other than for temporary use) and this Lease is not terminated, Base Rent shall be proportionally abated for the remainder of the Term. In the event of any taking of the Premises or any part thereof for temporary use, (i) this Lease shall be and remain unaffected thereby and rent shall not abate, and (ii) Tenant shall be entitled to receive for itself such portion or portions of any award made for such use with respect to the period of the taking that is within the Term, provided that if such taking shall remain in force at the expiration or earlier termination of this Lease, then Tenant shall pay to Landlord a sum equal to the reasonable cost of performing Tenant's obligations hereunder with respect to surrender of the Premises and upon such payment shall be excused from such obligations.

If in the last two years of the Term of this Lease, any Taking renders 50% or more of the Premises untenable, and in either case restoration of the effects of such Taking cannot be repaired or restored in Landlord's reasonable estimate within the lesser of one (1) year or one-half of the then-remaining Term from the date of such Taking, Tenant may upon thirty (30) days' prior written notice terminate this Lease provided that such termination election shall be null and void if Landlord completes such restoration within thirty (30) days of such notice or if Tenant exercises its right to extend the Term pursuant to Section 3.03(a) of this Lease.

Any damages that are expressly awarded to Tenant on account of its relocation expenses, and specifically so designated, shall belong to Tenant. Except as provided in the preceding sentence of this paragraph, Landlord reserves to itself, and Tenant releases and assigns to Landlord, all rights to damages accruing on account of any taking or by reason of any act of any public authority for which damages are payable, provided, however, that Tenant shall receive, subordinate to the repayment of any mortgage lender holding a mortgage on the Property out of any amount actually received by Landlord and *pari passu* with amounts payable to Landlord, an amount equal to the unamortized expense of the Excess Costs actually paid by Tenant under the Work Letter, amortized on

a straight line item over the initial Term of this Lease. Subject to its rights hereunder, Tenant agrees to execute such further instruments of assignment as may be reasonably requested by Landlord, and to turn over to Landlord any damages that may be recovered in any proceeding or otherwise.

**ARTICLE 13.
ASSIGNMENT AND SUBLETTING**

13.01. Landlord's Consent Required. Except for a Permitted Transfer, as defined below, Tenant shall not transfer any part of the Premises or of its interest in this Lease to any other entity, whether by sale, assignment, mortgage, sublease, license, transfer, operation of law (including, without limitation by merger, consolidation, sale or other transfer of all or substantially all of the stock or assets of Tenant, or otherwise) or act of Tenant (each a "Transfer") without Landlord's prior written consent as provided in Section 13.02 below. Consent to one Transfer does not imply consent to any other Transfer or waive the consent requirement. Any attempted Transfer without consent shall be void at the election of Landlord. Any entity to which a Transfer is made is a "Transferee."

The following transactions (any of them, a "Permitted Transfer") shall not require the consent of Landlord provided that Landlord shall receive prior notice thereof plus reasonable evidence upon closing that the transaction is in fact one of the following (and provided further that the proposed Transfer complies with all other provisions of this Lease, including, without limitation, this Article 13 (other than the first paragraph of this Section 13.01), does not alter Landlord's rights under this Lease, and does not impose any additional obligation on Landlord):

(a) Any Transfer to an entity acquiring all or substantially all of the stock or assets of Tenant, whether by way of merger, consolidation, acquisition or otherwise (any such entity, a "Successor Entity"), so long as the resulting tenant under the Lease has a creditworthiness at least equal to or greater than Tenant's as of the date of this Lease or at the time of proposed Transfer, whichever is greater; or

(b) Any Transfer to an entity directly or indirectly controlled, controlling, or under common control with Tenant (any such entity, a "Related Entity") so long as in the case of an assignment either the original Tenant or the assignee has a creditworthiness at least equal to or greater than Tenant's as of the date of this Lease or at the time of proposed Transfer, whichever is greater. For purposes of this clause (b), "control" shall mean possession of more than 50 percent ownership of the shares of beneficial interest of the entity in question together with the power to control and manage the affairs thereof either directly or by election of directors and/or officers.

For purposes of this Section 13.01, "substantially all" of Tenant's assets shall include without limitation the transfer of assets having a value of more than 75% of the total value, as opposed to number, of Tenant's assets other than (i) by license of the right to

use pharmaceutical products developed by Tenant in the ordinary course of Tenant's business, or (ii) in an arm's length transaction in which Tenant obtains market value for such assets and the consideration paid to Tenant is retained by Tenant and available to pay amounts due under the Lease as they become due, and/or otherwise used by Tenant in the ordinary course of business (i.e., such consideration is not distributed to stockholders or otherwise transferred to another party).

Notwithstanding anything to the contrary herein, so long as Tenant's shares are traded on a nationally recognized stock exchange, any sale of Tenant's shares shall not be deemed a Transfer subject to the provisions of this Article 13.

Tenant acknowledges that the covenants contained in this Section 13.01 are material to the transaction contained herein and that Landlord shall have, in addition to any other rights and remedies available under this Lease or at law, the right to seek injunctive relief and/or specific performance in order to enforce such covenants.

13.02. Landlord's Consent. Tenant's request for Landlord's consent to any Transfer shall be made at least thirty (30) days prior to the effective date of the proposed Transfer, describe the details of the proposed Transfer, including the name, business and financial condition of the prospective Transferee, and the financial terms of the proposed Transfer (e.g., payments in consideration of the proposed Transfer, term, rent and security deposit); Tenant shall also provide any other information Landlord reasonably deems relevant, including without limitation the proposed form of Transfer documentation. Landlord shall not unreasonably withhold, condition or delay (more than ten (10) business days following receipt of Tenant's request for consent with all information required herein) its consent to any assignment or subletting of the Premises, provided that Tenant is not then in default under this Lease (following the giving of notice of such default, where applicable) but it shall not be deemed unreasonable for Landlord to deny consent for the following reasons, among others: **[***]**.

[*]**.

At Landlord's election, Tenant shall pay to Landlord as Additional Rent fifty percent (50%) of the Profits on any Transfer other than a Permitted Transfer as and when received by Tenant, unless Landlord notifies Tenant and the Transferee that the Transferee shall pay Landlord's share of the Profits directly to Landlord. "Profits" means (A) all rent, fees and other consideration paid for or in respect of the Transfer, including fees in excess of reasonable amounts under any collateral agreements (the intent being to prohibit Tenant from shifting occupancy costs to collateral agreements), less (B) the Rent and other sums payable under this Lease (or if the Transfer is a sublease of part of the Premises, allocable to the subleased premises) and all reasonable costs and expenses directly incurred by Tenant for reasonable real estate broker's commissions and reasonable costs of renovation or construction of tenant improvements required by the Transfer, and reasonable legal fees (collectively, "Transfer Expenses"). Without limiting the generality of the first sentence of this section, any lump-sum payment or series of

payments (including for the purchase or use of Tenant Work and Finish Work) on account of any Transfer shall be deemed to be Profits to the extent to which such lump sum payments exceed the sum of (x) the present value of the Rent and other charges to be paid hereunder discounted at the rate of four percent (4%) and (y) Tenant's Transfer Expenses (pro rated based (a) on floor area in the case of a subletting, license or other occupancy of less than the entire area of the Premises and (b) over the remaining Term). Tenant may recover these reasonable costs and expenses before paying Profits to Landlord. Tenant shall give Landlord a written statement certifying all amounts to be paid from any Transfer (including any collateral agreements) within thirty (30) days after the transfer agreement is signed and from time to time thereafter on Landlord's request, and Landlord may inspect Tenant's books and records to verify the accuracy of such statements. On written request, Tenant shall promptly furnish to Landlord copies of all Transfer documents, certified by Tenant to be complete, true and correct.

13.03. No Release. Notwithstanding any Transfer and whether or not the same is consented to, the liability of Tenant to Landlord shall remain direct and primary. Any Transferee (other than a subtenant of less than all or substantially all of Tenant's interest in the Premises) shall be jointly and severally liable with Tenant to Landlord for the performance of all of Tenant's covenants under this Lease; and such Transferee shall upon request execute and deliver such instruments as Landlord reasonably requests in confirmation thereof (and agrees that its failure to do so shall be a default). Tenant hereby irrevocably authorizes Landlord, upon the occurrence of a default (following the giving of notice of such default, where applicable) to collect Rent from any Transferee (and upon notice any Transferee shall pay directly to Landlord) and apply the net amount collected to the Rent and other charges reserved under this Lease. No Transfer (whether or not consented to by Landlord, and whether or not such consent is required) shall be deemed a waiver of the provisions of this Section, or the acceptance of the Transferee as a tenant, or a release of Tenant from direct and primary liability for the performance of all of the covenants of this Lease. The consent by Landlord to any Transfer shall not relieve Tenant or any Transferee from the obligation of obtaining the express consent of Landlord to any modification of such Transfer or a further Transfer by Tenant or such Transferee. Notwithstanding anything to the contrary in the documents effecting the Transfer, Landlord's consent shall not alter in any manner whatsoever the terms of this Lease, to which any Transfer at all times shall be subject and subordinate.

13.04. [*]** In the event that Tenant disputes [***] either party may submit such dispute to mediation and the parties shall seek to identify within [***] a mutually acceptable mediator, who shall mediate the dispute in accordance with the AAA Commercial Mediation Rules, except that the mediator selected pursuant to this paragraph shall act as the administrator of the mediation and shall have all of the powers and duties conferred on the AAA pursuant to said Rules. Any conflicts between said Rules and this paragraph shall be resolved in favor of this paragraph. If the parties are unable or fail timely to agree upon the mediator, upon request of either party, the dispute shall be submitted for mediation to Boston office of the AAA or its successor entity. If neither the AAA nor any successor entity exists at the time of the dispute, the dispute

shall be submitted for mediation to the largest private provider of dispute resolution services then doing business in the greater Boston area.

Attendance at the mediation shall be limited to the parties and their counsel. All information exchanged or presented to the mediator in these proceedings, whether in oral, written, or other form, and the results of the proceedings, shall be confidential and except as required by law shall not be disclosed to any person or entity, without prior written permission from both parties. A party offering evidence or information in mediation shall not be precluded thereby from offering that evidence or information in any other proceeding. The mediation proceeding shall take place, and the mediator shall issue his or her report, within [***] following the submission of the dispute to mediation. Following any such mediation, if any such dispute remains unresolved, either party may initiate litigation to resolve such dispute and, notwithstanding anything to the contrary contained in this paragraph, the mediator's report shall be admissible in any such court proceeding as evidence.

[***].

13.05. [***] Tenant shall deliver to Landlord (i) a true and complete copy of the fully executed instrument or instruments evidencing any Transfer, and (ii) a written agreement of the Transferee agreeing with Landlord to perform and observe all of the terms, covenants, and conditions of this Lease undertaken by such Transferee. [***].

ARTICLE 14. EVENTS OF DEFAULT AND REMEDIES

14.01. Covenants and Conditions. Tenant's performance of each of its obligations under this Lease is a condition as well as a covenant. Tenant's right to continue in possession of the Premises is conditioned upon such performance. Time is of the essence in performance of all covenants and conditions set forth herein.

14.02. Events of Default. If Tenant fails to pay amounts of Base Rent or regular monthly recurring payments of Additional Rent (such as Operating Costs or parking charges) when due and such default continues for five (5) days, or, with respect to any non-recurring payment of Additional Rent, fails to pay any such Additional Rent when due and such default continues for five (5) days following notice from Landlord, or if more than three default notices are properly given in any 12-month period, or if Tenant (or any Transferee of Tenant) makes any Transfer of the Premises in violation of this Lease, or if a petition is filed by Tenant (or any Transferee) for insolvency or for appointment of a receiver, trustee or assignee or for adjudication, reorganization or arrangement under any bankruptcy act, or if any similar petition is filed against Tenant (or any transferee) and such petition filed against Tenant or any transferee is not dismissed within sixty (60) days thereafter, or if any representation or warranty made by Tenant is untrue in any material respect, or if Tenant fails to perform any other covenant or condition hereunder and such default continues longer than any period (following

notice, if expressly required) expressly provided for the correction thereof (and if no period is expressly provided then for thirty (30) days after notice is given, provided, however, that such period shall be reasonably extended in the case of any such non-monetary default that cannot be cured within such period (but in any event shall not exceed 180 days in the aggregate) only if the matter complained of can be cured, Tenant begins promptly and thereafter diligently completes the cure, and Tenant gives Landlord notice of such intent to cure within ten (10) days after notice of such default), then, and in any such case, Landlord and its agents lawfully may, in addition to any remedies for any preceding breach, immediately or at any time thereafter without further demand or notice in accordance with process of law, enter upon any part of the Premises in the name of the whole, or mail or deliver a notice of termination of the Term of this Lease addressed to Tenant at the Premises or any other address herein, and thereby terminate the Term and repossess the Premises as of Landlord's former estate. Any default beyond applicable notice and cure periods by Tenant is referred to herein as an "Event of Default". At Landlord's election such notice of termination may be included in any notice of default, subject to any applicable cure period. Upon such entry or mailing the Term shall terminate, all executory rights of Tenant and all obligations of Landlord will immediately cease, and Landlord may expel Tenant and all persons claiming under Tenant and remove their effects without any trespass and without prejudice to any remedies for arrears of Rent or prior breach; and Tenant waives all statutory and equitable rights to its leasehold (including rights in the nature of further cure or redemption, if any, to the extent such rights may be waived). If Landlord engages attorneys in connection with any failure to perform by Tenant hereunder, Tenant shall reimburse Landlord for the reasonable fees of such attorneys on demand as Additional Rent. Without implying that other provisions do not survive, the provisions of this Article shall survive the Term or earlier termination of this Lease.

14.03. Remedies for Default.

(a) Reletting Expenses Damages. If the Term of this Lease is terminated for default, Tenant covenants, as an additional cumulative obligation after such termination, to pay all of Landlord's reasonable costs, including reasonable attorneys fees, related to Tenant's default and in collecting amounts due and all reasonable expenses in connection with reletting, including tenant inducements to new tenants, brokerage commissions, fees for legal services, expenses of preparing the Premises for reletting and the like (together, "Reletting Expenses"). It is agreed that Landlord may (i) relet the Premises or part or parts thereof for a term or terms that may be equal to, less than or exceed the period that would otherwise have constituted the balance of the Term, and may grant such tenant inducements, including free rent, as Landlord in its sole discretion considers advisable, and (ii) make such alterations to the Premises as Landlord in its sole discretion considers advisable, and no failure to relet or to collect rent under any reletting shall operate to reduce Tenant's liability. Landlord shall use reasonable efforts to relet the Premises. Any such obligation to relet will be subject to Landlord's reasonable objectives of developing its property and the Project in a harmonious manner with appropriate mixes of tenants, uses, floor

areas, terms and the like. Landlord's Reletting Expenses together with all other sums provided for whether incurred prior to or after such termination will be due upon demand.

(b) Termination Damages. If the Term of this Lease is terminated for default, unless and until Landlord elects lump sum liquidated damages described in the next paragraph, Tenant covenants, as an additional, cumulative obligation after any such termination, to pay punctually to Landlord all the sums and perform all of its obligations in the same manner as if the Term had not been terminated. In calculating such amounts Tenant will be credited with the net proceeds of any rent then actually received by Landlord from a reletting of the Premises after deducting all Rent that has not then been paid by Tenant, provided that Tenant shall never be entitled to receive any portion of the re-letting proceeds, even if the same exceed the Rent originally due hereunder.

(c) Lump Sum Liquidated Damages. If this Lease is terminated for default, Tenant covenants, as an additional, cumulative obligation after any such termination, to pay forthwith to Landlord at Landlord's election made by written notice at any time after termination, as liquidated damages a single lump sum payment equal to either (x) the sum of (i) all sums to be paid by Tenant and not then paid at the time of such election, plus, (ii) the excess of the present value of all of the Rent reserved for the residue of the Term (with Additional Rent deemed to increase 5% in each year on a compounding basis) over the present value of the aggregate fair market rent and Additional Rent payable (if less than the Rent payable hereunder) on account of the Premises during such period, which fair market rent shall be reduced by reasonable projections of vacancies and by Landlord's Reletting Expenses described above to the extent not theretofore paid to Landlord) or (y) twelve (12) months (or such lesser number of months as may then be remaining in the Term) of Base Rent and Additional Rent at the rate last payable by Tenant under this Lease. (The Federal Reserve discount rate (or equivalent) shall be used in calculating such present values under clause (x)(ii), and in the event the parties are unable to agree on such fair market rent, the matter shall be submitted, upon the demand of either party, to the office of the AAA closest to the Property, with a request for arbitration in accordance with the rules of the Association by a single arbitrator who shall be a licensed real estate broker with at least ten (10) years experience in the leasing of 1,000,000 or more square feet of floor area of buildings similar in character and location to the Premises, and who shall not be affiliated with either Landlord or Tenant and has not worked for either party or its affiliates at any time during the prior five (5) years, whose decision shall be conclusive and binding on the parties.)

(d) Remedies Cumulative; Jury Waiver; Late Performance. The remedies to which Landlord may resort under this Lease, and all other rights and remedies of Landlord are cumulative, and any two or more may be exercised at the same time except where this Lease specifically provides otherwise, such as the provisions of Sections 14.03(b) and (c) and the provisions of Sections 14.03(c)(x) and (y). Nothing

in this Lease shall limit the right of Landlord to prove and obtain in proceedings for bankruptcy or insolvency an amount equal to the maximum allowed by any statute or rule of law in effect at the time, but not to exceed the limitations set forth in this Section 14.03; and Tenant agrees that the fair value for occupancy of all or any part of the Premises at all times shall never be less than the Base Rent and all Additional Rent payable from time to time. Tenant shall also indemnify and hold Landlord harmless in the manner provided in Section 9.02 if Landlord shall become or be made a party to any claim or action necessary to protect Landlord's interest under this Lease in a bankruptcy proceeding, or other proceeding under Title 11 of the United States Code, as amended. LANDLORD AND TENANT WAIVE TRIAL BY JURY IN ANY ACTION TO WHICH THEY ARE PARTIES, and further agree that any action arising out of this Lease (except an action for possession by Landlord, which may be brought in whatever manner or place provided by law) shall be brought in the Trial Court, Superior Court Department, in the county where the Premises are located.

(e) Waivers; Accord and Satisfaction. No consent by Landlord or Tenant to any act or omission that otherwise would be a default shall be construed to permit other similar acts or omissions. Neither party's failure to seek redress for violation or to insist upon the strict performance of any covenant, nor the receipt by Landlord of Rent with knowledge of any breach of covenant, shall be deemed a consent to or waiver of such breach. No breach of covenant shall be implied to have been waived unless such is in writing, signed by the party benefiting from such covenant and delivered to the other party; and no acceptance by Landlord of a lesser sum than the Rent due shall be deemed to be other than on account of the earliest installment of such Rent. No endorsement or statement on any check or in any letter accompanying any check or payment shall be deemed an accord and satisfaction; and Landlord may accept such check or payment without prejudice to Landlord's right to recover the balance of such installment or pursue any other right or remedy. The acceptance by Landlord of any Rent following the giving of any default and/or termination notice shall not be deemed a waiver of such notice. Tenant shall not interpose any counterclaim or counterclaims (other than compulsory counterclaims that would be lost if not interposed) in a summary proceeding or in any action based on non-payment of Rent.

(f) Landlord's Curing. If Tenant fails to perform any covenant within any applicable cure period, then Landlord at its option may (without waiving any right or remedy for Tenant's non-performance) at any time thereafter perform the covenant for the account of Tenant. Tenant shall upon demand reimburse Landlord's cost (including reasonable attorneys' fees) of so performing on demand as Additional Rent. Notwithstanding any other provision concerning cure periods, Landlord may cure any non-performance for the account of Tenant after such notice to Tenant, if any, as is reasonable under the circumstances if curing prior to the expiration of the applicable cure period is reasonably necessary to prevent likely damage to the Premises or Building or possible injury to persons, or to protect Landlord's interest in the Premises or Building.

ARTICLE 15.
PROTECTION OF LENDERS

15.01. Subordination and Superiority of Lease. Tenant agrees that this Lease and the rights of Tenant hereunder will be subject and subordinate to any lien of the holder of any future mortgage, and to the rights of any lessor under any ground or improvements lease of the Building (all mortgages and ground or improvements leases of any priority are collectively referred to in this Lease as "mortgage," and the holder or lessor thereof from time to time as a "mortgagee"), and to all advances and interest thereunder and all modifications, renewals, extensions and consolidations thereof; provided that any subordination of this Lease shall be conditioned upon Landlord delivering to Tenant a written, recordable subordination, non-disturbance and attornment agreement from the mortgagee seeking to have this Lease subordinated to its interest in the form attached as Exhibit 15.01 (or in such other form as such mortgagee may reasonably request). Tenant shall not be required to execute any subordination, non-disturbance and attornment agreement and this Lease shall not be subordinate to any junior mortgage where a mortgagee having priority over such junior mortgage has prohibited execution of a further subordination, nondisturbance and attornment agreement in any agreement with Tenant and has not consented to Tenant so executing a subordination, nondisturbance and attornment agreement with respect to such junior mortgage. Landlord represents and warrants that the only mortgage to which this Lease is subject as of the execution date is that certain mortgage (the "Existing Mortgage") to Anglo Irish Bank Corporation plc, dated September 29, 2005, and recorded at Book 38144, Page 301 of the Suffolk County Registry of Deeds. Landlord shall provide to Tenant, within 45 days after the date of this Lease, a written agreement from the lender (and upon which Tenant may rely) under the Existing Mortgage confirming that such lender will deliver a discharge or partial release of the Existing Mortgage upon the issuance of a building permit and closing of the construction loan for the Base Building Work.

Tenant agrees that this Lease shall survive the merger of estates of ground (or improvements) lessor and lessee, if any. Until a mortgagee (either superior or subordinate to this Lease) forecloses Landlord's equity of redemption (or terminates or succeeds to a new lease in the case of a ground or improvements lease) no mortgagee shall be liable for failure to perform any of Landlord's obligations (and such mortgagee shall thereafter be liable only after it succeeds to and holds Landlord's interest and then only as limited herein). Tenant shall, if requested by Landlord or any mortgagee, give notice of any alleged non-performance on the part of Landlord to any such mortgagee provided that an address for such mortgagee has been designated to Tenant in writing, and Tenant agrees that such mortgagee shall have a separate, consecutive reasonable cure period of no less than thirty (30) days (to be reasonably extended in the same manner Landlord's cure period is to be extended and for such additional periods as is necessary to allow such Mortgagee to take possession of the Property) following Landlord's cure period during which such mortgagee may, but need not, cure any non-performance by Landlord. The agreements in this Lease with respect to the rights and powers of a mortgagee constitute a continuing offer to any person that may be accepted by taking a

mortgage (or entering into a ground or improvements lease) of the Premises. This Section shall be self-operative, but in confirmation thereof, Tenant shall execute and deliver the subordination, nondisturbance and attornment agreement in the form of Exhibit 15.01 (or in such other form as such mortgagee may reasonably request).

15.02. Attornment. If Landlord's interest in the Property is acquired by mortgagee or purchaser at a foreclosure sale, Tenant shall, at the election of such mortgagee or purchaser, attorn to the transferee or successor to Landlord's interest in the Property and recognize it as Landlord under this Lease. Tenant waives the protection of any statute or rule of law which gives Tenant any right to terminate this Lease or surrender possession of the Premises upon the transfer of Landlord's interest. Upon such attornment, this Lease shall continue in full force and effect as a direct lease between the mortgagee and Tenant upon all of the terms, conditions and covenants as are set forth in this Lease, except that the mortgagee shall not be (i) liable in any way to Tenant for any act or omission, neglect or default on the part of Landlord under this Lease (nothing in this clause (i) being deemed to relieve any mortgagee succeeding to the interest of Landlord hereunder of its continuing obligations as landlord under this Lease from and after the date of such succession), (ii) responsible for any monies owing by or on deposit with Landlord to the credit of Tenant (except to the extent any such deposit is actually received by such mortgagee), (iii) subject to any counterclaim or setoff which theretofore accrued to Tenant against Landlord, (iv) bound by any amendment or modification of this Lease subsequent to such mortgage, or by any previous prepayment of Rent for more than one (1) month, which was not approved in writing by the mortgagee, or bound by the indemnity set forth in Section 9.04, (v) liable beyond mortgagee's interest in the Property, (vi) responsible for the performance of any work to be done by the Landlord under this Lease to render the Premises ready for occupancy by the Tenant or the payment of the Finish Work Allowance, or (vii) required to remove any person occupying the Premises or any part thereof, except if such person claims under the mortgagee. Tenant agrees that any present or future mortgagee may at its option unilaterally elect to subordinate, in whole or in part and by instrument in form and substance satisfactory to such mortgagee alone, the lien of its mortgagee (or the priority of its ground lease) to some or all provisions of this Lease. Nothing in the preceding sentences of this Section 15.02 shall prohibit Tenant from exercising its right to terminate this Lease pursuant to Section 3.01(c) and clause (x) of Section 3.01(e) of this Lease on the conditions set forth therein. Notwithstanding the foregoing, in the event that mortgagee or, other than an entity controlling, controlled by or under common control with Landlord, a purchaser at a foreclosure sale (a "Successor") succeeds to the interest of Landlord prior to the completion of Building (including Base Building and Finish Work), such Successor shall have thirty (30) days to send written notice to Tenant stating whether or not it intends to be bound to perform work remaining to be done by the Landlord under this Lease to render the Premises ready for occupancy by the Tenant and agrees to advance the Finish Work Allowance. For the purposes of the immediately preceding sentence, control shall have the meaning set forth in Section 13.01(b). In the event in such notice it states that it intends to be so bound, then such provisions of this

Lease shall be binding on the Successor. In the event the Successor states that it does not intend to be so bound or fails to timely provide notice to Tenant within such thirty (30) day period, then (A) prior to the date that Tenant has made Tenant's first payment towards the Excess Costs under the FW Contract under the Work Letter, Tenant shall have the right, by written notice to the Successor (a "Succession Election Notice") within sixty (60) days following notice of such acquisition, to either (I) terminate this Lease, or (II) continue this Lease, deposit such Excess Costs in escrow with the Successor to be held and disbursed against the costs to construct the Finish Work as they are incurred on behalf of Tenant in the manner provided under the Work Letter, and complete the Finish Work itself at its expense and otherwise in accordance with the terms of this Lease and (to the extent the Finish Work Allowance is not disbursed by the Successor) reduce the Rent by the amount of the unadvanced Finish Work Allowance amortized over the Term with interest at the rate of 8% per annum; or (B) from and after the date that Tenant has made Tenant's first payment towards the Excess Costs under the FW Contract under the Work Letter, Tenant shall have the right, by giving a Succession Election Notice to the Successor within sixty (60) days following notice of such acquisition, to either (X) terminate this Lease, or (Y) continue this Lease and complete the Finish Work itself at its expense and otherwise in accordance with the terms of this Lease and (to the extent the Finish Work Allowance is not disbursed by the Successor reduce the Rent by the amount of the unadvanced Finish Work Allowance amortized over the Term with interest at the rate of 8% per annum; provided, however, that the Successor can render any Succession Election Notice pursuant to clause (A) or (B), above, null and void and of no force and effect if, within thirty (30) days after the giving of such notice by Tenant, the Successor agrees to be bound by the applicable provisions of this Lease. Tenant's failure to give a Succession Election Notice in the time period(s) required above shall be deemed to be an election pursuant to the clause (II) or (Y) of the immediately preceding sentence, as applicable.

15.03. Rent Assignment. If from time to time Landlord assigns this Lease or the rents payable hereunder to any person, whether such assignment is conditional in nature or otherwise, such assignment shall not be deemed an assumption by the assignee of any obligations of Landlord; but, subject to the limitations herein including Sections 15.01 and 10.02(b), the assignee shall be responsible only for non-performance of Landlord's obligations that occur after it succeeds to, and only during the period it holds possession of, Landlord's interest in the Premises after foreclosure or voluntary deed in lieu of foreclosure.

15.04. Other Instruments. The provisions of this Article shall be self-operative; nevertheless, Tenant agrees to execute, acknowledge and deliver any subordination, attornment or priority agreements or other instruments conforming to the provisions of this Lease (and being otherwise commercially reasonable) from time to time requested by Landlord or any mortgagee, consistent with the terms of this Lease with respect to the rights of Tenant, and further agrees that its failure to do so within ten (10) days after written request shall be a default for which this Lease may be terminated without further notice. Without limitation, where Tenant in this Lease indemnifies or otherwise

covenants for the benefit of mortgagees, such agreements are for the benefit of mortgagees as third party beneficiaries; and at the request of Landlord, Tenant from time to time will confirm such matters directly with such mortgagee.

15.05. Estoppel Certificates. Within ten (10) days after request by a party to this Lease, the other party shall execute, acknowledge and deliver a written statement certifying: (i) that none of the terms or provisions of this Lease have been changed (or if they have been changed, stating how); (ii) that this Lease has not been canceled or terminated; (iii) the last date of payment of Base Rent and other charges and the time period covered; (iv) that to the knowledge of the party executing the certificate, the party requesting such certificate is not in default under this Lease (or, if in default, describing it in reasonable detail); and (v) such other information with respect this Lease as may be reasonably requested or which any prospective purchaser or encumbrancer of the Property may require (which with respect to a statement requested of the Tenant may include whether the Tenant then meets the Financial Standard). [***]. The party receiving any such statement may deliver the statement to any such prospective purchaser or encumbrancer, or with respect to a statement requested by Tenant, Tenant's auditor, which may rely conclusively upon such statement as true and correct. The party requesting such estoppel certificate shall promptly reimburse the other party upon written demand for the reasonable out-of-pocket attorneys' fees and expenses incurred to review, modify, and prepare such certificate, but in any event not to exceed \$1,500 in any one instance.

ARTICLE 16. MISCELLANEOUS PROVISIONS

16.1. Landlord's Consent Fees. In addition to fees and expenses in connection with Tenant Work, as described in Section 10.05, Tenant shall pay Landlord's reasonable fees and expenses, including legal, engineering and other consultants' fees and expenses, incurred in connection with Tenant's request for Landlord's consent under Article 13 (Assignment and Subletting) or in connection with any other act by Tenant which requires Landlord's consent or approval under this Lease.

16.2. Notice of Landlord's Default. Tenant shall give notice of Landlord's failure to perform any of its obligations under this Lease to Landlord, and to any mortgagee or beneficiary under any deed of trust encumbering the Property whose name and address have been given to Tenant. Landlord shall not be in default under this Lease unless Landlord (or such mortgagee or beneficiary) fails to cure such non-performance within thirty (30) days after receipt of Tenant's notice. However, if such nonperformance requires more than thirty (30) days to cure, such period shall be reasonably extended in the case of any such non-performance that cannot be cured by the payment of money where such non-performance can be cured (but in any event shall not exceed 180 days in the aggregate), and Landlord begins promptly within said thirty (30) day period and thereafter diligently completes the cure. In no event shall Landlord be liable for indirect or consequential damages arising out of any default by Landlord under this Lease.

16.3. Quiet Enjoyment. Landlord agrees that, so long as Tenant is not in default under the terms of this Lease, Tenant shall lawfully and quietly hold, occupy and enjoy the Premises during the Term of this Lease without disturbance by Landlord or by any person claiming through or under Landlord, subject to the terms of this Lease.

16.4. Cooperation With Accounting. Upon the written request of Tenant, not more often than quarterly (other than as set forth in the Work Letter), Landlord will provide Tenant with financial information with respect to Operating Expenses and Taxes incurred to date for the then-current year (including capital expenditures for the Building even if not includable within Operating Expenses hereunder) to the extent available to Landlord, as is reasonably required by Tenant's accountants and auditors for Tenant to comply with lease accounting requirements applicable to Tenant (provided that nothing herein shall be deemed to expand, modify or limit Tenant's rights under Article 4 of this Lease, and any such information and Tenant's rights to the same shall be subject to the provisions of Section 4.06 as if it were an audit of Landlord's books and records). Tenant shall reimburse Landlord for the reasonable out-of-pocket costs to provide such information as Additional Rent within 30 days after invoice.

16.5. Notices. All notices, requests and other communications required under this Lease shall be in writing, addressed as specified in Article 1, and shall be (i) personally delivered, (ii) sent by certified mail, return receipt requested, postage prepaid, or (iii) delivered by a national overnight delivery service that maintains delivery records. All notices shall be effective upon delivery (or refusal to accept delivery). Either party may change its notice address upon written notice to the other party. Notices under this Lease may be given by counsel for either party.

16.6. No Recordation. Tenant shall not record this Lease. Either Landlord or Tenant may require that a statutory notice, short form or memorandum of this Lease executed by both parties be recorded. Tenant may record any subordination agreement (notifying Landlord of the date and book and page number) or request Landlord to record it on Tenant's behalf. The party requesting or requiring such recording shall pay all expenses, transfer taxes and recording fees.

16.7. Corporate Authority. Tenant warrants and represents that (a) Tenant is duly organized, validly existing and in good standing under the laws of the jurisdiction in which such entity was organized; (b) Tenant has the authority to own its property and to carry on its business as contemplated under this Lease; (c) Tenant has duly executed and delivered this Lease; (d) the execution, delivery and performance by Tenant of this Lease (i) are within the powers of Tenant, (ii) have been duly authorized by all requisite action, (iii) will not violate any provision of law or any order of any court or agency of government, or any agreement or other instrument to which Tenant is a party or by which it or any of its property is bound, and (iv) will not result in the imposition of any lien or charge on any of Tenant's property, except by the provisions of this Lease; and (e) this Lease is a valid and binding obligation of Tenant in accordance with its terms. This warranty and representation shall survive the termination of the Term.

Landlord represents and warrants that (a) Landlord is duly organized, validly existing and in good standing under the laws of the jurisdiction in which such entity was organized; (b) Landlord has the authority to own its property and to carry on its business as contemplated under this Lease; (c) Landlord has duly executed and delivered this Lease; (d) the execution, delivery and performance by Landlord of this Lease (i) are within the powers of Landlord, (ii) have been duly authorized by all requisite action, (iii) will not violate any provisions of law or any order of any court or agency of government, or any agreement or other instrument to which Landlord is a party or by which it or any of its property is bound, and (iv) will not result in the imposition of any lien or charge on any of Landlord's property, except by the provisions of this Lease; and (e) this Lease is a valid and binding obligation of Landlord in accordance with its terms. This warranty and representation shall survive the termination of the Term.

16.8. Joint and Several Liability. If more than one party signs this Lease as Tenant, they shall be jointly and severally liable for all obligations of Tenant.

16.9. Force Majeure. Except where Force Majeure is expressly excluded elsewhere in this Lease, if a party cannot perform any of its obligations due to events beyond its reasonable control (other than the inability to make payments when due), the time provided for performing such obligations shall be extended by a period of time equal to the duration of the events. Events beyond a party's reasonable control include without limitation acts of God, war, civil commotion, labor disputes, strikes, terrorist attacks, fire, flood or other casualty, the inability to obtain labor or material from customary sources on customary terms, government regulation or restriction (as distinguished from inability to obtain permits in the ordinary course), abnormal weather conditions (meaning circumstances in which adverse weather conditions significantly exceed those that have historically been encountered, or may reasonably be expected to be encountered, at the Property, and, with respect to the construction of Landlord Work, solely to the extent the applicable contractor is entitled to a delay in time for performance on account of such abnormal weather conditions), neglects or delays of the other party, or any similar event to the foregoing. Events described in this Section 16.09 are referred to herein as "Force Majeure".

16.10. Limitation of Warranties. Landlord and Tenant expressly agree that, other than those warranties expressly set forth in this Lease, there are and shall be no implied warranties of merchantability, habitability, suitability, fitness for a particular purpose or of any other kind arising out of this Lease.

16.11. No Other Brokers. Landlord and Tenant represent and warrant to each other that the Broker(s) named in Article 1 are the only agents, brokers, finders or other parties with whom such party has dealt who may be entitled to any commission or fee with respect to this Lease or the Premises or the Property. Landlord and Tenant agree to indemnify and hold the other harmless from any claim, demand, cost or liability, including attorneys' fees and expenses, asserted by any party other than the brokers named in Article 1 based upon dealings of that party with the indemnifying party. Landlord shall be responsible

for the payment of any brokerage fees to the brokers named in Article 1. The provisions of this Section shall survive the Term or early termination of this Lease.

16.12. Applicable Law and Construction. This Lease may be executed in counterparts, shall be construed as a sealed instrument, and shall be governed exclusively by the provisions hereof and by the laws of the state where the Property is located without regard to principles of choice of law or conflicts of law. A facsimile signature to this Lease shall be sufficient to prove the execution by a party. If any provisions shall to any extent be invalid, the remainder shall not be affected. Other than contemporaneous instruments executed and delivered of even date, if any, this Lease contains all of the agreements between Landlord and Tenant relating in any way to the Premises and supersedes all prior agreements and dealings between them. There are no oral agreements between Landlord and Tenant relating to this Lease or the Premises. This Lease may be amended only by instrument in writing executed and delivered by both Landlord and Tenant. The provisions of this Lease shall bind Landlord and Tenant and their respective successors and assigns, and shall inure to the benefit of Landlord and its successors and assigns and of Tenant and its permitted successors and assigns, subject to Article 13. The titles are for convenience only and shall not be considered a part of this Lease. This Lease shall not be construed more strictly against one party than against the other merely by virtue of the fact that it may have been prepared primarily by counsel for one of the parties, it being recognized that both Landlord and Tenant have contributed substantially and materially to the preparation of this Lease. If Tenant is granted any extension or other option, to be effective the exercise (and notice thereof) shall be unconditional; and if Tenant purports to condition the exercise of any option or to vary its terms in any manner, then the purported exercise shall be ineffective. The enumeration of specific examples of a general provision shall not be construed as a limitation of the general provision. Unless a party's approval or consent is required by the express terms of this Lease not to be unreasonably withheld, such approval or consent may be withheld in the party's sole discretion. The submission of a form of this Lease or any summary of its terms shall not constitute an offer by Landlord to Tenant; but a leasehold shall only be created and the parties bound when this Lease is executed and delivered by both Landlord and Tenant and approved by the holder of any mortgage of the Premises having the right to approve this Lease. Nothing herein shall be construed as creating the relationship between Landlord and Tenant of principal and agent, or of partners or joint venturers or any relationship other than landlord and tenant. This Lease and all consents, notices, approvals and all other related documents may be reproduced by any party by any electronic means or by facsimile, photographic, microfilm, microfiche or other reproduction process and the originals may be destroyed; and each party agrees that any reproductions shall be as admissible in evidence in any judicial or administrative proceeding as the original itself (whether or not the original is in existence and whether or not reproduction was made in the regular course of business), and that any further reproduction of such reproduction shall likewise be admissible. If any payment in the nature of interest provided for in this Lease shall exceed the maximum interest permitted

under controlling law, as established by final judgment of a court, then such interest shall instead be at the maximum permitted interest rate as established by such judgment.

16.13. Construction on the Property or Adjacent Property.

(a) Tenant acknowledges that Landlord and/or its affiliates is or are undertaking or may undertake major renovations and/or construction at the Project. Landlord shall have the right, in connection with the development, redevelopment, alteration, improvement, operation, maintenance, or repair of the Project, to subject the Property and its appurtenant rights to easements for the construction, reconstruction, alteration, improvement, operation, repair or maintenance of elements thereof, for access and egress, for parking, for the installation, maintenance, repair, replacement or relocation of utilities serving the Project and to subject the Property to such other rights, agreements, and covenants for such purposes as Landlord may determine. Tenant hereby agrees that this Lease shall be subject and subordinate to any such matters that do not materially interfere with Tenant's use of the Premises. Neither Tenant nor any persons acting under Tenant shall take any action to oppose the Project, nor, to the extent within Tenant's control, shall the Tenant knowingly permit any Tenant Parties to take any action in opposition to the Project.

Landlord and its affiliates and their respective agents, employees, licensees and contractors shall also have the right to enter on the Property or Building to undertake work pursuant to any easement granted pursuant to the above paragraph; to shore up the foundations and/or walls of the Building; to erect scaffolding and protective barricades around, within or adjacent to the Building; and to do any other act necessary for the safety of the Building or the expeditious completion of such work. Landlord shall not be liable to Tenant for any compensation or reduction of Rent by reason of inconvenience or annoyance or for loss of business resulting from any act by Landlord pursuant to this Section provided that Landlord complies with this Section 16.13. [***]. For the purposes of mitigating against potential adverse impacts on Tenant's operations as a result of activities permitted under this Section 16.13, Landlord and Tenant agree to cooperate with each other as is reasonably required during the design of the Finish Work and any Tenant Work to identify reasonable measures to reduce vibration risk to any unusually vibration-sensitive Tenant equipment in the Premises.

Tenant acknowledges that, in connection with the Building B Lease and the exercise of its rights under this Section 16.13, Landlord shall cause (or permit to be caused) the construction of a pedestrian bridge from Building B to the Premises in a location to be reasonably approved by Tenant. Any such pedestrian bridge (the "Pedestrian Bridge") shall be considered part of Building B, subject to Tenant's appurtenant rights as set forth in Section 2.01(b) above. Landlord shall (if required), with Tenant's cooperation, re-balance Building heating, ventilation and air-conditioning systems following the construction of the Pedestrian Bridge.

16.14. Confidentiality of Information.

Landlord agrees to hold any proprietary information identified as confidential by Tenant in writing and supplied to Landlord pursuant to this Lease, excluding any information required to be filed with a governmental agency ("Confidential Information") in confidence. Notwithstanding the foregoing, Landlord may disclose such Confidential Information to its attorneys, accountants, property managers, real estate brokers, investors, lenders, attorneys, and consultants in connection with the financing or sale of the Property or Landlord's review of such information to the extent (a) such parties need to know the Confidential Information for the purpose of evaluating the proposed transaction, (b) Landlord informs such parties of the confidential nature of the Confidential Information and (c) such parties agree to hold the Confidential Information in confidence. Landlord will use reasonable efforts to cause such parties to observe the terms of this agreement, and Landlord will be responsible for any breach of this provisions by any such parties.

Landlord acknowledges and agrees that Tenant shall not have an adequate remedy at law in the event of a breach of this provision by Landlord, that Tenant will suffer irreparable damage and injury if Landlord breaches this Section 16.14, and that Tenant, in addition to any other rights and remedies available under this Lease or otherwise, shall be entitled to an injunction to be issued by a court of competent jurisdiction restricting Landlord from committing or continuing any violation of this Section 16.14.

The term "Confidential Information" does not include information that (i) is publicly known at the time of delivery, (ii) subsequently becomes publicly known through no breach of this Section 16.14 by Landlord or its representatives, (iii) Landlord can demonstrate was in its possession at the time of disclosure and was not acquired by it directly or indirectly from Tenant on a confidential basis, (iv) becomes available to Landlord on a non-confidential basis from a source other than the Tenant and which source, to the best of Landlord's knowledge, is not under an obligation of confidence to Tenant or (v) is disclosed in the course of litigation between Landlord and Tenant or Landlord and any other third party.

16.15. Equal Employment Opportunity. If and to the extent applicable to each of them, Landlord and Tenant shall comply with the requirements of 41 C.F.R. Sections 60-1.4(a)(7), 60-300.5(d), 60-741.5(d), and 29 C.F.R. part 471, Appendix A to Subpart A.

**ARTICLE 17.
SECURITY DEPOSIT**

17.01. Letter of Credit. If, at any time following the Telaprevir Approval, Tenant has an unrestricted cash, cash equivalent and marketable securities balance of [***], as determined in accordance with generally accepted accounting principles, consistently applied (the "Financial Standard") then Tenant shall provide to Landlord as security for

the performance of the obligations of Tenant hereunder a letter of credit in the amount specified in Section 1.13 in accordance with this Section (as renewed, replaced, and/or reduced pursuant to this Section, the “Letter of Credit”). The Letter of Credit shall be in the form attached as Exhibit 17.01 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 that has an office in Boston, Massachusetts, (ii) shall require only the presentation to the issuer of a certificate of the holder of the Letter of Credit stating either (a) that Landlord is entitled to draw on the Letter of Credit in accordance with this Lease or (b) 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 this Lease, (iii) shall be payable to Landlord and its successors in interest as the Landlord and shall be freely transferable at nominal cost, (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 sixty (60) 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 than the date sixty (60) days after the last day of the Term.

If (x) Tenant shall be in default under this 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); (y) 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; or (z) (i) the credit rating of the long-term debt of the issuer of the Letter of Credit (according to Moody’s, Standard & Poor’s or similar national rating agency reasonably identified by Landlord) is downgraded to a grade below investment grade; or (ii) the issuer of the Letter of Credit enters into any supervisory agreement with any governmental authority; or (iii) the issuer of the Letter of Credit fails to meet any capital requirements imposed by applicable law, then, in any of such events under this clause (z), unless Tenant delivers to Landlord a replacement Letter of Credit complying with the terms of this Lease within ten (10) days after demand therefor from Landlord, Landlord shall have the right to draw upon the Letter of Credit in full or in part without giving any further notice to Tenant. Such failure to timely deliver a new Letter of Credit pursuant to this Section 17.01 shall be deemed to be an Event of Default by Tenant (without the necessity of further notice or cure period notwithstanding anything in this Lease to the contrary). Landlord may, but shall not be obligated to, apply the amount so drawn to the extent necessary to cure Tenant’s default and/or any other damages to which Landlord is entitled under this 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 against amounts due hereunder 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. 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 Tenant provided that no default of which Tenant then has notice (to the extent that such notice is required) is then continuing.

17.02. Letter of Credit Pledge. The Landlord may pledge its right and interest in and to the Letter of Credit to any mortgagee or ground lessor and, in order to perfect such pledge, have such 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 ("Letter of Credit Pledge"), 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 mortgagee or ground lessee. In the event that the Letter of Credit is ever held by any party in escrow including but not limited to a Letter of Credit Pledgee, Landlord shall provide in the documentation of any such escrow or pledge or other assignment of the Letter of Credit to a Letter of Credit Pledgee, and the Letter of Credit Pledgee or other party given possession of the Letter of Credit shall agree, that the Letter of Credit Pledgee or such other party shall release the Letter of Credit in the event Landlord is required to release the Letter of Credit pursuant to Section 17.04 hereunder.

17.03. 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 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 shall be responsible for any of the costs associated with such transfer that are in excess of nominal costs. 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.

17.04. Release of the Security Deposit. At any time (but no more than once per calendar year) after Tenant provides the Letter of Credit hereunder, if Tenant meets the Financial Standard and provided that there is not an ongoing Event of Default hereunder at the time of such request, Landlord shall release the Letter of Credit, if any, then held by Landlord. If Landlord has so released the Letter of Credit (whether one or more times), and thereafter Tenant fails to meet the Financial Standard, as reasonably determined by Landlord, Tenant shall, within ten (10) days thereafter, be obligated to reinstate the Letter of Credit.

17.05. Reporting Obligations. Unless Tenant is a public company, and Tenant's applicable quarterly and annual filings clearly set forth the information necessary to determine whether Tenant meets the Financial Standard in connection with the periodic determination of whether Tenant meets the Financial Standard, Tenant shall, upon request in each instance by Landlord, furnish to Landlord the following: (x) within sixty (60) days after each of its first three fiscal quarters during each fiscal year of the Term (and ninety (90) days after the fourth fiscal quarter during each fiscal year) an unaudited financial statement of Tenant together with a letter from the chief financial officer of Tenant stating, to the best of his or her knowledge, whether or not Tenant meets the Financial Standard (together with a copy of the most recently filed United States Securities and Exchange Commission form 10Q, if Tenant is lawfully required to file such a report), and (y) within one hundred fifty (150) days after each of Tenant's fiscal years during the Term audited financial statements of the Tenant for the prior fiscal year (together with a copy of the most recently filed United States Securities and Exchange Commission form 10K, if Tenant is lawfully required to file such a report). If any of the financial documentation required under Section 17.05 is not provided when required, and if Tenant fails to furnish the same to Landlord within fifteen (15) days of Landlord's written request therefor, and if Tenant has not cured such failure within five (5) business days after receiving a second written request from Landlord (provided both of such notices contain a prominent reference to this Section in bold print stating that the failure to provide such financial statements shall result in a default under this Lease), then Tenant shall be in default under this Lease and the unrestricted cash, cash equivalent and marketable securities of the Tenant shall be deemed to be zero until financial statements are provided in accordance with this Section 17.05. Unless public by other means, Landlord will maintain confidential such statements, except as required by applicable law or Court order; however Landlord may provide information from such statements to Landlord's accountants, lenders, attorneys and partners, as long as Landlord advises the recipients of the existence of Landlord's confidentiality obligation.

ARTICLE 18. GOVERNMENT INCENTIVES

18.01. Government Incentives.

(a) The parties acknowledge that Landlord or an affiliate of Landlord has submitted to The Commonwealth of Massachusetts an application for approval of the Project as an Economic Development District under St. 2006, c.293 §§ 5-12, as amended by St. 2008, c.129 (the "I³ Program") for state infrastructure development assistance that will finance, through tax exempt bonds issued by The Massachusetts Development Finance Agency, the cost of certain of the utilities, streets, sidewalks, water transportation facilities, parks and other public infrastructure to be constructed at the Project in the amount of \$50,000,000.00 pursuant to a Preliminary Economic Development Proposal dated April 8, 2011, as supplemented on April 22, 2011, to the Secretary of the

Massachusetts Executive Office of Administration and Finance (the “Secretary”), the Mayor of the City of Boston, the Massachusetts Development Finance Agency (the “Agency”) and the Commissioner of the Massachusetts Department of Revenue, a copy of which has been provided to Tenant (the “Preliminary Application”). Pursuant to the Preliminary Application and the I³ Program, such bonds would be paid by dedication of new state tax revenue from income taxes to be generated by eligible new jobs created by Tenant in the Building and the premises leased under the Building B Lease and, to the extent includable under the I³ Program, the Building F Lease and the Building E Lease. Tenant shall reasonably cooperate with Landlord and/or an affiliate of Landlord in providing employment and wage information in connection with such application and the I³ Program. Landlord shall use commercially reasonable, good faith efforts to obtain approval for the funding of such infrastructure development under the I³ Program, including without limitation the submission of an Economic Development Proposal (the “Final Application”) to the Secretary and the Agency for final approval if the Preliminary Application (as it may be supplemented or amended in accordance with the I³ Program) is approved by the Secretary and the City of Boston, but it shall not be a default of the Landlord hereunder if the Preliminary Application or the Final Application is not so approved or if by reason of any condition in the approved Final Application any portion of the bonds are not issued. Landlord’s obligations under this Section 18(a) and Section 18(b) below shall terminate on the earlier to occur of the date that either the Preliminary Application or the Final Application for coverage under the I³ Program is first denied or rejected, whether by the City of Boston, the Secretary, the Agency or any other state agency with jurisdiction over the I³ Program, or the I³ Program is no longer in full force and effect.

(b) Tenant shall be entitled to an increase in the Finish Work Allowance equal to an amount (the “I³ Amount”) equal to fifty-one percent (51%) of the amount of the net proceeds (i.e. net of all transaction and issuance costs associated therewith incurred by Landlord or its affiliates) of that portion of the state infrastructure development assistance actually received by the Landlord or its affiliates for the Project based upon the new state tax revenue from eligible new jobs created by Tenant to the extent approved by the Commonwealth of Massachusetts (the “Tenant Supported Bonds”), as such assistance is actually received from time to time by Landlord or its affiliates on account of I³ Program funds obtained pursuant to the application by Landlord as described in Section 18(a), above.

If and to the extent that Landlord or any of its affiliates is required to reimburse the City of Boston the amount of any shortfall of the allocable debt service apportioned to the Property under the I³ Program (the “Tenant Shortfall”) from time to time, in consideration of any Finish Work Allowance actually received by Tenant on account of the I³ Program, then Tenant shall pay to Landlord, as Additional Rent, one hundred percent (100%) of the amount of any Tenant Shortfall that Landlord is required to pay (whether contractually, through liens placed by the City of Boston on the Property, or otherwise) within thirty (30) days following written demand by Landlord so that Landlord can pay such amounts as and when due from Landlord or an affiliate of

Landlord to the City of Boston. From and after the date the Final Application is approved, if Tenant is entitled to an increase in the Finish Work Allowance pursuant to the terms of this subsection (b), then Tenant shall provide to Landlord, within 10 days of Landlord's written request from time to time, such information regarding the number of Tenant's current and projected employees, payroll, and income taxes withheld thereon as may be required for compliance by Landlord or any affiliate of Landlord with respect to Chapter 293 §§ 5 through 12 of the 2006 Massachusetts Acts and Resolves, as amended by Chapter 129 of the 2008 Massachusetts Acts and Resolves; 801 C.M.R 51.00 et seq; and Technical Information Release 08-18 issued by the Massachusetts Department of Revenue. Tenant's obligations to pay any Tenant Shortfall to Landlord pursuant to this paragraph shall survive the termination or earlier expiration of this Lease.

(c) Prior to the Final Commencement Date, Landlord and Landlord affiliates shall reasonably cooperate with Tenant at no cost and expense to Landlord and Landlord affiliates in applying for available forms of state financial assistance for life science companies at the Building, including without limitation for a MassWorks Infrastructure Program grant (a "MIP grant"), if legally possible. Such cooperation shall include Landlord's (and as applicable, Landlord affiliates') application for a MIP grant to be used for infrastructure costs at the Project, if legally possible. Landlord will increase the Finish Work Allowance by an amount equal to fifty-one percent (51%) of the amount of the net proceeds (i.e. net of all transaction costs incurred by Landlord or its affiliates) of any MIP grant or financial assistance actually received by Landlord expressly by reason of Tenant's tenancy in the Premises and as a result of an application filed prior to the Commencement Date, as such MIP grant funds or other assistance are actually received from time to time by Landlord. Landlord shall use commercially reasonable, good faith efforts to obtain a MIP grant for infrastructure costs at the Project prior to the Commencement Date, if legally possible, but it shall not be a default of the Landlord hereunder if the Project is not so approved.

(d) Landlord shall reasonably cooperate with Tenant at no cost and expense to Landlord in making application for other available forms of state financial assistance with respect to Tenant's relocation to the Building. The whole of any economic benefit from any such state financial assistance based solely on Tenant's occupancy of the Premises shall inure solely to Tenant. If legally required, Landlord or its affiliate shall join as applicant with Tenant for a Tax Increment Financing Agreement for the Project with the City of Boston, but all of the benefits from such agreement (and any obligations associated therewith) shall accrue solely to Tenant.

(e) To the extent any costs, expenses or benefits must be allocated among one or more buildings occupied by Tenant at Fan Pier under this Section 18.01 and equivalent provisions under other leases between Tenant and Landlord or its affiliates, such allocations shall be made based upon the square footage of the buildings, the qualified Tenant employees therein, or such other method as is reasonably determined by Landlord.

(f) Tenant intends to apply to the Massachusetts Economic Assistance Coordinating Council for designation of the Building as a Certified Project, as defined in 402 C.M.R. Section 2, and for approval of a Tax Increment Financing Agreement (a “TIFA”) with the City of Boston with respect to the Premises. If Tenant actually so applies and the Certified Project Application, including a TIFA providing for an exemption percentage as would result in a projected total savings of approximately \$12,000,000 commencing July 1, 2014 in the aggregate with all other TIFAs Tenant obtains at the Project applicable during such period from the real estate taxes that would otherwise be payable with respect to the Premises and the premises under the Building B Lease, in the aggregate, is not approved by the City of Boston on or before June 1, 2011, then Tenant at Tenant’s option by notice to the Landlord given no earlier than June 2, 2011 and no later than June 10, 2011 may, in conjunction with a simultaneous termination of all other Tenant leases at the Project, terminate this Lease by written notice to Landlord, effective as of the date of such notice (provided, however, that Landlord may render such termination notice null and void by, within thirty (30) days thereafter, irrevocably committing in writing to provide Tenant with an alternate economic benefit of equal or better value based on the standards set forth on Exhibit 18.01(f), attached). If legally required, Landlord and any affiliate of Landlord, including Fan Pier Development LLC, shall join as applicant with Tenant for a TIFA with the City of Boston.

(g) To the extent the Finish Work Allowance as increased by the I³ Amount and, if legally possible, the MIP Grant (collectively, the “Governmental Incentives”) exceeds the Excess Costs, or any portion of the Governmental Incentives is received by Landlord after the Tenant has paid all of the Excess Costs such that Tenant would not otherwise receive the benefit of such Governmental Incentives, Landlord shall pay to Tenant such excess following the final reconciliation contemplated by Sections 11.02 and 11.06 of the Work Letter.

[BALANCE OF PAGE HAS BEEN INTENTIONALLY LEFT BLANK.]

IN WITNESS WHEREOF, the undersigned have caused this Lease to be executed as of the day and year first above written.

LANDLORD:

FIFTY NORTHERN AVENUE LLC, a Delaware limited liability company

By: Fan Pier Development LLC, a Delaware limited liability company, its Manager

By: Cornerstone Real Estate Advisers LLC, a Delaware limited liability company, its
Manager

By: /s/ David J. Reilly

Name: David J. Reilly

Title: President/Chief Executive Officer

TENANT:

VERTEX PHARMACEUTICALS INCORPORATED, a Massachusetts corporation

By: /s/ Ian F. Smith

Name: Ian F. Smith

Title: Chief Financial Officer

By: /s/ Matthew W. Emmens

Name: Matthew W. Emmens

Title: President & CEO

Certain confidential information contained in this document, marked by [***], has been omitted because it is not material and would likely cause competitive harm to Vertex Pharmaceuticals Incorporated if publicly disclosed.

EXECUTION COPY

ELEVEN FAN PIER BOULEVARD LLC

AND

VERTEX PHARMACEUTICALS INCORPORATED

**LEASE FOR 11 FAN PIER BOULEVARD (PARCEL B — FAN PIER)
BOSTON, MASSACHUSETTS**

ELEVEN FAN PIER BOULEVARD LLC

AND

VERTEX PHARMACEUTICALS INCORPORATED

**LEASE FOR 11 FAN PIER BOULEVARD (PARCEL B — FAN PIER)
BOSTON, MASSACHUSETTS**

TABLE OF CONTENTS

ARTICLE 1.	BASIC TERMS	1	
1.01.	Date of Lease:	1	
1.02.	Landlord:	1	
1.03.	Tenant:	1	
1.04.	Address of Property:	1	
1.05.	Building, Property and Project:	1	
1.06.	Premises:	2	
1.07.	Tenant's Pro Rata Share:	2	
1.08.	Term:	2	
1.09.	Commencement Date:	3	
1.10.	Permitted Uses:	3	
1.11.	Broker(s):	4	
1.12.	Management Company:	4	
1.13.	Security Deposit:	4	
1.14.	Parking Access Devices:	4	
1.15.	Base Rent:	4	
1.16.	Additional Rent:	5	
1.17.	Expenses Paid Directly by Tenant:	5	
1.18.	Original Address of Landlord for Notices:	5	
1.19.	Original Address of Tenant for Notices:	6	
1.20.	Finish Work:	6	
1.21.	Finish Work Allowance:	6	
1.22.	Exhibits:	6	
ARTICLE 2.	PREMISES AND APPURTENANT RIGHTS		8
2.01.	Lease of Premises; Appurtenant Rights		8
ARTICLE 3.	LEASE TERM	14	
3.01.	Lease Term; Delay in Commencement		14
3.02.	Hold Over	16	

3.03.	Right to Extend	17	
ARTICLE 4.	RENT	19	
4.01.	Base Rent	19	
4.02.	Additional Rent	19	
4.03.	Late Charge	21	
4.04.	Interest	21	
4.05.	Method of Payment	21	
4.06.	Audit	22	
4.07.	Phasing	23	
ARTICLE 5.	TAXES	24	
5.01.	Taxes	24	
5.02.	Definition of "Taxes"	24	
5.03.	Personal Property Taxes	25	
ARTICLE 6.	UTILITIES	25	
6.01.	Utilities	25	
ARTICLE 7.	INSURANCE	27	
7.01.	Coverage	27	
7.02.	Action Increasing Rates	28	
7.03.	Waiver of Subrogation	29	
7.04.	Landlord's Insurance	30	
ARTICLE 8.	OPERATING EXPENSES	30	
8.01.	Operating Expenses	30	
ARTICLE 9.	USE OF PREMISES	33	
9.01.	Permitted Uses	33	
9.02.	Indemnification	33	
9.03.	Compliance With Legal Requirements	34	
9.04.	Hazardous Substances	35	
9.05.	Signs and Auctions	37	
9.06.	Landlord's Access	38	
9.07.	Security	39	
ARTICLE 10.	CONDITION AND MAINTENANCE OF PREMISES AND PROPERTY	40	
10.01.	Condition of Premises and Property	40	
10.02.	Exemption and Limitation of Liability	40	
10.03.	Landlord's Obligations	41	
10.04.	Tenant's Obligations	43	

10.05.	Tenant Work	44	
10.06.	Condition upon Termination	48	
10.07.	Decommissioning of the Premises	49	
ARTICLE 11.	ROOFTOP LICENSE; ANTENNAS		50
11.01.	Rooftop License	50	
11.02.	Installation and Maintenance of Rooftop Equipment		50
11.03.	Interference by Rooftop Equipment	51	
11.04.	Relocation of Rooftop Equipment	52	
ARTICLE 12.	DAMAGE OR DESTRUCTION; CONDEMNATION		52
12.01.	Damage or Destruction of Premises	52	
12.02.	Eminent Domain	54	
ARTICLE 13.	ASSIGNMENT AND SUBLETTING		55
13.01.	Landlord's Consent Required	55	
13.02.	Landlord's Consent	56	
13.03.	No Release	58	
13.04.	***	58	
13.05.	***	59	
ARTICLE 14.	EVENTS OF DEFAULT AND REMEDIES		60
14.01.	Covenants and Conditions	60	
14.02.	Events of Default	60	
14.03.	Remedies for Default	60	
ARTICLE 15.	PROTECTION OF LENDERS		63
15.01.	Subordination and Superiority of Lease		63
15.02.	Attornment	64	
15.03.	Rent Assignment	65	
15.04.	Other Instruments	65	
15.05.	Estoppel Certificates	65	
ARTICLE 16.	MISCELLANEOUS PROVISIONS		66
16.01.	Landlord's Consent Fees	66	
16.02.	Notice of Landlord's Default		66
16.03.	Quiet Enjoyment	66	
16.04.	Cooperation With Accounting		66
16.05.	Notices	67	
16.06.	No Recordation	67	
16.07.	Corporate Authority	67	
16.08.	Joint and Several Liability		67
16.09.	Force Majeure	67	

16.10.	Limitation of Warranties	67	
16.11.	No Other Brokers	68	
16.12.	Applicable Law and Construction	68	
16.13.	Construction on the Property or Adjacent Property		69
16.14.	Confidentiality of Information	70	
16.15.	Equal Employment Opportunity	70	
ARTICLE 17.	SECURITY DEPOSIT	71	
17.01.	Letter of Credit	71	
17.02.	Letter of Credit Pledge	72	
17.03.	Transfer of Security Deposit	72	
17.04.	Release of the Security Deposit	72	
17.05.	Reporting Obligations	72	
ARTICLE 18.	GOVERNMENT INCENTIVES	73	
18.01.	Government Incentives	73	

INDEX OF DEFINED TERMS

—A—

AAA 23
Additional Rent 128
Agency 73
Alternative Extension Term 17
Applicable Preclusion Period 57
Arbitrator 19
Audit Period 22

—B—

BMBL 35
Building 1
Building B 13
Building B Lease 13
Building E 17
Building E Lease 17

—C—

Common Areas and Facilities 8
Comparable Properties 18
Confidential Information 70
Construction Documents 45
control 56
Core Building Systems 45

—D—

Decision Date 18
Decision Notice 18
Declaration 12
Default Rate 21
DEP 12
Development Plan 3
DHHS 35

—E—

Environmental Incidents 36
Environmental Insurance 30
Environmental Law 35
Environmental Reports 36
Estimated Commencement Date 3

Event of Default 60
Existing Mortgage 63
Extension Term 18

—F—

Final Application74
Final Commencement Date 3
Financial Standards 71
First Extension Term 17
Force Majeure 68
EPOC 12

—H—

Hazardous Substances 35

—I—

I³ Amount.....74
I³ Program..... 73
Indemnities 33

—L—

Lease 94
LEED 47
Legal Requirement 34
Legal Requirements 34
Letter of Credit 71
Letter of Credit Pledgee 72
Limited Parking Period 12

—M—

Market Rent 18
Material Service Interruption 27
Measurement Standard 12
MIP grant 74

—O—

Occurrences 37
Operating Costs 20
Operating Expenses 30

—P—

Parking Agreement 10

Parking Garage 11
Percentage Share 31
Permitted Transfer 55
Preliminary Application 73
Premises 2
Profits 58
Project 1
Project Document 13
Project Documents 13
Property 1

—R—

Related Entity 56
Reletting Expenses 61
Rent 19
Restricted Parking Rate 12
Rooftop Agreement 51
Rooftop Equipment 50
Rules and Regulations 33

—S—

Secretary 73
Security Plan 39
Service Contracts 43
Service Interruption 26
Service Interruption Notice 26
Storage Space 4
Succession Election Notice 64
Successor 64
Successor Entity 55

—T—

Taxes 24
Tenant Contractor 46
Tenant Environmental Incident 36
Tenant Parties 27
Tenant Party 27
Tenant Property 25
Tenant Shortfall 74
Tenant Supported Bonds 74
Tenant Work 44
Tenant Work Threshold Amount 45
Tenant's Architect 46

Tenant's Audit Notice 22
Tenant's Damages 14
Tenant's Existing Leases 15
Term 22
Third Arbitrator 19
Total Operating Costs 20
Transfer 55
Transfer Expenses 58
Transferee 55

—U—

Utility Service 25
Utility Service Provider 26
Utility Services 25
Utility Switching Points 26

VERTEX PHARMACEUTICALS INCORPORATED

**LEASE FOR PARCEL B — FAN PIER
BOSTON, MASSACHUSETTS**

**ARTICLE 1.
BASIC TERMS**

The following terms used in this Lease shall have the meanings set forth below.

- 1.01. Date of Lease:** May 5, 2011
- 1.02. Landlord:** Eleven Fan Pier Boulevard LLC, a Delaware limited liability company
- 1.03. Tenant:** Vertex Pharmaceuticals Incorporated, a Massachusetts corporation
- 1.04. Address of Property:** Parcel B, Fan Pier, Boston, MA, subject to the provisions of Section 2.01(c).
- 1.05. Building, Property and Project:** The 16-story building to be constructed by Landlord and containing, upon completion, approximately [***] rentable square feet (the “Building”) in the City of Boston, Massachusetts, located on a parcel of land described in Exhibit 1.05 attached hereto and known as Parcel B, Fan Pier, Boston, Massachusetts (the Building and such parcel of land hereinafter being collectively referred to as the “Property”). The Property is part of a phased development located in the South Boston waterfront area of Boston, Massachusetts, currently consisting of nine (9) lettered parcels to be developed separately with up to nine (9) new buildings, projected to have an aggregate of approximately [***] square feet of gross floor area dedicated to a mixture of office, laboratory, residential, hotel, retail, civic/cultural uses, accessory parking spaces and maritime uses, together with access roads and landscaped open spaces (as such area is improved from time to time, the “Project”)

- 1.06. Premises:** Approximately [***] rentable square feet, consisting of all of the second through the sixteenth floors of the Building (including a mechanical floor), the Pedestrian Bridge (as defined in Section 2.01(h)), a portion of the first floor of the Building, a two-story mechanical penthouse in the Building, and a portion of a 3-level below grade structure, all as further described on Exhibit 1.06 (the “Premises”), based on a modified ANSI/BOMA Z65.1- 1996 method of measurement and as conclusively agreed to by the parties as set forth in Section 2.01(e).
- 1.07. Tenant’s Pro Rata Share:** [***]
- 1.08. Term:**
- Initial Term:** The period commencing on the Commencement Date and expiring on the last day of the fifteenth (15th) Lease Year, determined as set forth in the definition of “Lease Year,” below.
- Extension Term:** One (1) additional term of ten (10) years, as further described in, and subject to the provisions of, Section 3.03.

Lease Year:

The first (1st) Lease Year begins on the first Commencement Date to occur and ends on the last day of the twelfth full calendar month after the Final Commencement Date. Each subsequent Lease Year ends twelve months after the preceding one, provided, however, that the fifteenth (15th) Lease Year shall end on the later to occur of (i) the last day of the twelfth month after the fourteenth (14th) Lease Year or (ii) if the Building A Lease (as defined in Section 2.01(g), below) Final Commencement Date (as defined therein) occurs after the Final Commencement Date hereunder, the expiration date of the initial term of the Building A Lease (meaning and intending that the Building A Lease and this Lease be coterminous). The parties acknowledge that the first (1st) Lease Year and the fifteenth (15th) Lease Year each may consist of more than 12 months.

1.09. Commencement Date:

The earlier of (i) the date Tenant has occupied any portion of the Premises for the conduct of its business, as opposed to occupying any portion of the Premises for the installation of the FF&E Work, as defined in Section 4 of Exhibit 10.03, or (ii) the Substantial Completion Date (as defined in Section 12.01 of Exhibit 10.03). Pursuant to Section 4.07 of this Lease, the Commencement Date may occur in one or more Phases. The Commencement Date shall be determined separately for each Phase and Rent shall be pro-rated based on the ratio of occupied floors to total floors of the Premises (excluding mechanical floors and penthouses in each case) to reflect Tenant's partial occupancy of the Premises until such time as the Commencement Date occurs with respect to the entire Premises. The Commencement Date upon which the remainder of the Premises is delivered to Tenant shall constitute the "Final Commencement Date".

The "Estimated Commencement Date" shall mean the date that is 30 months from the issuance of the first building permit for any portion of the Building.

- 1.10. Permitted Uses:** Office Uses and Research Center Uses as defined in and limited by the Development Plan for the Fan Pier Development, Planned Development Area #54 approved by the Boston Redevelopment Authority on November 14, 2001, and adopted by the Boston Zoning Commission on February 27, 2002, effective February 28, 2001, as amended by First Amendment to the Development Plan for the Fan Pier Development, Planned Development Area #54 approved by the Boston Redevelopment Authority on December 20, 2007, and adopted by the Boston Zoning Commission on January 30, 2008, effective January 30, 2008 (collectively, the “Development Plan”), and customary uses accessory to Office Uses and Research Center Uses as permitted under the Development Plan. Use of the mechanical penthouse, mechanical rooms, the mechanical floor, telephone closets, storage areas, and similar accessory areas of the Premises constructed as part of the Base Building Work, as defined in Exhibit 10.03, to the extent each are included within the Premises, shall be further limited to the purposes for which they have been constructed.
- 1.11. Broker(s):** CB Richard Ellis — N.E. Partners, LP
- 1.12. Management Company:** Fallon Management Company LLC
c/o The Fallon Company LLC
One Marina Park Drive
Boston, Massachusetts 02210
Attn: Joseph F. Fallon
- 1.13. Security Deposit:** \$[***], if, as and when required pursuant to the terms of Article 17.
- 1.14. Parking Access Devices:** [***], subject to the provisions of Section 2.01(d). [***].
- 1.15. Base Rent:**

Initial Term:

From and after the Commencement Date through the end of the fifth (5th) Lease Year, [***] per annum ([***] per rentable square foot for [***] rentable square feet of the Premises and [***] per rentable square foot for [***] rentable square feet of the Premises designated as storage space on Exhibit 1.06 (the "Storage Space")), [***].

From and after the first (1st) day of the sixth (6th) Lease Year through the end of the tenth (10th) Lease Year, [***] per annum ([***] per rentable square foot for [***] rentable square feet of the Premises and [***] per rentable square foot for the Storage Space).

From and after the first (1st) day of the eleventh (11th) Lease Year through the end of the Initial Term, [***] per annum ([***] per rentable square foot for [***] rentable square feet of the Premises and [***] per rentable square foot for the Storage Space).

Extension Terms:

Base Rent shall be [***] of the Market Rent, as determined pursuant to Section 3.03.

1.16. Additional Rent:

All amounts payable by Tenant under this Lease other than Base Rent, including without limitation:

- (i) Tenant's Pro Rata Share of Taxes (Article 5);
- (ii) Utility expenses for the Premises under Article 6 to the extent paid by or to Landlord;
- (iii) Tenant's Pro Rata Share of Operating Expenses (Article 8) (see Section 4.02);
- (iv) Payment of the parking contract amounts due pursuant to Section 2.01(d).

1.17. Expenses Paid Directly by Tenant:

All utilities (except as set forth in Article 6) and services to the Premises.

1.18. Original Address of Landlord for Notices:

Eleven Fan Pier Boulevard LLC
c/o The Fallon Company LLC
One Marina Park Drive
Boston, Massachusetts 02210
Attn: Joseph F. Fallon

and:

Cornerstone Real Estate Advisers LLC
180 Glastonbury Boulevard, Suite 200
Glastonbury, Connecticut 06033
Attn: Linda Houston

With a copy to:

DLA Piper LLP (US)
33 Arch Street
Boston, MA 02110
Attn: John E. Rattigan, Esquire

With a copy to:

Day Pitney LLP
242 Trumbull Street
Hartford, CT 06103
Attn: James A. McGraw, Esquire

1.19. Original Address of Tenant for Notices:

Vertex Pharmaceuticals Incorporated
130 Waverly Street
Cambridge, Massachusetts 02139
Attn: Alfred Vaz

With a copy to:

Bowditch & Dewey, LLP
175 Crossing Boulevard
Suite 500
Framingham, MA 01702
Attn: Paul C. Bauer, Esquire

- 1.20. Finish Work:** All to be designed and constructed by Landlord, pursuant to Tenant’s Program, as further set forth in Section 10.03 and Exhibit 10.03.
- 1.21. Finish Work Allowance:** [***] (calculated on the basis of [***] per rentable square foot times [***] rentable square feet plus [***], subject to adjustment pursuant to Article 18).
- 1.22. Exhibits:**
- | | |
|-------------------|--|
| Exhibit 1.05: | Property |
| Exhibit 1.06: | Premises |
| Exhibit 2.01(e): | Measurement Standard |
| Exhibit 2.01(f): | Permitted Encumbrances |
| Exhibit 2.01(g): | Schedule of Reimbursable Expenditures |
| Exhibit 3.01(a): | Form of Confirmation of Commencement Date |
| Exhibit 3.01(b): | Tenant’s Existing Lease Terms |
| Exhibit 3.03(b) | Parcels A and E Description |
| Exhibit 9.01: | Rules and Regulations |
| Exhibit 9.04: | Environmental Reports |
| Exhibit 9.05: | Retail Signage |
| Exhibit 10.03: | Work Letter |
| Exhibit 10.05(b): | Construction Documents |
| Exhibit 10.05(c): | Tenant Work Insurance Schedule |
| Exhibit 10.06: | Items That Must Remain On the Premises |
| Exhibit 15.01: | Form of Lender’s Subordination, Nondisturbance and
Attornment Agreement |
| Exhibit 17.01: | Form of Letter of Credit |
| Exhibit 18.01(f): | Alternate Economic Benefit Standards |

ARTICLE 2.
PREMISES AND APPURTENANT RIGHTS

2.01. Lease of Premises; Appurtenant Rights. Landlord hereby leases the Premises to Tenant, and Tenant hereby leases the Premises from Landlord, for the Term. Tenant shall be permitted access to the Building, the Premises and the Parking Garage on a 24 hour per day, 7 day per week basis, subject to the Rules and Regulations, Force Majeure (as hereinafter defined) and Landlord's reasonable security measures.

(a) Exclusions. The Premises exclude Common Areas and Facilities of the Property, as defined in Section 2.01(b), and exterior walls, the roof, the stairways and stairwells to the Parking Garage, the portion of the Building identified as "future retail tenants" on Exhibit 1.06, retail loading dock, and pipes, ducts, conduits, wires and appurtenant fixtures located within the Premises but serving other parts of the Property (exclusively or in common). If the Premises include less than the entire rentable area of any floor from time to time, then the Premises also exclude the common corridors, lobbies, elevator lobby, and lavatories located on such floor.

(b) Appurtenant Rights. Tenant shall have, as appurtenant to the Premises, rights, in common with others (subject to the Rules and Regulations), to use the Common Areas and Facilities of the Property, to contracts for parking set out in Section 2.01(d), to the signage rights as set out in Section 9.05, and to use the rooftop as set out in Article 11. As used herein, "Common Areas and Facilities" is defined as (i) the common stairways and access ways, lobbies, hallways, entrances, stairs, elevators and any passageways thereto, other areas or facilities within the Building for the general use, convenience and benefit of Tenant and other tenants and occupants of the Building and the common pipes, ducts, conduits, wires, telephone and electrical closets (except on floors leased entirely by Tenant), and appurtenant equipment serving the Premises; (ii) the common exterior walkways located on the Property and associated with the Building, and (iii) any other common areas and facilities from time to time designated as such by Landlord (provided that no areas initially designated as part of the Premises on Exhibit 1.06 may be designated as a common area).

(c) Reservations. In addition to other rights reserved herein or by law, Landlord reserves the right from time to time, without unreasonable (except in emergency) interference with Tenant's rights hereunder, including without limitation Tenant's use of and access to the Premises: (i) to make additions to or reconstructions of the Building and to install, use, maintain, repair, replace and relocate for service to the Premises and other parts of the Building, or either, pipes, ducts, conduits, wires and appurtenant fixtures, wherever located in the Premises, the Building, or elsewhere in the Property, provided, however, such installation, reconstruction or relocation shall not materially reduce the usable floor area of the

Premises (other than a temporary reduction to accommodate installation, repair, replacement, maintenance and relocation) without the consent of Tenant, which may be granted or withheld in Tenant's sole discretion and if granted, the Base Rent and Tenant's Pro Rata Share shall be proportionately reduced; (ii) to alter or relocate any portion of the Common Areas and Facilities, including the lobbies and entrances (provided that (A) Tenant's rights under this Lease are not adversely affected in any material respect and (B) with respect to any relocation of the lobby or entrance to the Building or the Premises, other than a temporary relocation to accommodate required work, any such relocation shall be subject to Tenant written approval, in Tenant's sole discretion), (iii) to grant easements and other rights with respect to the Property, provided such grants do not materially and adversely affect Tenant's rights under this Lease, and (iv) to change the street address of the Property prior to the date that Landlord commences the Finish Work (and, thereafter, with Tenant's written consent, not to be unreasonably withheld, conditioned or delayed). Installations, replacements and relocations within the Premises referred to in clause (i) shall be located as far as practicable in the core areas of the Building, above ceiling surfaces, below floor surfaces or within perimeter walls of the Premises and Landlord shall minimize the disruption to the Tenant to the degree reasonably practicable.

For the purposes of separately owning and/or financing the portions of the Building comprising retail space and/or the Parking Garage below the Building from the remainder of the Building, the Property may be subdivided into separate lots, submitted to a condominium regime or divided into separate leasehold lots by ground leases to permit such separate ownership and financing of portions of the Property, provided that (a) Tenant's rights and obligations under this Lease shall not be diminished or negatively affected in anything more than a de minimis manner, (b) there shall not be material interference with (I) access to the Premises from Fan Pier Boulevard, (II) Tenant's ability to otherwise use the number of parking spaces as provided under Section 2.01(d) below, or (III) the ability to use and occupy the Premises for the Permitted Uses, and (c) if the Property is submitted to a condominium regime, the entire Premises shall be contained within a single condominium unit. In the event the Property, as originally defined herein, is subdivided, then the term "Property" shall be deemed to refer only to the portions of the parcel or parcels of land or air rights on which the Building is located and, at the request of either Landlord or Tenant, Exhibit 1.05 and any Notice of Lease recorded pursuant Section 16.06 shall be amended accordingly. In the event the Property is submitted to a condominium regime, the Property shall be deemed to be the condominium unit in which the Premises are located (but any such condominium unit shall have the appurtenant rights to which Tenant expressly is entitled under this Lease) and, at the request of either Landlord or Tenant, Exhibit 1.05 and any Notice of Lease recorded pursuant Section 16.06 shall be amended accordingly. Tenant agrees to enter into any instruments reasonably requested by Landlord in connection with the foregoing, so long as the same are not inconsistent with the rights of Tenant

under this Lease and are otherwise reasonably acceptable to Tenant. Without limiting the generality of the foregoing, such instruments may include a subordination of this Lease to a ground lease or documents creating a condominium on the Property, provided that in the case of a condominium Tenant's rights under this Lease are not materially affected and that in the case of a ground lease Tenant shall receive a non-disturbance agreement reasonably acceptable to Tenant from any ground lessor having a priority interest over this Lease. If the Property is subject to a condominium regime under this paragraph, then Landlord shall not exercise its right to vote as a member of the owner's association of the condominium in a manner that materially and adversely affects Tenant's rights under this Lease without Tenant's prior written consent, which consent shall not be unreasonably withheld, conditioned or delayed, and, so long as Tenant is not in default of any of its payment obligations under this Lease, Landlord shall promptly pay all assessments against the condominium unit containing the Premises (which assessments shall be includable within Operating Costs) within the period required under the condominium regime so that no liens for unpaid assessments attach to the Premises. In the event of any failure by Landlord to pay condominium assessments for any reason (other than Tenant's failure to pay Operating Costs) such that the condominium association commences an enforcement process against the condominium unit containing the Premises, Tenant shall have the right to pay such assessments directly (and shall provide evidence of such payments to Landlord) and Tenant may offset such expenditures against the next payment or payments of Additional Rent under this Lease. Following any such event, to the extent permissible under law, the condominium documents shall either be revised to provide for provision of copies of any notice of default to Tenant or Landlord shall otherwise require the condominium association to copy Tenant as a notice party in addition to Landlord, and thereafter copies of invoices for condominium assessments or other material notices that Landlord receives from the condominium association shall be delivered to Tenant and Landlord. Landlord shall promptly provide Tenant with copies of any notice of nonpayment of condominium assessments (provided that Landlord shall not be in default of this sentence if such amounts are paid by Landlord prior to the exercise of any remedies against the condominium unit containing the Premises).

(d) Parking. During the Term, Landlord shall cause the Parking Garage operator to enter into contracts with Tenant for the number of parking access devices set forth in Section 1.14, permitting the parking of such number of vehicles in unreserved parking spaces in the Parking Garage. In furtherance of such rights, Landlord has entered into and recorded that certain Garage Reciprocal Easement Agreement (the "Parking Agreement") described on Exhibit 2.01(f). Landlord covenants that it shall not grant any other tenant in the Building the right to park exclusively in the portion of the Parking Garage located beneath the Building unless such rights affect a de minimis number of parking spaces for the benefit of the retail tenants in the Building and Landlord offers comparable rights to Tenant. The

monthly rate to be paid by Tenant and its employees under such contracts shall be the prevailing monthly parking rate charged by the Parking Garage operator at the Parking Garage (or surface parking, as applicable), which parking rate may change at any time and from time to time, as determined by such Parking Garage operator, [***]. Tenant shall have the right to provide Landlord with recommendations from time to time regarding the exercise of the Landlord's rights to approve the parking garage operator under the Parking Agreement, and Landlord agrees that it shall not vote such rights in favor of employing any particular parking garage operator to which Tenant has bona fide, good faith objections as reasonably and previously described to Landlord in writing (Tenant acknowledging that the Parking Garage requires a parking operator and that Tenant shall reasonably cooperate with Landlord to identify viable recommended candidates for the parking operator position). [***].

[***].

"Parking Garage" shall collectively mean (i) the three (3) level subterranean parking garage located below the Building and constructed as part of the Base Building Work, and (ii) such other parking garages as may be constructed from time to time within the Project and subsequently made available to the Building under reciprocal easement agreements, operating agreements or other such agreements now or hereafter in effect. Payments under the parking contracts shall constitute Additional Rent for purposes of this Lease. Payments under this Section shall be made directly to the Parking Garage or applicable parking operator in accordance with the provisions of the parking contracts. Without limiting Landlord's other remedies under this Lease, if Tenant shall fail to pay the amounts due under any parking contract for more than ten (10) days after notice of such failure given by Landlord or the applicable parking operator, or if Tenant shall cease to contract for any access device for more than 60 consecutive days, or if Tenant relinquishes in any manner any parking contract(s), then Landlord may permanently terminate Tenant's rights to the applicable number of access devices immediately upon notice by Landlord to Tenant (such terminations, if any, to be applied first to parking contracts for surface parking hereunder and then to parking contracts in the Parking Garage). Tenant may irrevocably relinquish any such parking contract(s) on 30 days' prior written notice to Landlord (in which event the number of parking access devices specified in Section 1.14 shall be deemed to have been reduced accordingly). If Landlord shall fail to provide any or all of the parking spaces for Tenant parking hereunder other than due to (i) temporary interruptions of not more than one (1) business day, (ii) the operation of the South Boston Parking Freeze Regulations as set forth in the following paragraph or (iii) Tenant's default as specified in the preceding sentence, then Tenant shall not be required to make payments under the parking contracts for such parking spaces during the period in which such parking spaces are unavailable. The Parking Garage operator's failure to provide the Parking Spaces to

Tenant, other than in the event of a temporary closure of the Parking Garage due to casualty, governmental action or other cause beyond Landlord's and such Parking Garage operator's reasonable control, or as otherwise permitted hereunder, shall constitute a default by Landlord hereunder, subject to applicable notice and cure periods.

Tenant acknowledges that the Parking Garage and any such surface parking areas are subject to the provisions of the South Boston Parking Freeze Regulations and to one or more Parking Freeze Permits issued thereunder by the City of Boston Air Pollution Control Commission, which regulations and permits require that 20% of the total parking supply in the Parking Garage be set aside for Off-Peak use, and not be available weekdays between 7:30 a.m. and 9:30 a.m. Tenant acknowledges that the administration of such requirement may from time to time limit the ability of certain of the parking access device holders to enter the Parking Garage or the surface parking areas between 7:30 a.m. and 9:30 a.m. (the "Limited Parking Period"). [***].

Tenant's rights under this Section 2.01(d) shall not be assigned or sublicensed except in connection with an assignment or sublease permitted under Article 13.

(e) Measurement. The parties acknowledge and agree that the square footages set forth herein have been conclusively determined pursuant to a modified ANSI/BOMA Z65.1-1996 method of measurement for useable space in office buildings and consistent as set forth on Exhibit 2.01(e) attached (the "Measurement Standard").

(f) Matters to Which Lease is Subject. This Lease, and Tenant's rights hereunder, are subject and subordinate to the matters listed on Exhibit 2.01(f) and all Legal Requirements, including, without limitation: (i) that certain Declaration of Covenants, Easements and Restrictions by and between Fan Pier Development LLC, a Delaware limited liability company, and Fan Pier Owners Corporation, a Massachusetts corporation ("FPOC"), dated January 31, 2008 and recorded with the Suffolk County Registry of Deeds in Book 43059, Page 1, as amended by that certain First Amendment dated as of the date hereof, to be recorded in the Suffolk County Registry of Deeds, as the same may be further amended from time to time (the "Declaration"), and any rules or regulations promulgated by or on behalf of the "Developer" or "FPOC" under the Declaration, whether recorded or unrecorded, to the extent of and in accordance with the provisions of the next succeeding sentence, (ii) Consolidated Written Determination dated June 28, 2002 (final decision dated November 21, 2002) issued by issued by the Massachusetts Department of Environmental Protection ("DEP") for the Fan Pier Project, as extended by letter from DEP dated April 18, 2007, and the Chapter 91 license for the Building to be issued by DEP, and Chapter 91 License No. 11907 issued by DEP for all of the public realm areas of the Fan Pier Project, recorded with the Suffolk Registry of Deeds in Book 42568, Page 89; (iii) the Development Plan, and (iv) all agreements with the

BRA or the City of Boston relating to the Building or the Project (collectively, and as may be amended or supplemented from time to time, the “Project Documents,” and each individually a “Project Document”). There are no existing rules or regulations promulgated under the Declaration as of the date of this Lease and Landlord shall not promulgate such rules or regulations nor enter into an amendment to the Declaration nor shall Landlord enter into any new Project Document or any amendment, termination, cancellation, revision or modification to an existing Project Document that materially, adversely affects Tenant’s rights or privileges under this Lease without the written consent of Tenant, which consent may be granted or withheld in Tenant’s sole discretion. Landlord shall not be liable to Tenant for any injury, loss, costs, expenses, liabilities, claims or damage (including attorneys’ fees and disbursements) to any person or property arising from or in any related to the proper exercise of the rights of the Developer or FPOC under the Declaration. Tenant shall cooperate with Landlord as reasonably requested from time to time in order to permit Landlord or its affiliates to meet reporting requirements under the Project Documents, including without limitation under the Transportation Access Plan Agreement for the Project or the Building, as they may be amended.

(g) Lease Contingency. Simultaneously with the execution of this Lease, Tenant and an affiliate of Landlord (“Building A Landlord”) are entering into a lease for a building to be constructed on Parcel A of the Project (such building to be referred to as “Building A”, as such Parcel A is more particularly described on Exhibit 3.03(b), attached, and any such lease of Building A to be referred to as the “Building A Lease”). This Lease and the Building A Lease (together, the “Leases”) are each contingent upon the issuance of an “approval letter” by the Federal Drug Administration (the “FDA”) of Tenant’s new drug application for telaprevir as a so-called “listed drug”, as such terms are defined in 21 C.F.R. 314.3 (the “Telaprevir Approval”). If the Telaprevir Approval is not issued by the FDA, or the FDA issues a written refusal to approve telaprevir, on or before December 31, 2011, then this Lease shall terminate and be of no further force and effect as of December 31, 2011 except for the obligations that expressly survive the termination hereof.

[***].

[***].

(h) Pedestrian Bridge. As part of the Base Building Work, Landlord shall cause the construction of the pedestrian bridge from the Premises to Building A as shown on the Base Building Work Plans. Such pedestrian bridge (the “Pedestrian Bridge”) shall be considered part of the Premises, and shall be subject to the appurtenant rights of Tenant as tenant under the Building A Lease as set forth therein. The Pedestrian Bridge shall be enclosed and shall be not more than two stories in height and shall be used solely for passage of pedestrians and materials between buildings, rather than the Permitted Use generally. No sign, banner, logo or

other communication may be displayed externally from the Pedestrian Bridge. Maintenance of the Pedestrian Bridge shall be allocated between Landlord and Tenant consistent with the allocation herein with respect to other elements of the Building.

**ARTICLE 3.
LEASE TERM**

3.01. Lease Term; Delay in Commencement.

(a) The Initial Term of this Lease is set forth in Article 1. Following each Commencement Date, Landlord and Tenant shall enter into a recordable instrument confirming the occurrence of the applicable Commencement Date in the form of Exhibit 3.01(a), attached (provided, however, that the failure to enter into such instrument shall not be deemed to delay the occurrence of the applicable Commencement Date).

(b) Landlord shall endeavor in good faith to Substantially Complete (as defined in Exhibit 10.03) the Landlord Work (as defined in Exhibit 10.03) such that the Final Commencement Date will occur on or before the Estimated Commencement Date, subject to extension for Force Majeure and Tenant Delays (as defined in Exhibit 10.03). If the Final Commencement Date has not occurred by the Estimated Commencement Date, as extended by Tenant Delay (but not for Force Majeure), then, as Tenant's sole remedy at law or equity (except as provided in Sections 3.01(c), below), Tenant shall receive a credit against Base Rent in an amount equal to Tenant's Damages. "Tenant's Damages" shall mean [***]. Responsibility for Tenant's Damages shall be allocated between the Landlord and the Building A Landlord pursuant to this Section 3.01(b) and Section 3.01(b) of the Building A Lease in proportion to the respective rentable square feet of the premises under such leases. [***].

(c) Tenant shall have the right to terminate this Lease in accordance with the provisions of this Subsection 3.01(c) if any of the following milestones are not met: (i) if Landlord has not closed a construction loan to finance construction of the Building on or before the later of (A) the date Tenant delivers to Landlord the Security Deposit if any to the extent required pursuant to Section 17.01, or (B) the date that is ninety (90) days following the Telaprevir Approval for any reason (including without limitation Force Majeure) other than Tenant Delays; (ii) a building permit is not issued for the Building on or before the later of (A) the date Tenant delivers to Landlord the Security Deposit if and to the extent required pursuant to Section 17.01, or (B) the date that is ninety (90) days following the Telaprevir Approval for any reason (including without limitation Force Majeure) other than Tenant Delays (clauses (i) and (ii) above, the "Building B Initial Construction Milestones"); or (iii) the Building A Landlord does not meet all the Building A Initial

Construction Milestones, as defined in the Building A Lease. In the event that any of the foregoing milestones are not met, then Tenant may terminate this Lease upon thirty (30) days' prior written notice (provided that such termination will not take effect if the construction loan closing, issuance of a building permit and compliance with the Building A Initial Construction Milestones, to the extent any such milestone had not been met prior to the Tenant's termination notice hereunder, occurs within such 30 day period), as Tenant's sole remedy at law or equity. In the event Tenant terminates this Lease pursuant to the provisions of this Subsection 3.01(c), Tenant shall terminate the Building A Lease and that certain lease (the "Building F Lease") by and between Tenant and an affiliate of Landlord dated as of the date hereof with respect to the building known as One Marina Park Drive and located on Parcel F (as described in Exhibit 3.03(b)). Notwithstanding anything to the contrary in this Lease, Landlord shall have no obligation to apply for a building permit or to commence construction of the Landlord Work prior to the date of Telaprevir Approval. To advance the Final Completion Date, Tenant may elect by written notice (the "Acceleration Notice") to Landlord to cause Landlord to apply for the building permit prior to Telaprevir Approval by agreeing in such notice to include 100% of the cost of the building permit for the Building as a Reimbursable Expenditure and increase the cap on Reimbursable Expenditures by an equivalent amount; provided, however, that such notice shall only have force and effect if Tenant simultaneously gives an Acceleration Notice to the landlord under the Building A Lease pursuant to Section 3.01(c) of the Building A Lease.

(d) Intentionally Omitted.

(e) The foregoing remedies are Tenant's sole remedies in the event of a delay in the construction of the Landlord Work, except that if construction of the Landlord Work is materially abandoned for a period of (x) at least ninety (90) consecutive days or (y) at least ninety (90) days in any one-hundred twenty (120) day period, in each case after excavation for the Building foundation commences (for reasons other than Tenant Delays or Force Majeure), then Landlord shall be deemed to be in default under this Lease subject to Landlord's right to notice and cure under Section 16.02 of this Lease, with a copy of any such default notice simultaneously being delivered to Landlord's construction lender (the cessation of such abandonment within the period required by Section 16.02 being deemed to be a cure of such default). Tenant's sole remedies at law or equity for any default pursuant to the immediately preceding sentence beyond applicable notice and cure periods shall be (x) termination of this Lease by thirty (30) days' prior written notice to Landlord if such default first arises prior to the time that either Landlord first commences the erection of structural steel for the Building or the Building A Landlord first commences the erection of structural steel for Building A, and/or (y) a claim for actual, direct damages.

3.02. Hold Over. If Tenant (or anyone claiming through Tenant) shall remain in occupancy of the Premises or any part thereof after the expiration or early termination of the Term without a written agreement therefor executed and delivered by Landlord, then, without limiting Landlord's other rights and remedies, the person remaining in possession shall be deemed a tenant at sufferance, and Tenant shall thereafter pay monthly rent (pro rated for such portion of any partial month as Tenant shall remain in possession) at a rate equal to the higher of 125% for the first 30 days, and 150% thereafter, of (x) the Base Rent rate applicable during the last monthly period immediately preceding such expiration or termination or (y) the fair market rent for Base Rent (which shall be determined on a so-called "triple net" basis), in each case with all Additional Rent also payable as provided in this Lease. The foregoing provisions shall not serve as permission for Tenant or anyone claiming by, through, or under Tenant to hold-over, nor serve to extend the Term (although Tenant shall remain bound to comply with all provisions of this Lease until Tenant vacates the Premises) and Landlord shall have the right at any time after the expiration or earlier termination of this Lease to enter and possess the Premises and remove all property and persons therefrom or to require Tenant to surrender possession of the Premises as provided in this Lease upon the expiration or earlier termination of the Term. If Tenant fails to surrender the Premises upon the expiration or termination of this Lease, Tenant agrees to indemnify, defend and hold harmless Landlord from all costs, loss, expense or liability, including without limitation, claims made by any succeeding tenant and real estate brokers' claims and attorneys' fees. No acceptance by Landlord of any Rent during or for any period following the expiration or termination of this Lease shall operate or be construed as an extension or renewal of this Lease. Should Tenant remain in the Premises on a month-to-month basis with Landlord's prior and express written approval, such month-to-month tenancy may be cancelled by either party with thirty (30) days' prior written notice or such lesser time period as may be permitted by Law. In any case, Tenant shall be liable to Landlord for all damages actually resulting from any failure by Tenant to vacate the Premises or any portion thereof when required hereunder. The provisions of this Section 3.02 shall survive the termination or earlier expiration of this Lease.

3.03. Right to Extend.

(a) First Extension Term. This Lease may be extended for one (1) additional ten-year period (the "First Extension Term") by unconditional written notice from Tenant to Landlord delivered at least twenty (20) months before the end of the Initial Term, time being of the essence. If Tenant does not timely exercise this option, or if on the date of such notice or at the beginning of the First Extension Term an Event of Default is then continuing, then Tenant's right to extend the Term pursuant to this Section 3.03(a) shall irrevocably lapse, Tenant shall have no further right to extend, and this Lease shall expire at the end of the Initial Term.

(b) Alternative Extension Term. Simultaneously herewith, Tenant has entered into an agreement (the "Parcel E Agreement") with an affiliate of Landlord for certain rights to lease a building that is contemplated for construction on Parcel E of the Project (such building to be referred to as "Building E"), as such Parcel E is more particularly described on Exhibit 3.03(b), attached. If Tenant enters into a lease for Building E pursuant to the Parcel E Agreement (such lease of Building E to be referred to as the "Building E Lease"), then Tenant shall have the following additional extension option with respect to the Building: (a) if Tenant's right to extend the term of the Building E Lease in compliance with the terms of the Parcel E Agreement has expired without exercise or has been waived, then Tenant may elect to extend the Term of this Lease for such period as will result in the Term of this Lease being coterminous with the term of the Building E Lease, or (b) if Tenant shall have exercised the First Extension Option, and Tenant has extended the term of the Building E Lease in compliance with its terms for a period of ten (10) years, then Tenant may elect to extend the First Extension Term of this Lease for such period as will result in the Term of this Lease being coterminous with the term of the Building E Lease, as so extended, in each case by unconditional written notice from Tenant delivered to Landlord at least twenty (20) months before the end of the Initial Term (with respect to option (a)) or the First Extension Term (with respect to option (b)), time being of the essence (either such extended term being referred to as the "Alternative Extension Term"). If Tenant does not timely exercise the options set forth in this paragraph, or if on the date of such notice or at the beginning of the Alternative Extension Term an Event of Default is then continuing, Tenant's right to extend pursuant to this Section 3.03(b) shall irrevocably lapse, Tenant shall have no further right to extend, and this Lease shall expire at the end of the Initial Term or First Extension Term, as applicable.

All references to the Term shall mean the Initial Term as it may be extended by the First Extension Term and/or the Alternative Extension Term, if any (each, an "Extension Term"). Each Extension Term shall be on all the same terms and conditions applied to the Initial Term (including without limitation the obligation to pay Additional Rent) except that the Base Rent for each Extension Term shall be as set forth below and Tenant shall have no further right to extend the term of this Lease except as expressly set forth in subparagraph (b), above.

(c) Market Rent. If Tenant gives Landlord timely notice of its intention to extend the then-current Term of this Lease, whether for the First Extension Term or the Alternative Extension Term, then at least nineteen (19) months before the end of the then-scheduled expiration Term, Landlord shall give Tenant written notice of the then applicable market rent for Tenant's space, based on similar space in similar Class A office and laboratory buildings in the Seaport District or the Longwood Medical Area (excluding owner-occupied space) of the City of Boston, Massachusetts (such buildings, the "Comparable Properties," and such rent, the "Market Rent"),

taking into account all of the factors that a landlord and tenant would consider in negotiating an arms-length rent for a lease (including without limitation whether or not a brokerage fee is payable in connection therewith). Base Rent for any Extension Term shall be established as [***] of the Market Rent. Within thirty (30) days after Tenant receives such notice, Tenant shall notify Landlord of its agreement with or objection to Landlord's determination of the Market Rent, whereupon, if the Tenant objects to such determination, the Market Rent shall be determined in the manner set forth below. If Tenant does not notify Landlord within such thirty (30) day period of Tenant's agreement with or objection to Landlord's determination of the Market Rent, then the Market Rent for the applicable Extension Period shall be deemed to be Landlord's determination of the Market Rent as set forth in the notice from Landlord described in this subsection and Tenant shall be irrevocably bound to lease the Premises for the applicable Extension Term. In the event Tenant's notice objects to such determination, from the date Tenant provides such notice through the date that is seventeen (17) months before the end of the then scheduled expiration Term (the "Decision Date"), Landlord and Tenant shall negotiate in an attempt to reach agreement on the Base Rent for the applicable Extension Period. Prior to the Decision Date, Tenant shall send a notice rescinding its exercise of the right to extend or requesting arbitration pursuant to Section 3.03(d) below (a "Decision Notice"). If Tenant fails to send such Decision Notice prior to the Decision Date or sends a notice requesting arbitration pursuant to Section 3.03(d) below, then Tenant shall be irrevocably bound to lease the Premises for the applicable Extension Term and the Market Rent for such Extension Term shall be determined by arbitration in the manner set forth in Section 3.03(d).

(d) Arbitration of Market Rent. If Tenant notifies Landlord of Tenant's objection to Landlord's determination of Market Rent and sends a Decision Notice requesting arbitration under the preceding subsection, such Decision Notice shall also set forth a request for arbitration and Tenant's appointment of an MAI appraiser having at least ten (10) years' experience in the Class A office and laboratory leasing market in the Seaport District or the Longwood Medical Area of the City of Boston, Massachusetts, and who shall not be affiliated with either Landlord or Tenant and has not worked for either party or its affiliates at any time during the prior five (5) years (an "Arbitrator"). Within five (5) days thereafter, Landlord shall by notice to Tenant appoint a second Arbitrator having such experience. Each Arbitrator shall be advised to determine the Market Rent for the applicable Extension Term within thirty (30) days after Landlord's appointment of the second Arbitrator. On or before the expiration of such thirty-(30)-day period, the two Arbitrators shall confer to compare their respective determinations of the Market Rent. If the difference between the amounts so determined by the two Arbitrators is less than or equal to ten percent (10%) of the lower of said amounts, then the final determination of the Market Rent shall be equal to the average of said amounts. If such difference between said amounts is greater than ten percent (10%), then the two

Arbitrators shall have ten (10) days thereafter to appoint a third Arbitrator (the “Third Arbitrator”), who shall be instructed to determine the Market Rent for the applicable Extension Term within ten (10) days after its appointment by selecting one of the amounts determined by the other two Arbitrators. Each party shall bear the cost of the Arbitrator selected by such party. The cost for the Third Arbitrator, if any, shall be shared equally by Landlord and Tenant. Failure of the Arbitrators, singly or collectively, to complete this process within the time frame set forth (i) shall not terminate the Tenant’s exercise of the applicable Extension Term, or (ii) cause the arbitration process to end; the parties shall thereafter continue to work in good faith to conclude the arbitration process.

**ARTICLE 4.
RENT**

4.01. Base Rent. On the Commencement Date and thereafter on the first day of each month during the Term, Tenant shall pay Landlord the monthly installment of Base Rent in the manner and as further provided in Section 4.05, below. If the Commencement Date occurs in Phases, then Tenant shall be entitled to a credit against Base Rent due for the period (the “Early Access Period”) beginning with the first Commencement Date to occur and ending on the day immediately preceding the Final Commencement Date in the amount of any Phasing Premium actually paid by Tenant on account of Finish Work Changes for Phasing under the Work Letter (provided, however, that no such credit shall be due to Tenant from and after the Final Commencement Date, and in no event shall such credit be deemed to exceed the total Base Rent due with respect to the Early Access Period).

4.02. Additional Rent.

(a) General. “Additional Rent” has the meaning set forth in Section 1.16. “Rent” means Base Rent and Additional Rent. Landlord shall estimate in advance (i) all Taxes under Article 5, (ii) all utility costs (unless separately metered to or separately contracted for by Tenant) under Article 6, (iii) all insurance premiums to be paid by Landlord under Article 7, and (iv) all Operating Expenses under Section 8.01 (individually all such items in clauses (i) through (iv) being “Operating Costs” and collectively, “Total Operating Costs”) and, commencing on the Commencement Date Tenant shall pay one-twelfth of Tenant’s Pro Rata Share of such estimated Total Operating Costs monthly in advance together with Base Rent. Landlord shall provide Tenant with such estimate on or before the Commencement Date and on or before each subsequent December 1, for the next ensuing calendar year, during the term of the Lease. Landlord may adjust its estimates of Total Operating Costs at any time based upon its experience and reasonable anticipation of costs. Such adjustments shall be effective as of the next Rent payment date after notice to Tenant. On or before each December 1 following the Commencement Date, Landlord shall provide

Tenant with a reasonably detailed statement of the Total Operating Costs paid or incurred by Landlord during the then-current fiscal year (including an estimate on an accrual basis for the period, if any, of such fiscal year following December 1) and Tenant's Pro Rata Share of such expenses and shall provide Tenant with a final statement within 60 days after the end of each such fiscal year of the Property during the Term (Tenant acknowledging that any Operating Costs on account of the Declaration shall be reconciled separately following Landlord's receipt of annual accountings thereunder during the term and need not be provided within such 60 day period, but Landlord shall endeavor to provide Tenant with a reconciliation statement for such charges as soon as reasonably practicable following receipt of the annual statement, or any permitted subsequent billing or adjustment, under the Declaration). Within the next thirty (30) days following delivery of such statements, Tenant shall pay Landlord any underpayment, or Landlord shall credit against Additional Rent next due any overpayment, of Tenant's Pro Rata Share of such Total Operating Costs. If the Term expires or this Lease is terminated as of a date other than the last day of a fiscal year, Tenant's payment of Additional Rent pursuant to this Section 4.02(a) for such partial fiscal year shall be based on Landlord's best estimate of the items otherwise includable in Total Operating Costs and shall be made on or before the later of (a) thirty (30) days after Landlord delivers such estimate to Tenant or (b) the last day of the Term, with an appropriate payment or refund to be made upon Tenant's receipt of Landlord's statement of Total Operating Costs for such fiscal year. This Section 4.02(a) shall survive expiration or earlier termination of the Term.

This Lease requires Tenant to pay directly to suppliers, vendors, carriers, contractors, etc., certain insurance premiums, utility costs, personal property taxes, maintenance and repair costs and other expenses. If Landlord pays any of these amounts in accordance with this Lease, Tenant shall reimburse such costs in full upon demand with the next monthly Rent payment. Unless this Lease provides otherwise, Tenant shall pay all Additional Rent then due on or before the date for the next monthly Rent payment. In no event shall Landlord's failure to demand payment of Additional Rent be deemed a waiver of Landlord's right to such payment.

(b) Allocation of Certain Operating Costs. If at any time during the Term, Landlord provides services only with respect to particular portions of the Building or incurs other Operating Costs allocable to particular portions of the Building, then such Operating Costs shall be charged entirely to those tenants, including Tenant, if applicable, of such portions, notwithstanding the provisions hereof referring to Tenant's Pro Rata Share. In furtherance of and not in limitation of the foregoing, if it is feasible to differentiate between Taxes allocable to (i) the retail portion of the Building and (ii) the Parking Garage, on the one hand, and Taxes allocable to the remainder of the Building, on the other hand, based on the records of the City of Boston assessors' office, then Landlord shall allocate such Taxes accordingly such that the retail tenants shall pay 100% of the Taxes allocable to retail space, the

Parking Garage owner shall pay 100% of the Taxes allocable to the Parking Garage, and Tenant shall pay 100% of the Taxes allocable to the remainder of the Building. Landlord acknowledges that it shall use commercially reasonable efforts to have the retail portion of the Building and the Parking Garage assessed separately from the remainder of the Building for the purposes of facilitating the allocation set forth in the immediately preceding sentence (provided that nothing in this sentence shall require Landlord to subject the Building to a condominium or subdivision).

4.03. Late Charge. Tenant acknowledges that if it pays Rent late, Landlord shall incur unanticipated costs, which shall be extremely difficult to ascertain exactly. Such costs include processing and accounting charges, and late charges that may be imposed on Landlord by any mortgage on the Property. Accordingly, if Landlord does not receive any Rent payment within five (5) days following its due date, Tenant shall pay Landlord a late charge equal to five (5%) percent of the overdue amount. The parties agree that this late charge represents a fair and reasonable estimate of the costs Landlord shall incur by reason of Tenant's payment default. Payment of the late charge shall not cure Tenant's payment default or prevent Landlord from exercising other rights and remedies. No late charges under this Section 4.03 shall accrue until Landlord provides notice of such late payment to Tenant and five (5) days elapse from such notice without Tenant having made such payment; provided, however, that Landlord shall not be required to give such notice more than two times in any 12-month period.

4.04. Interest. Any late Rent shall bear interest from the date due until paid at the annual rate of the Bank of America (or its successor) prime rate of interest plus four percent (4%) per annum (the "Default Rate") except to the extent such interest would cause the total interest to be in excess of that legally permitted. Payment of interest shall not cure Tenant's payment default or prevent Landlord from exercising other rights and remedies. No interest under this Section 4.04 shall accrue until Landlord provides notice of such late payment to Tenant and five (5) days elapse from such notice without Tenant having made such payment; provided, however, that Landlord shall not be required to give such notice more than one time in any 12-month period.

4.05. Method of Payment. Tenant shall pay the Base Rent to Landlord in advance in equal monthly installments by the first of each calendar month during the Term and the monthly installment of Tenant's Pro Rata Share of Total Operating Costs as provided in Section 4.02, without offset, deduction or prior demand, except as otherwise expressly set forth herein. Tenant shall make a ratable payment of Base Rent and Additional Rent for any period of less than a month at the beginning or end of the Term. All payments of Base Rent, Additional Rent and other sums due shall be paid, without demand, set-off or other deduction, except as otherwise expressly set forth herein, in current U.S. exchange by check drawn on a clearinghouse bank at the Original Address of Landlord or such other place as Landlord may from time to time direct. Tenant acknowledges that the initial monthly periodic payments under the Lease, including without limitation Base

Rent, Taxes and Operating Expenses, will all be made by electronic fund transfer pursuant to wire instructions to be provided by Landlord unless and until otherwise directed by Landlord.

Without limiting the foregoing, except as expressly provided in the immediately following sentence, Tenant's obligation to pay Rent shall be absolute, unconditional, and independent of any Landlord covenants and shall not be discharged or otherwise affected by any law or regulation now or hereafter applicable to the Premises, or any other restriction on Tenant's use, or, except as expressly provided herein, any casualty or taking, or any failure by Landlord to perform or other occurrence; and Tenant waives all rights now or hereafter existing to quit or surrender this Lease or the Premises or any part thereof, or to assert any counterclaim or defense in any action seeking to recover Rent (unless such counterclaim or defense would be lost by Tenant if not raised in such proceeding). Notwithstanding the foregoing to the contrary, nothing in this paragraph shall be deemed to limit Tenant's express right to an abatement of Rent or to terminate the Lease, as applicable, on the terms and conditions set forth in Sections 3.01(c), 3.01(e), 6.01, 10.03(c), and 15.02 and Article 12 of this Lease. Subject to the provisions of this Lease, however, Tenant shall have the right to seek judgments for direct money damages occasioned by Landlord's breach of its Lease covenants (but may not set-off any such judgment against any Rent or other amount owing hereunder).

It is intended that Base Rent payable hereunder shall be a net return to Landlord throughout the term of this lease, as it may be extended (the "Term"), free of expense, charge, offset, diminution or other deduction whatsoever (except as expressly provided herein) on account of the Premises (excepting Landlord's financing expenses, federal and state income taxes of general application, and those expenses that this Lease expressly makes the responsibility of Landlord), and all provisions hereof shall be construed in light of such intent.

4.06. Audit. Landlord shall keep books and records regarding Total Operating Costs. All records shall be retained for at least three (3) years. At the request of Tenant ("Tenant's Audit Notice") given within one hundred eighty (180) days after Landlord delivers Landlord's statement of Total Operating Costs with respect to any fiscal year during the Term, Tenant (at Tenant's expense) shall have the right to examine Landlord's books and records applicable to Total Operating Costs for such fiscal year. Such right to examine the records shall be exercisable: (i) upon reasonable advance notice to Landlord and at reasonable times during Landlord's business hours and (ii) only during the 60-day period (the "Audit Period") following Tenant's Audit Notice. Landlord shall make such books and records available at Landlord's office in Massachusetts or at the Property, or in electronically accessible form. [***], conducted by either a certified public accountant from a nationally-recognized accounting firm or a nationally-recognized commercial real estate services firm, in either case as approved by Landlord for such purpose (such approval not to be unreasonably withheld, conditioned or delayed), [***] Tenant may

submit the dispute for determination by an arbitration conducted by the Boston Office of the American Arbitration Association (“AAA”) in accordance with the AAA’s commercial real estate arbitration rules. The arbitrator shall be selected by AAA and shall be a certified public accountant with at least ten (10) years of experience in auditing Class A commercial office and laboratory buildings and who shall not be affiliated with either Landlord or Tenant and has not worked for either party or its affiliates at any time during the prior five (5) years. [***]. Any auditing firm retained by Tenant pursuant to this paragraph shall not be compensated on a contingent fee basis. [***].

As a condition precedent to performing any such examination of Landlord’s books and records, Tenant’s examiners shall be required to execute and deliver to Landlord an agreement in form reasonably acceptable to Landlord agreeing to keep confidential any non-public, confidential information that they discover about Landlord or the Building or the Property in connection with such examination and not to disclose the results of such examination except as required by law. Notwithstanding any prior approval of any examiners by Landlord, Landlord shall have the right to rescind such approval at any time if in Landlord’s reasonable judgment the examiners have breached any confidentiality undertaking to Landlord or cannot provide reasonably acceptable assurances and procedures to maintain confidentiality.

4.07. Phasing. [***].

ARTICLE 5. TAXES

5.01. Taxes. Tenant covenants and agrees to pay to Landlord as Additional Rent Tenant’s Pro Rata Share of the Taxes for each fiscal tax period, or ratable portion thereof, included in the Term. If Landlord receives a refund of any such Taxes, Landlord shall credit against Additional Rent next due or, at Landlord’s election, pay Tenant its Pro Rata Share of the refund, in each case after deducting Landlord’s reasonable costs and expenses incurred in obtaining the refund (to the extent such costs and expenses were not previously included in Operating Expenses or Taxes), but in any event such refund to Tenant shall not exceed amounts paid by Tenant for Taxes on account of the period subject to such refund. Upon Tenant’s request, Landlord shall furnish Tenant with copies of the applicable real estate tax bill. Tenant shall make estimated payments on account of Taxes in monthly installments on the first day of each month, in amounts reasonably estimated from time to time by Landlord pursuant to Section 4.02(a).

5.02. Definition of “Taxes”. “Taxes” means all taxes, assessments, betterments, excises, user fees and all other governmental charges and fees of any kind or nature, or impositions or agreed payments in lieu thereof or voluntary payments made in connection with the provision of governmental services or improvements of benefit to the Building or the Property, and all penalties and interest thereon (if due to Tenant’s failure to make

timely payments), assessed or imposed against the Premises or the Property (including without limitation any personal property taxes levied on the Property or on fixtures or equipment used in connection therewith), other than a federal or state income tax of general application. Taxes shall not include: any of the foregoing which are levied or assessed against the Property to the extent not attributable to the Term; inheritance, estate, gift, excise, franchise, income, gross receipts, capital levy, revenue, rent, state, payroll, stamp or profit taxes, however designated; or any interest or penalties resulting from the late payment of taxes by Landlord (except to the extent due to Tenant's failure to make timely payments), any environmental assessments, charges or liens arising in connection with the remediation of Hazardous Substances (as hereinafter defined) from the Premises or Building, the causation of which arose prior to the Commencement Date of this Lease, or to the extent caused by Landlord, its agents, employees or contractors or any tenant of the Building (other than Tenant or its sublessees or assignees); costs or fees payable to public authorities in connection with any future construction, renovation and/or improvements to the Premises or Building other than the Finish Work, the Tenant Work or improvements to the Premises made by or for Tenant, including fees for transit, housing, schools, open space, child care, arts programs, traffic mitigation measures, environmental impact reports, traffic studies, and transportation system management plans (except to the extent included in the CAM Charges under the Declaration or in the definition of Operating Expenses); reserves for future Taxes; or Taxes allocable to the Parking Garage. If during the Term the present system of taxation of real or personal property shall be changed so that, in lieu of or in addition to the whole or any part of such tax there shall be assessed, levied or imposed on such property or Premises or on Landlord any kind or nature of federal, state, county, municipal or other governmental capital levy, income, sales, franchise, excise or similar tax, assessment, levy, charge or fee (as distinct from the federal and state income tax in effect on the Date of Lease) measured by or based in whole or in part upon Building valuation, mortgage valuation, rents, services or any other incidents, benefits or measures of real property or real property operations, then any and all of such taxes, assessments, levies, charges and fees shall be included within the term of Taxes; provided, however, that Tenant's obligation with respect to such substitute taxes shall be limited to the amount thereof as computed at the rates that would be payable if the Building and Property were the only property of Landlord. Taxes shall also include reasonable expenses, including reasonable fees of attorneys, appraisers and other consultants, incurred by Landlord in connection with any efforts to obtain abatements or reduction or to assure maintenance of Taxes for any year wholly or partially included in the Term, whether or not successful and whether or not such efforts involved filing of actual abatement applications or initiation of formal proceedings. Landlord shall endeavor to have the Property separately assessed from the remainder of the Project by subdivision, condominium regime, or otherwise. In the event that the Building is not taxed separately from the remainder of the Project, Landlord will allocate the taxes on a square footage basis or on such other basis that is reasonably appropriate and equitable. Any exemption from real property taxes for the Property due to any Tax Increment Financing Agreement entered into by the Tenant and the City of

Boston shall be allocated entirely to Tenant (i.e. not Tenant's Pro Rata Share) so that Taxes payable by Tenant reflects such exemption.

Landlord shall, upon the written request of Tenant, commence a proceeding for abatement of real estate Taxes, provided Landlord shall thereafter have the right to settle such proceeding for the benefit of tenants in its reasonable discretion. [***]. In the event of any abatement of Taxes for a period occurring during the term of this Lease, Tenant shall be entitled to Tenant's Pro Rata Share of any refund (after deducting Landlord's or Tenant's, as applicable, reasonable cost in obtaining an abatement, if any, to the extent not previously included in Operating Expenses) but in any event such refund to Tenant shall not exceed the amounts on account of Taxes actually paid by Tenant with respect to the period subject to the abatement.

5.03. Personal Property Taxes. Tenant shall pay directly all taxes charged against Tenant's trade fixtures, furnishings, equipment, inventory, or other personal property (collectively, "Tenant Property"). Tenant shall use its best efforts to have Tenant Property taxed separately from the Property. Landlord shall notify Tenant if any of Tenant Property is taxed with the Property, and Tenant shall pay such taxes to Landlord within thirty (30) days of such notice.

ARTICLE 6. UTILITIES

6.01. Utilities. Tenant shall pay all charges for water, sewer, gas, electricity and other utilities or like services used or consumed on the Premises (each, a "Utility Service" and collectively the "Utility Services"), and used or consumed by all mechanical equipment serving the Premises, wherever located, whether called use charge, tax, assessment, fee or otherwise as the same become due. It is understood and agreed that Landlord shall be responsible for bringing each Utility Service described in the Base Building Work to a common switching point(s) at the Building as shown on the Base Building Work Plans (as defined in the Work Letter)(collectively, the "Utility Switching Points"). As part of the Base Building Work, Landlord shall install a direct meter to measure electricity serving the Premises and, with respect to all other Utility Services being installed as Base Building Work, a direct, sub- or "check" meter for measuring Tenant's consumption of such Utility Service. Tenant shall pay all costs and expenses associated with any separately metered utilities (such as electricity and telephone) directly to the applicable service provider. Tenant shall pay all costs and expenses associated with utility charges that are based on a check- or sub-metering metering installation, based on Landlord's reading of such meters, directly to Landlord at the same rate paid by Landlord to the provider thereof. Additional Rent for any check- or sub-metered utilities may be reasonably estimated monthly by Landlord, based on actual readings of sub — and "check" meters where applicable, and shall be paid monthly by Tenant within thirty (30) days after being billed with a final accounting based upon actual bills received from the

utility providers following the conclusion of each fiscal year of the Building. Tenant shall pay for any and all costs to install and connect Utility Services from the Utility Switching Points to the Premises. Landlord shall be under no obligation as to any Utility Services beyond the foregoing responsibility to bring such Utility Services to the Utility Switching Points and as required in the completion of the Finish Work and Landlord shall not be liable for any interruption or failure in the supply of any utilities or Utility Services, except to the extent expressly set forth below.

To the extent permitted by law, Landlord shall have the right at any time and from time to time during the Term to contract for or purchase one or more Utility Services not being obtained directly by Tenant from any company or third party providing Utility Services (“Utility Service Provider”), subject to Tenant approval of the proposed Utility Service Provider, such approval not to be unreasonably withheld, conditioned or delayed, and provided that such alternate Utility Service Provider shall be retained on market terms and conditions. In requesting Tenant consent to a proposed Utility Service Provider, Landlord shall provide Tenant with reasonable documentation regarding the proposed contract to permit Tenant to determine whether such terms meet the foregoing standard. The parties acknowledge that, initially, the only Utility Services not being obtained directly by Tenant are water, sewer and gas, and the City of Boston and Boston Gas Company are the approved initial providers of such respective Utility Services. Provided there shall be no unreasonable interference with Tenant’s operations within the Premises, Tenant agrees reasonably to cooperate with Landlord and the Utility Service Providers and at all times as reasonably necessary, and on reasonable advance notice, shall allow Landlord and the Utility Service Providers reasonable access to any utility lines, equipment, feeders, risers, fixtures, wiring and any other such machinery or personal property within the Premises and associated with the delivery of Utility Services.

***].

***].

ARTICLE 7. INSURANCE

7.01. Coverage. Tenant shall maintain during the Term insurance for the benefit of Tenant and Landlord (as their interests may appear) from insurers rated at least A-/X by A. M. Best (subject to the provisions of Section 7.02, below), with terms and coverages reasonably satisfactory to Landlord and with such increases in limits as Landlord may from time to time reasonably request consistent with requirements at other Comparable Properties. Initially, Tenant shall maintain the following:

(a) Commercial general liability insurance naming Landlord, Landlord's management agents and Landlord's mortgagee(s) from time to time as additional insureds, with coverage for premises/operations, personal injury, and contractual liability with combined single limits of liability of not less than \$10,000,000 for bodily injury and property damage per occurrence with a per location aggregate.

(b) Property insurance that shall be primary on the Tenant Work and Finish Work and Tenant's property, including its laboratory equipment, office furniture, trade fixtures, office equipment, inventory, merchandise and all other items of Tenant Property, in an amount adequate to cover their replacement cost, including a vandalism and malicious mischief endorsement, and sprinkler leakage coverage; business interruption insurance, loss of income and extra expense insurance covering all perils covered by a standard, "Special Form" (as defined from time-to-time by the insurance industry) property insurance policy. Such insurance, with respect only to Tenant Work, Finish Work, and Tenant's BBW, as defined in Exhibit 10.03, shall name Landlord, and Landlord's mortgagee(s) from time to time as additional loss payees as their interests may appear. Such insurance shall cover special perils including theft and such other risks Landlord may from time to time reasonably designate if such risks are required by landlords to be insured by tenants of similar properties under similar circumstances, for the full replacement cost value of the covered items and in amounts that meet any co-insurance clause of the policies of insurance, with a deductible amount not to exceed [***].

(c) Workers' compensation insurance with statutory benefits and employers' liability insurance in the following amounts: each accident, \$1,000,000; disease (policy limit), \$1,000,000; disease (each employee), \$1,000,000.

In addition, Tenant shall carry such other coverages, and in such amounts, as are required by Landlord from time to time, so long as such coverages and amounts are consistent with Comparable Properties. Prior to the Date of Lease and on each anniversary of that date (or on the policy renewal date), Tenant shall give Landlord certificate(s) evidencing such coverage and with an affirmative statement of the agent issuing such certificate that it may not be canceled or coverage limits reduced without at least thirty (30) days' prior written notice to Landlord and Tenant. Liability insurance maintained by Tenant shall be deemed to be primary insurance, and any liability insurance maintained by Landlord shall be deemed secondary to it.

Tenant may use blanket or excess umbrella coverage to satisfy any of the requirements of this Section 7.01 provided that the Premises is specifically named in any blanket coverage and the limits thereon are available on a per property basis and on such basis comply with the required limits set out herein and that any umbrella coverage is provided on a "following form" basis.

7.02. Action Increasing Rates. Tenant shall comply with Sections 9.01, 9.02, 9.03, and 9.04 and in addition shall not, directly or indirectly, use the Premises in any way that is prohibited by law (nothing in this sentence being deemed to relieve Landlord of its obligations under Sections 9.02 and 9.03). If Tenant, directly or indirectly, uses the Premises in any way that jeopardizes any insurance coverage carried by Landlord or Tenant as reasonably documented by evidence provided by Landlord to Tenant, then Tenant shall, if such use is in violation of the other terms and conditions of this Lease, promptly stop such use. Tenant shall, in any event, reimburse Landlord upon demand for all of Landlord's costs incurred in providing any insurance to the extent attributable to any special endorsement or increase in premium resulting from the particular business or operations of Tenant, and any special or extraordinary risks or hazards resulting therefrom, including without limitation, any risks or hazards associated with the generation, storage and disposal of so-called biohazards or medical waste. Notwithstanding the foregoing, Tenant's use of the Premises for the Permitted Uses, generally (as opposed to Tenant's particular use) in compliance with the terms and conditions of this Lease shall not be deemed legally prohibited or dangerous to people or property for the purposes of this Section 7.02. Tenant shall cure any breach of this Lease on account of Tenant's failure to carry the insurance required by this Section 7.02 within ten (10) days after notice from Landlord and Tenant shall have no further notice or cure right under Article 14 for any such breach.

The parties acknowledge and agree that, as of the date hereof, their respective insurers maintaining the property and commercial general liability insurers coverages required hereunder currently have an A.M. Best rating of [***] (i.e. in excess of the requirement otherwise set forth in this Article Seven). If at any time during the term of this Lease the Landlord's or Tenant's applicable insurance carriers no longer meet the [***] standard (but otherwise meets the [***] standard set forth herein), then, upon at least 30 days' prior written notice from the other party, such party shall use commercially reasonable efforts to obtain such coverages from an insurer meeting the [***] standard at the sole cost and expense of the requesting party (to the extent that any such change in carrier results in additional costs) provided that nothing in this sentence shall obligate either party to change its insurance carrier if it would adversely affect coverages being provided to any other property under any blanket policy, result in a default under any other agreement to which the insured is a party, or otherwise be prohibited by the terms of the applicable insurance policy (and provided that in no event can any such request be made more than once in any 12-month period). [***].

The parties shall direct the Boston office of the AAA to appoint an arbitrator who shall have [***] and who has provided such services to buildings and property [***] and who shall not be affiliated with either Landlord or Tenant and has not worked for either party or its affiliates at any time during the prior five (5) years. [***].

The arbitration shall be conducted in accordance with the expedited commercial arbitration rules of the AAA insofar as such rules are not inconsistent with the provisions of this Lease (in which case the provisions of this Lease shall govern). [***].

[***]. The arbitrator's decision shall be final and binding on the parties.

7.03. Waiver of Subrogation. Landlord and Tenant each waive any and every claim for recovery from the other for any and all loss of or damage to the Property or any part of it, or to any of its contents, to the extent such loss or damage is covered by property insurance or would have been covered by property insurance required hereunder. Landlord waives any and every such claim against Tenant that would have been covered had the insurance policies required to be maintained by Landlord by this Lease been in force, to the extent that such loss or damage would have been recoverable under such policies. Tenant waives any and every such claim against Landlord that would have been covered had the insurance policies required to be maintained by Tenant under this Lease been in force, to the extent that such loss or damage would have been recoverable under such policies. This mutual waiver precludes the assignment of any such claim by subrogation (or otherwise) to an insurance company (or any other person), and Landlord and Tenant each agree to give written notice of this waiver to each insurance company that has issued or shall issue any property insurance policy to it, and to have the policy properly endorsed, if necessary, to prevent invalidation of the insurance coverage because of this waiver.

7.04. Landlord's Insurance. Landlord shall purchase and maintain during the Term with insurance companies rated at least [***] by A.M. Best (subject to the provisions of Section 7.02, above) the following: (i) commercial general liability insurance for incidents occurring in the common areas, with coverage for premises/operations, personal and advertising injury, products/completed operations and contractual liability with combined single limits of liability of not less than \$10,000,000 for bodily injury and property damage per occurrence; and (ii) All Risk property insurance covering property damage to the Building (other than Tenant Work), and loss of rental income (covering off-site events to the extent then available, if such coverage is available at commercially reasonable rates), covering special perils including theft for the full replacement cost value of the Building above foundation walls, [***], with co-insurance waived by inclusion of an agreed amount endorsement together with such other coverages and risks as Landlord shall reasonably decide or a mortgagee or ground lessor may require. As set forth in Section 4.02(a), a portion of the cost thereof shall be borne by Tenant. In addition, Landlord shall name Tenant as an additional insured (except with respect to acts of Tenant Parties) on its Pollution Legal Liability policy and any replacement policy obtained by Landlord from time to time during the term hereof (any such policy being referred to herein as "Environmental Insurance").

ARTICLE 8.

OPERATING EXPENSES

8.01. Operating Expenses. “Operating Expenses” shall mean all costs and expenses associated with the operation, management, maintenance and repair of the Property, together with the Building’s share of costs associated with the operation, management, maintenance and repair of the common areas of the Project. Operating Expenses include without limitation costs of: compliance with Landlord’s obligations under Section 10.03(c); planting and landscaping; snow removal; utility, water and sewage services; maintenance of signs (other than tenants’ signs); supplies, materials and equipment purchased or rented; total wage and salary costs paid to, and all contract payments made on account of, all persons engaged in the operation, maintenance, security, cleaning and repair of the Property, including Social Security, old age and unemployment taxes and so-called “fringe benefits” prorated to the extent engaged in such services to or for the Building; services furnished to tenants of the Property, generally; maintenance, repair and replacement of Building equipment and components; utilities consumed and expenses incurred in the operation, maintenance and repair of the Property including, without limitation, oil, gas, hot/chilled water, and electricity (other than electricity to tenants in their demised premises if Tenant is directly responsible for payment under this Lease on account of electricity consumed by Tenant); workers’ compensation insurance and property, liability and other insurance premiums; personal property taxes; rental or lease payments paid by Landlord for rented or leased personal property used in the operation or maintenance of the Property; fees for required licenses and permits; refuse removal; security; an administrative fee in the initial amount of [***] per rentable square foot, increasing by [***] per rentable square foot after the third (3rd) Lease Year and every third (3rd) Lease Year thereafter, subject to a cap of [***] per rentable square foot during the initial term of this Lease and then increasing to a flat [***] per rentable square foot (i.e. without further increases) effective on the commencement of the Extension Term; Landlord’s “Percentage Share” of “CAM Charges” (as defined in the Declaration); any periodic assessments, both regular and special, for which Landlord is or becomes responsible under the Project Documents; and costs incurred by Landlord to comply with the terms and conditions of any governmental approvals affecting operations of the Property (including without limitation the Project Documents). Landlord may use third parties or affiliates to perform any of these services (subject to the limitations on Operating Expenses attributable to services performed by affiliates expressly set forth in the immediately following paragraph), and the cost thereof shall be included in Operating Expenses, provided that Operating Expenses shall not include any property management fee, other than the administrative fee described above. Landlord shall reasonably allocate the cost of any Operating Expenses incurred jointly for the Property and any other property. In addition, if Landlord from time to time repairs or replaces any existing improvements or equipment or installs any new improvements or equipment to the Building (including without limitation energy conservation improvements or other improvements), then the cost of such items that are treated as capital expenses pursuant to generally accepted accounting principles (to the extent not excluded below) shall be

amortized over their useful life, as reasonably determined by Landlord, together with interest at an actual or imputed interest rate (at the prime rate of interest then being charged by the Bank of America or its successors, plus 4%) and included in Operating Expenses.

Notwithstanding the foregoing, Operating Expenses shall not include: the cost of designing and constructing the Landlord Work; the costs of initial contributions, exactions, and costs of a capital nature, for which Landlord is or becomes responsible under the Project Documents (except (i) housing exactions in the amount of \$5.49 per square foot of gross floor area, as defined in the Boston Zoning Code, of the Building, payable in 12 equal annual installments following the issuance of a certificate of occupancy in accordance with the "Development Impact Project Agreement" listed on Exhibit 2.01(f) and (ii) such costs to the extent included in the CAM Charges paid to FPOC for administration of the Common Areas and Facilities); and costs incurred by Landlord in order to construct the Building and any other improvements at the Property and Project in compliance with the terms and conditions of any governmental approvals affecting operations of the Property (including without limitation the Project Documents), the cost of casualty repairs to the extent covered by insurance (except for reasonable deductibles paid by Landlord under insurance policies maintained by Landlord); costs associated with the operation of the business of Landlord and/or the sale and/or financing of the Property, as distinguished from the cost of Property operations, maintenance and repair; any ground or underlying lease rental; costs of disputes between Landlord and its employees, tenants or contractors; bad debt expenses and interest, principal, points and fees on debts or amortization on any mortgage or other debt instrument encumbering the Building or the Property; costs incurred by Landlord to the extent that Landlord is reimbursed by insurance proceeds or is otherwise reimbursed by third parties; expenses in connection with services or other benefits that are not offered to Tenant or to the extent that any other tenant is charged for directly; management fees paid or charged by Landlord in connection with the management of the Building; amounts paid to Landlord or to subsidiaries or affiliates of Landlord for goods and/or services in the Building to the extent the same exceeds the costs of such goods and/or services rendered by unaffiliated third parties on a competitive basis; costs associated with the operation of the business of the entity which constitutes Landlord as the same are distinguished from the costs of operation of the Building, including accounting and legal matters; costs of selling, syndicating, financing, mortgaging or hypothecating any of Landlord's interest in the Building; salaries of executives and owners not directly employed in the management/operation of the Building; the cost of work done (including without limitation leasehold improvements and redecoration work) or services furnished by Landlord exclusively for a particular tenant; the cost of soil and groundwater testing, remediation and other response actions, except to the extent the need therefor arises from any negligence or willful misconduct of Tenant or Tenant's employees, agents or contractors, or any default of Tenant under this Lease; advertising and other fees and costs (including without limitation legal, architectural and brokerage fees and tenant improvement allowances)

incurred in procuring tenants; costs incurred in connection with causing the Base Building Work to comply with Legal Requirements existing as of the Commencement Date; repairs, alterations, additions, improvements or replacements made to rectify or correct any defect in the design, materials or workmanship of the Base Building Work or common areas during any warranty period (to the extent covered by warranty) or to comply with any requirements of any governmental authority in effect as of the Commencement Date; costs of repairs, restoration, replacements or other work occasioned by (i) fire, windstorm or other casualty and either (a) paid by insurance required to be carried by Landlord under this Lease, or (b) otherwise paid by insurance (not including any deductible paid by Landlord) then in effect obtained by Landlord, (ii) the exercise by governmental authorities of the right of eminent domain, whether such taking be total or partial, to the extent that Landlord is compensated by such governmental authority for such repairs, restoration, replacements or other work, or (iii) the act of any other tenant in the Building, or any other tenant's agents, employees, licensees or invitees to the extent the applicable cost is recovered from such person; Landlord's general overhead and administrative expenses not related to the Building; non-cash items, such as deductions for depreciation and amortization of the Building (except with respect to capital expenditures as specified above) and the Building equipment, or interest on capital invested; costs incurred due to violation by Landlord or any other tenant in the Building of the terms and conditions of any lease; salaries, wages, or other compensation to any employee of Landlord to the extent not assigned to the operation, management, maintenance, or repair of the Building, including accounting or clerical personnel and other overhead expenses of Landlord (except to the extent providing services, such as accounting, for which Landlord would otherwise use a third-party provider); costs of the initial construction of the Base Building Work; repair of defects in the Base Building Work identified in the one year period after substantial completion of the Base Building Work; any expenses related to real estate taxes, insurance, and all expenses for the construction, operation, repair and maintenance of the Parking Garage. None of the foregoing exclusions from Operating Expenses shall be deemed to entitle Tenant to an exclusion on account of any portion of CAM Charges, Tenant acknowledging that Landlord may vote as part of FPOC on matters affecting the CAM Charges but does not control FPOC. [***].

Tenant shall pay Tenant's Pro Rata Share of Operating Expenses in accordance with Section 4.02.

**ARTICLE 9.
USE OF PREMISES**

9.01. Permitted Uses. Tenant may use the Premises only for the Permitted Uses described in Section 1.10. Tenant shall keep the Premises equipped with appropriate safety appliances to the extent required by applicable laws or insurance requirements relating to Tenant's use of the Premises. Tenant shall comply with Landlord's rules and

regulations (the “Rules and Regulations”) promulgated from time to time, provided the same are not inconsistent with or in limitation of the provisions of this Lease and are reasonable, and Tenant shall use reasonable efforts to cause its agents, contractors, customers and business invitees to comply therewith. Landlord’s initial Rules and Regulations are attached hereto as Exhibit 9.01.

9.02. Indemnification. From and after the Commencement Date, Tenant shall assume exclusive control of all areas of the Premises, including all improvements, utilities, equipment, and facilities therein. Tenant is responsible for the Premises and all of Tenant’s improvements, equipment, facilities and installations, wherever located on the Property and all liabilities, including without limitation tort liabilities incident thereto. Tenant shall indemnify, save harmless and defend Landlord, and its members, managers, officers, directors, mortgagees, and employees (collectively, “Indemnitees”) from and against any and all claims, damages, losses, penalties, costs, expenses and fees (including reasonable attorneys’ fees) arising in whole or in part out of (i) any injury, loss, theft or damage (except to the extent due to the negligence or willful misconduct of the Indemnitees and their respective agents, contractors or Landlord or its employees) to any person or property while on or about the Premises or, to the extent caused by the negligence or willful misconduct of Tenant, the Property; (ii) any condition within the Premises, or, to the extent caused by the negligence or willful misconduct of Tenant, the Property and, in each, except for conditions existing prior to the date that Tenant first takes occupancy of the Premises; and (iii) the use of the Premises by, or any act or omission of, Tenant or persons claiming by, through or under Tenant, or any of its agents, employees, independent contractors, suppliers or invitees.

Landlord shall indemnify, save harmless and defend Tenant, and its members, managers, officers, directors, and employees from and against any and all claims, damages, losses, penalties, costs, expenses and fees (including without limitation reasonable legal fees) arising in whole or in part out of any injury, loss, theft or damage (except to the extent due to the negligent acts or omissions of Tenant, its employees, contractors or agents) to any person or property while on or about the common areas of the Property to the extent resulting from the negligent acts or omissions or willful misconduct of Landlord, its employees, agents or contractors.

The provisions of this Section 9.02 shall survive the expiration or earlier termination of this Lease.

9.03. Compliance With Legal Requirements. Tenant shall not cause or permit the Premises, or cause (or permit Tenant Parties to cause) the portions of the Property other than the Premises, to be used in any way that violates any law, code, ordinance, restrictive covenant, encumbrance, governmental regulation, order, permit, approval, Project Document, or any provision of this Lease (each a “Legal Requirement”, and collectively the “Legal Requirements”), or constitutes a nuisance or waste, and shall

comply with all Legal Requirements applicable to the Premises and Property. Tenant shall obtain and pay for all permits and shall promptly take all actions necessary to comply with all Legal Requirements, including without limitation the Occupational Safety and Health Act, applicable to Tenant's use of the Premises. Notwithstanding the foregoing two sentences to the contrary, Landlord shall be responsible for the compliance of the Base Building Work and the Finish Work with all Legal Requirements as of the Commencement Date. Tenant shall maintain in full force and effect all certifications or permissions required for Tenant's operations at the Premises. Tenant shall be solely responsible for procuring and complying at all times with any and all necessary permits, certifications, permissions and the like and complying with all reporting requirements directly relating or incident to: the conduct of its activities on the Premises; its scientific experimentation; transportation, storage, handling, use and disposal of any chemical or radioactive or bacteriological or pathological substances or organisms or other hazardous wastes or environmentally dangerous substances or materials or medical waste. Within ten (10) days of a request by Landlord, which request shall be made not more than once during each period of twelve (12) consecutive months during the Term hereof, unless otherwise requested by any mortgagee of Landlord, Tenant shall furnish Landlord with copies of all such permits that Tenant possesses or has obtained together with a certificate certifying that such permits are all of the permits that Tenant possesses or has obtained with respect to the Premises. Tenant shall promptly give notice to Landlord of any written orders, warnings or violations relative to the above received from any federal, state, or municipal agency or by any court of law and shall promptly comply with and cure the conditions causing any such violations in accordance with applicable Legal Requirements. Tenant shall not be deemed to be in default of its obligations under the preceding sentence to promptly cure any condition causing any such violation in the event that, in lieu of such cure, Tenant shall contest the validity of such violation by appellate or other proceedings permitted under applicable law, provided that: (i) any such contest is made reasonably and in good faith, (ii) Tenant makes provisions, including, without limitation, posting bond(s) or giving other security, reasonably acceptable to Landlord to protect Landlord, the Building and the Property from any liability, costs, damages or expenses arising in connection with such violation and failure to cure, (iii) Tenant shall agree to indemnify, defend (with counsel reasonably acceptable to Landlord) and hold Landlord harmless from and against any and all liability, costs, damages, or expenses arising in connection with such condition and/or violation, (iv) Tenant shall promptly cure any violation in the event that it exhausts all available appeals without success, and (v) Tenant shall certify to Landlord's reasonable satisfaction that Tenant's decision to delay such cure shall not result in any actual or threatened bodily injury or property damage to Landlord, any tenant or occupant of the Building or the Property, or any other person or entity.

Landlord shall be responsible for the compliance of the structural elements, roof and building systems to the Utility Switching Points of the Building, and the common areas of the Building and the Property, with all Legal Requirements except to the extent

compliance is required due to Tenant's particular use of the Premises, as opposed to the Permitted Uses generally.

9.04. Hazardous Substances. "Environmental Law" means all statutes, laws, rules, regulations, codes, ordinances, authorizations and orders of federal, state and local public authorities pertaining to any Hazardous Substances or to environmental compliance, contamination, cleanup or disclosures of any release or threat of release to the environment, of any Hazardous Substances, including, without limitation, the Toxic Substances Control Act, 15 U.S.C. § 2601, et seq.; the Clean Water Act, 33 U.S.C. § 1251, et seq.; the Clean Air Act, 42 U.S.C. § 7401, et seq.; the Safe Drinking Water Act, 42 U.S.C. § 300f-300j, et seq.; the Federal Water Pollution Control Act, 33 U.S.C. § 1321, et seq.; the Solid Waste Disposal Act, 42 U.S.C. § 6901, et seq.; the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. Section 9601 et seq.; the Federal Resource Conservation and Recovery Act, 42 U.S.C. Section 6901 et seq.; the Superfund Amendments and Reauthorization Act of 1986, Public Law No. 99-499 (signed into law October 17, 1986); M.G.L. c.21C; and oil and hazardous materials as defined in M.G.L. c.21E, as any of the same are from time to time amended, and the rules and regulations promulgated thereunder, and any judicial or administrative interpretation thereof, including any judicial or administrative orders or judgments, and all other federal, state and local statutes, laws, rules, regulations, codes, ordinances, standards, guidelines, authorizations and orders regulating the generation, storage, containment or disposal of any Hazardous Substances, including but not limited to those relating to lead paint, radon gas, asbestos, storage and disposal of oil, biological, chemical, radioactive and hazardous wastes, substances and materials, and underground and above-ground oil storage tanks; and any amendments, modifications or supplements of any of the foregoing.

"Hazardous Substances" means, but shall not be limited to, any hazardous substances, hazardous waste, environmental, biological, chemical, radioactive substances, oil, petroleum products and any waste or substance, which because of its quantitative concentration, chemical, biological, radioactive, flammable, explosive, infectious or other characteristics, constitutes or may reasonably be expected to constitute or contribute to a danger or hazard to public health, safety or welfare or to the environment, including without limitation any asbestos (whether or not friable) and any asbestos-containing materials, lead paint, waste oils, solvents and chlorinated oils, polychlorinated biphenyls (PCBs), toxic metals, etchants, pickling and plating wastes, explosives, reactive metals and compounds, pesticides, herbicides, radon gas, urea formaldehyde foam insulation and chemical, biological and radioactive wastes, or any other similar materials that are regulated by any Environmental Law.

Tenant may generate, produce, bring upon, use, store or treat Hazardous Substances in the Premises in connection with its operations at the Premises provided that (x) such use is in compliance with all applicable Legal Requirements, including without

limitation Environmental Laws, and in compliance with the terms and conditions of this Lease, (y) as to any Hazardous Substances, processes, or procedures not then subject to Legal Requirements, such activities are conducted in accordance with standard laboratory practices for tenants conducting similar operations in Comparable Properties, and do not endanger or create a hazard to public health, safety or welfare or to the environment, within the Building or in the area of the Property, generally, and (z) in no event shall Tenant generate, produce, bring upon, use, store or treat Hazardous Substances with a risk category higher than Biosafety Level 2 as established by the Department of Health and Human Services (“DHHS”) and as further described in the DHHS publication Biosafety in Microbiological and Biomedical Laboratories (5th Edition) (as it may be or may have been further revised, the “BMBL”) or such nationally recognized new or replacement standards as may be reasonably selected by Landlord if applicable to similar facilities in the City of Boston, provided that such new or replacement standards may update requirements but shall not be materially more restrictive on Tenant’s use than Biosafety Level 2 as of the Date of Lease. In all events Tenant shall comply with all applicable provisions of the BMBL. Furthermore, beginning on the Commencement Date, on an annual basis or upon Landlord’s request following the occurrence of any Environmental Incident, or on no more than one additional occasion during any year if reasonably requested by Landlord’s mortgagee(s) in connection with any financing or refinancing of the Property, Tenant shall provide Landlord with a list detailing the types and amounts of all Hazardous Substances being generated, produced, brought upon, used, stored, treated or disposed of by or on behalf of Tenant in or about or on the Premises, Building or Property and, upon Landlord’s request, copies of any manifests or other federal, state or municipal filings by Tenant with respect to such Hazardous Substances (redacted to protect confidential information to the extent such redactions are permitted by the applicable federal, state or municipal authorities having jurisdiction over such filings). Tenant agrees to pay the reasonable cost of any environmental inspection or assessment requested by any lender that holds a security interest in the Property or this Lease, or by any insurance carrier, to the extent that such inspection or assessment pertains to any release, reasonable threat of release, contamination, or a loss or damage or determination of condition related to the foregoing (together, “Environmental Incidents”) in the Premises other than Environmental Incidents arising prior to the Commencement Date or migrating to the Premises from some other part of the Building or Property due to environmental conditions existing prior to the Commencement Date or through no fault, act or omission of Tenant.

If any transportation to or from, or any storage, use or disposal of Hazardous Substances on or about, the Property by any Tenant Party results in any escape, or release, reasonable threat of release, contamination of the soil or surface or ground water or any loss or damage to person or property (any such event, a “Tenant Environmental Incident”), Tenant agrees to: (a) notify Landlord immediately of the occurrence; (b) after consultation with Landlord, clean up the occurrence in full compliance with all applicable Environmental Laws and (c) indemnify, save harmless and defend the Indemnitees from

and against any and all claims, damages, losses, penalties, costs, expenses and fees (including reasonable attorneys' fees) arising in whole or in part out of such occurrence. In the event of such occurrence, Tenant agrees to cooperate fully with Landlord and provide such documents, affidavits, and information and take such actions as may be requested by Landlord from time to time (1) to comply with any Environmental Law or Legal Requirement, (2) to comply with any request of any mortgagee, insurer or tenant, and/or (3) for any other reason deemed necessary by Landlord in its sole discretion. In the event of any such occurrence that is required to be reported to a governmental authority under any Environmental Law or Legal Requirement, Tenant shall simultaneously deliver to Landlord copies of any notices given or received by Tenant and shall promptly pay when due any fine or assessment against Landlord, Tenant, or the Premises or Property relating to such occurrence.

Tenant acknowledges that it has received and reviewed certain environmental reports listed on Exhibit 9.04 (the "Environmental Reports") regarding the condition of the Property and that, upon the Commencement Date, subject to the provisions of this paragraph, Tenant shall accept the Premises in the condition existing as of the date of this Lease with respect to the presence of Hazardous Substances. [***]. For the purposes of this paragraph, "response" has the meaning set forth in Section 2 of Chapter 21E of the Massachusetts General Laws. Expenses, losses and liabilities, as described above, shall include, without limitation (i) any and all expenses that Tenant may incur to comply with any Environmental Laws on account of such Occurrences; (ii) any and all costs that Tenant may incur in studying or remedying any Occurrences at or arising from the Premises, Building or the Property; (iii) any and all costs that Tenant may incur in studying, removing, disposing or otherwise addressing any Hazardous Substances on account of such Occurrences; (iv) any and all fines, penalties or other sanctions assessed upon Tenant on account of such Occurrences; (v) any and all reasonable legal and professional fees and costs incurred by Tenant in connection with the foregoing; and (vi) losses due to bodily injury or physical damage to property incurred by Tenant due to Landlord's failure to undertake response actions required pursuant to, and within time periods required by, Legal Requirements on account of any such Occurrences. Tenant's right to the foregoing indemnities shall be conditioned on Tenant giving prompt written notice to Landlord of any claim, demand or threat of claim or demand made upon Tenant by any governmental agency or other person. Landlord shall have the right, but not any obligation, to control the defense of any such matter which could result in an indemnification obligation by Landlord under this provision. Landlord shall be subrogated to any and all claims, rights and defenses Tenant has against other persons with respect to any such matter, and Tenant shall not settle, compromise or adjust any such claim or right or any indemnified matter without the prior written consent of Landlord.

The provisions of this Section 9.04 shall survive the expiration or earlier termination of this Lease.

9.05. Signs and Auctions. Tenant, at Tenant's expense and subject to Landlord's reasonable approval with respect to the location and design, shall have the exclusive right to install and maintain (i) reasonable amounts of non-retail signage in the Building lobby identifying Tenant and (ii) reasonable amounts of non-retail exterior signage on the Building identifying Tenant to the extent permitted by all Legal Requirements. Tenant shall be entitled, at Tenant's sole cost and expense, to Tenant's Pro Rata Share of any monument signage to which the Building has rights in the Project. Tenant shall not conduct or permit any auctions or sheriff's sales at the Property. Landlord shall have the reserved right to install directional signage in the main lobby of the Building to direct visitors to the Parking Garage, [***] and to install signage identifying Landlord and Landlord's property manager at the Building (but not within the Premises). Landlord shall cooperate with Tenant as is reasonably required, in Landlord's capacity as owner of the Building, to apply for and obtain approvals from municipal authorities for any exterior signage pursuant to clause (ii) above, without any obligation for Landlord to incur any out-of-pocket expenses on account of such cooperation except to the extent that Tenant reimburses Landlord for the same.

9.06. Landlord's Access. Landlord or its agents may enter the Premises at all reasonable times (i) to show the Premises to potential and actual buyers, investors, lenders, or, in the last eighteen (18) months of the Term (provided that Tenant has not timely exercised its right to extend the Term pursuant to Section 3.03), prospective tenants; (ii) to inspect and monitor Tenant's compliance with Legal Requirements governing Hazardous Substances, and to inspect the Premises to determine whether Tenant is in compliance with the terms of this Lease, but any entries pursuant to this clause (ii) shall require at least two (2) business days' prior notice, shall be during normal business hours (unless otherwise agreed by Tenant) and shall not occur more often than once annually during the term of this Lease except where a notice of default has been provided to Tenant or where such inspections are required by Landlord's mortgagees or insurers; (iii) for purposes described in Sections 2.01(c), 9.04 and/or 10.04(b), or (iv) for any other purpose Landlord reasonably deems necessary in connection with the exercise of Landlord's rights and obligations under this Lease. Landlord shall give Tenant reasonable prior notice (which shall be not less than 24 hours and may be via e-mail to vertex_operations@vrtx.com or an alternative e-mail address provided to Landlord in writing from time to time) of such entry. Landlord shall cooperate with Tenant to schedule any such entry and activity at a time designed to reduce any inconvenience to Tenant. Tenant shall have the right to have a representative of Tenant accompany Landlord during any such entry, but entry shall not be prohibited if Tenant fails to provide an accompanying representative (in the event of which failure, Landlord shall attempt at least one phone call to each Tenant's Designated Representative (as defined below), if any then exists, to notify Tenant of such failure prior to any entry). However, in case of emergency, Landlord may enter any part of the Premises with such notice as is reasonably practicable or without prior notice if notice is impracticable and without

Tenant's representative, if necessary, and shall, if no notice was provided (Landlord agreeing that it shall endeavor to provide an e-mail notice to the e-mail address provided above), promptly notify Tenant of the nature and extent of such entry. During Landlord's access of the Premises, Landlord shall comply with reasonable security provisions required by Tenant to preserve the confidential nature of information in whatever form maintained within the Premises. For safety, security, confidentiality or compliance with law purposes, Tenant may designate certain limited areas as limited access areas to be shown on plans provided by Tenant to Landlord and updated by Tenant as reasonably necessary in the future to which Landlord and related parties shall not have access except in an emergency or as otherwise reasonably necessary and then only in accordance with a mutually agreed-upon plan to protect Tenant's reasonable concerns regarding safety, security and confidentiality, provided that such limited access areas shall be reasonably identified and necessary to protect the health of persons or security of confidential and proprietary information. Landlord and Tenant will develop a protocol limiting and controlling the distribution of Landlord's keys or other access devices to the Premises. "Tenant's Designated Representative" shall mean (a) a person with an office at the Premises identified by Tenant in writing to Landlord from time to time as the primary point of contact for Landlord's access to the Premises and (b) the on-site supervisor of Tenant's private security, if any, that is then on duty. Tenant shall provide Landlord with a phone number for Tenant's Designated Representative with any notice designating such person, and any change in the identification of Tenant's Designated Representative shall take effect five (5) business days following delivery of such notice to Landlord.

9.07. Security. Tenant shall be solely responsible, at Tenant's sole cost and expense, to provide any security measures that Tenant requires within, and at the entries to, the Premises. Tenant shall provide Landlord with a written description of its security plan from time to time, outlining Tenant's security measures to the extent applicable to visitors, guests, and others entitled to access the Premises (Tenant being permitted to redact from such security plan any Confidential Information, as defined in Section 16.14). Tenant's security plan shall include the designation of a person or persons who shall be on the Premises 24 hours, seven days a week to the extent required for the purposes of fulfilling municipal fire command obligations (Landlord acknowledging that such person may be a third-party contractor or designee thereof). Tenant shall have reasonable access to the Property outside the Premises to install and operate any such security measures, including installation of security video cameras in the Premises and Common Areas and Facilities located on the Property (and the retail loading docks on the Property), subject to Landlord's reasonable approval. In no event may Tenant's security measures restrict or impede access to the Parking Garage through the main lobby of the Building.

Landlord shall develop, or cause to be developed by FPOC, jointly with Tenant and subject to Tenant approval, such approval not to be unreasonably withheld, conditioned or delayed, a commercially reasonable security and operations plan (the

“Security Plan”) for the exterior perimeter and common areas of the Building and the Parking Garage. Operating Costs of security outside of the Premises related to Tenant’s use of the Premises that are in excess of those typically anticipated for the other uses at the Project will be allocated entirely to Tenant. Landlord shall provide for security to the Property in accordance with the Security Plan. Notwithstanding the fact that Landlord provides security services at the Property at any time during the Term, to the extent permitted by applicable law, Landlord shall not be deemed to owe Tenant, or any person claiming by, through or under Tenant, any special duty or standard of care as a result of Landlord’s provision of such security services other than the duty or standard of care that would have applied without such services and in no event shall Landlord be responsible for the efficacy of any such security measures.

Tenant acknowledges and agrees that all maintenance, repair, replacement, operation and administration of the “Fan Pier Project Common Areas and Facilities” (as defined in the Declaration) are under the control of the Developer or FPOC and that the Developer’s or FPOC’s election to provide mechanical surveillance or to post security personnel in the Fan Pier Project Common Areas and Facilities is subject to the Developer’s or FPOC’s sole discretion. Landlord will provide, and cause Landlord affiliates owning parcels within the Project to provide, in the Declaration a definition of “First Class Standard” for the maintenance and operation of Fan Pier Project Common Areas and Facilities, as follows: “the standard according to which first class multi-use developments including office, research laboratory, hotel and residential buildings therein of a size and otherwise reasonably comparable to the Project are then being maintained in major urban areas within the United States. Without limiting the generality of the foregoing, with respect to the level of security in the Fan Pier Project Common Areas and Facilities, First Class Standard shall not be less than the following from and after the Substantial Completion of the Building: a sufficient number of trained security personnel shall patrol the Fan Pier Common Areas and Facilities so as to walk the perimeter of all of the Initial Improvements (as defined in the Declaration) and through the Open Space Areas (as defined in the Declaration) at intervals of approximately every hour on a 24 hour/7 days per week basis. Such security personnel shall be equipped with communication equipment for contacting 911 in case of emergency, and shall log their rounds using fobs such as Detex system.” The Landlord shall exercise reasonable efforts to prevent future amendment of the Declaration to reduce this level of security. Notwithstanding anything to the contrary contained in this Lease, Landlord’s sole responsibility with respect to the maintenance, repair, replacement, operation, administration or the provision of surveillance or security in the Fan Pier Project Common Areas and Facilities shall be to use commercially reasonable efforts to enforce the obligations of the Developer or FPOC under the Declaration. Tenant shall hold Landlord harmless from any claim concerning the failure to maintain any portion of the Fan Pier Project Common Areas and Facilities, other than a failure of Landlord to use commercially reasonable efforts to enforce the Developer or FPOC’s obligations under the Project Documents or to the extent such failure results from a failure to fund

Landlord's share of assessments under the Declaration (other than as a result of Tenant's default).

**ARTICLE 10.
CONDITION AND MAINTENANCE OF PREMISES AND PROPERTY**

10.01. Condition of Premises and Property. Tenant acknowledges that except for any express representations in this Lease, neither Landlord nor any person acting under Landlord has made any representation as to the condition of the Property or the suitability of the Property for Tenant's intended use. Tenant represents and warrants that Tenant has made its own inspection and inquiry regarding the Property and is not relying on any representations of Landlord or any Broker or persons acting under either of them except for any express representations in this Lease.

10.02. Exemption and Limitation of Liability.

(a) Exemption from Liability. Tenant shall insure its personal property under a "Special Form" (as defined by the insurance industry). Landlord shall not be liable for any damage or injury to the person, property or business (including loss of revenue, profits or data) of any Tenant Party except to the extent of any damage or injury to persons or property arising from Landlord's negligence or willful misconduct (but subject to the provisions of Section 7.03 and exclusions from liability set forth in Section 10.02(c), and nothing in this sentence shall be construed to limit Tenant's express remedies pursuant to Sections 6.01 and 12.01 of this Lease). Except as otherwise expressly provided in this Lease, this exemption shall apply whether such damage or injury is caused by (among other things): (i) fire, steam, electricity, water, gas, sewage, sewer gas or odors, snow, ice, frost or rain; (ii) the breakage, leaking, obstruction or other defects of pipes, faucets, sprinklers, wires, appliances, plumbing, windows, air conditioning or lighting fixtures or any other cause; (iii) any other casualty or any Taking; (iv) theft; (v) conditions in or about the Property or from other sources or places; or (vi) any act or omission of any other tenant.

(b) Limitations On Liability. Tenant agrees that Landlord shall be liable only for breaches of its covenants occurring while it is owner of the Property (provided, however, that if Landlord from time to time is lessee of the ground or improvements constituting the Building, then Landlord's period of ownership of the Property shall be deemed to mean only that period while Landlord holds such leasehold interest). Upon any sale or transfer of the Building (or Landlord's interest as ground lessee, as applicable), the transferor Landlord (including any mortgagee) shall be freed of any liability or obligation thereafter arising to the extent that such liabilities and obligations are assumed by such transferee and, thereafter, Tenant shall look solely to the transferee Landlord as aforesaid for satisfaction of such liability or obligation.

Tenant and each person acting under Tenant agrees to look solely to Landlord's interest from time to time in the Property, including the rents, insurance proceeds and condemnation proceeds therefrom, for satisfaction of any claim against Landlord. No owner, trustee, beneficiary, partner, member, manager, agent, or employee of Landlord (or of any mortgagee or any lender or ground or improvements lessor) nor any person acting under any of them shall ever be personally or individually liable to Tenant or any person claiming under or through Tenant for or on account of any default by Landlord or failure by Landlord to perform any of its obligations hereunder, or for or on account of any amount or obligations that may be or become due under or in connection with this Lease or the Premises; nor shall it or they ever be answerable or liable in any equitable judicial proceeding or order beyond the extent of their interest in the Property. No owner, trustee, beneficiary, partner, member, manager, agent or employee of Tenant nor any person acting under any of them shall ever be personally or individually liable to Landlord or any person acting under or through Landlord for or on account of any default by Tenant or failure by Tenant to perform any of its obligations that may be or become due under or in connection with this Lease or the Premises. No deficit capital account of any member or partner of Landlord shall be deemed to be a liability of such member or partner or an asset of Landlord.

(c) No Indirect or Consequential Damages. In no event shall Landlord or Tenant ever be liable to the other for indirect or consequential damages (including loss of revenue, profits, or data); provided, however, that no remedies or damages expressly provided in this Lease shall be considered indirect or consequential, and that the provisions of this Section 10.02(c) shall not apply to Sections 3.02 and 9.04 of this Lease.

10.03. Landlord's Obligations.

(a) Base Building Work. Landlord shall construct the Base Building Work as further set forth on Exhibit 10.03, attached.

(b) Finish Work. Landlord shall construct the Finish Work as further set forth in Exhibit 10.03, attached. Payments for such Finish Work and other provisions relating to Finish Work will be as provided in Exhibit 10.03.

(c) Repair and Maintenance. Subject to the provisions of Article 12, and except for damage caused by any act or omission of Tenant or persons acting under Tenant, Landlord shall make such repairs and replacements to the roof structure and roof membrane; exterior walls; floor slabs, footings, foundations, columns, and other structural components of the Building; glass in exterior windows and exterior doors of the Building; and other Building systems up to the Utility Switching Points, as may be necessary to properly maintain them in good repair and condition. Landlord shall

have no obligation to repair or maintain any portion of the Premises or perform any service, except as specifically set forth in this paragraph. Tenant shall promptly report in writing to Landlord any defective condition known to it that Landlord is required to repair. Tenant waives the benefit of any present or future law that provides Tenant the right to repair the Premises or Property at Landlord's expense or to terminate this Lease because of the condition of the Property or Premises (but nothing in this sentence shall be deemed to limit Tenant's exercise of the remedies expressly provided in the immediately following paragraph).

[***].

[***].

10.04. Tenant's Obligations.

(a) Repair and Maintenance. Except for work that Section 10.03 or Article 12 requires Landlord to do, Tenant at its sole cost and expense shall keep the Premises including without limitation all elevators; elevator shafts; heating, ventilation and air conditioning equipment; fixtures, systems and equipment of any type serving the Premises, and now or hereafter on the Premises, or elsewhere serving the Premises, in good order, condition and repair (and at least as good order, condition and repair as they are in on the Commencement Date or may be put in during the Term), normal wear and tear, casualty and condemnation (to the extent the responsibility of Landlord pursuant to Article 12 hereof) excepted; shall keep in a safe, secure and sanitary condition all trash and rubbish temporarily stored at the Premises; and shall make all repairs and replacements and do all other work necessary for the foregoing purposes whether the same may be ordinary or extraordinary, foreseen or unforeseen. The foregoing shall include without limitation Tenant's obligation to repair, maintain, and replace floors and floor coverings, to paint and repair walls and doors, to replace and repair all glass in windows and doors of the Buildings (except glass in the exterior walls of the Buildings and in exterior doors), ceiling tiles, lights and light fixtures, pipes, conduits, wires, drains and the like in the Premises and to make as and when needed as a result of misuse by, or neglect or improper conduct of Tenant or any Tenant Party or otherwise, all repairs necessary, which repairs and replacements shall be in quality and class equal to the original work. Tenant shall secure, pay for, and keep in force third-party maintenance and service contracts with appropriate and reputable service companies approved by Landlord (such approval not to be unreasonably withheld, conditioned or delayed) providing for the regular maintenance of all elevators, elevator shafts, heating, ventilation and air conditioning equipment, Building systems, the Building life safety system including the emergency generator connected to the Building life safety system and the fire command center; and other elements of the Premises within

Tenant's repair and maintenance responsibility that landlords of Comparable Properties typically service by use of third-party service companies (collectively, the "Service Contracts"), copies of which shall be provided to Landlord, and Tenant shall provide to Landlord in a timely manner such periodic inspection reports (but no less frequently than annually) as are prepared by the service providers under the Service Contracts.

Without limitation, Tenant shall be responsible for heating, ventilating and air-conditioning systems to the extent exclusively serving the Premises and Utility Services serving the Premises from the Utility Switching Points. If anything required pursuant to this Section 10.04(a) to be repaired cannot be fully repaired or restored, Tenant upon prior notice to Landlord shall replace it at Tenant's cost, even if the benefit or useful life of such replacement extends beyond the Term provided, however that if, in the last three years of the Term, (i) the replacement has been approved in advance and in writing by Landlord, not to be unreasonably withheld, and (ii) the property subject to replacement will become the property of Landlord pursuant to the terms of this Lease at the conclusion of the Term, then within ninety (90) days after the expiration of the Term, Landlord shall reimburse Tenant for the unamortized portion of the capital replacement calculated as follows: upon receipt of notice from Tenant of the need for such capital replacement, Landlord and Tenant shall cooperate to determine the estimated cost of such replacement. The actual cost of the replacement, as documented by Tenant and subject to Landlord's approval (which shall not be unreasonably withheld), shall be amortized over the useful life of such replacement as reasonably determined by Landlord on a straight line basis together with interest at the prime interest rate from time to time announced by Bank of America (or any successor financial institution). Tenant shall transfer to Landlord all of its rights and interests in any warranties, together with copies of the same, related to said replacement at the conclusion or earlier expiration of the Term. Tenant acknowledges that Landlord has the right, but not the obligation, to reduce the amount payable at the conclusion of the Term to Tenant pursuant to this paragraph by any amounts of Rent then due and payable to Landlord.

Tenant shall hire its own cleaning contractor for the Premises. Notwithstanding anything to the contrary in this Lease, it is expressly understood and agreed that Landlord shall have no liability or responsibility for the storage, containment or disposal of any Hazardous Substances generated, stored or contained by Tenant, Tenant hereby agreeing to store, contain and dispose of any and all such Hazardous Substances at Tenant's sole cost and expense in accordance with the provisions of Article 9 hereof.

Tenant acknowledges that the Parking Garage is open to the general public and that access to the Parking Garage must be maintained open to the public through the main Building lobby and the common stairways and stairwells providing access to the

Parking Garage from the lobby at all times during the Term, subject to matters described in Article 12. Stairways and stairwells and elevators serving the Parking Garage shall be differentiated and secured from stairways, stairwells and elevators serving the Building so that there is no direct access from the Parking Garage to the upper floors of the Building without entering the lobby. Notwithstanding anything to the contrary herein, such lobby shall be maintained by Tenant in a condition consistent with main building lobbies in Class A office buildings in the Seaport District of the City of Boston, Massachusetts.

(b) Landlord's Right to Cure. If Tenant does not perform any of its obligations under Section 10.04(a), Landlord upon twenty (20) days' prior notice to Tenant (or without prior notice in the case of an emergency) may perform such maintenance, repair or replacement on Tenant's behalf, and Tenant shall reimburse Landlord for all costs reasonably incurred, plus an administrative charge of ten percent (10%) of such costs, within thirty (30) days following invoice from Landlord.

(c) Other Tenant Work. Tenant shall perform all work, other than the Landlord Work, required to prepare the Premises for Tenant's use and occupancy.

10.05. Tenant Work.

(a) General. "Tenant Work" shall mean all work, including demolition, improvements, additions and alterations, in or to the Premises other than the Landlord Work. Without limitation, Tenant Work includes any penetrations in the walls, partitions, ceilings or floors and all attached carpeting, all signs visible from the exterior of the Premises, and any change in the exterior appearance of the windows in the Premises (including shades, curtains and the like). All Tenant Work shall be subject to Landlord's prior written approval and shall be arranged and paid for by Tenant all as provided herein; provided that any interior, non-structural Tenant Work (including any series of related Tenant Work projects) that (a) costs less than [***] (the "Tenant Work Threshold Amount" , (b) does not adversely affect any fire-safety, telecommunications, electrical, mechanical, or plumbing systems of the Building ("Core Building Systems") (it being agreed that the mere use of such Core Building Systems in a manner within the designed load and capacity of such Core Building Systems, and in accordance with applicable operating specifications, is not deemed to have an adverse affect in and of itself), and (c) does not adversely affect any penetrations in or otherwise affect any walls, floors, roofs, or other structural elements of the Building or any signs visible from the exterior of the Premises or any change in the exterior appearance of the windows in the Premises (including shades, curtains and the like) shall not require Landlord's prior approval if Tenant delivers the Construction Documents (as defined in Section 10.05(b)) for such work to Landlord at least five (5) business days' prior to commencing such work. When Tenant requests Landlord's approval pursuant to the foregoing sentence with respect to

Tenant Work requiring Landlord's prior written approval, such approval shall be granted or denied by Landlord within ten (10) business days after Landlord's actual receipt of such request provided that Tenant indicates in a prominent location and in prominent bold type, that Landlord is obligated to respond to such request within ten (10) business days. Landlord shall not unreasonably withhold, condition or delay Landlord's approval of Tenant Work, but Landlord's disapproval of proposed Tenant Work shall not be unreasonable where, in Landlord's reasonable judgment, such proposed Tenant Work (i) adversely affects any structural component of the Building, (ii) would be incompatible with the Core Building Systems, (iii) affects the exterior or the exterior appearance of the Building or common areas within or around the Building or other property than the Premises, (iv) diminishes the value of the Premises or the Property, or (v) requires any unusual expense to readapt the Premises. Landlord shall cooperate with Tenant, at no cost and liability to Landlord, to execute any permit applications requiring execution by the Building owner in connection with Tenant Work. Prior to commencing any Tenant Work affecting air disbursement from ventilation systems serving the Premises or the Building, including without limitation the installation of Tenant's exhaust systems, Tenant shall provide Landlord with a third party report from a consultant, and in a form, reasonably acceptable to Landlord, showing that such work will not adversely affect the ventilation systems of the Building (or of any other tenant in the Building) and shall, upon completion of such work, provide Landlord with a certification reasonably satisfactory to Landlord from such consultant confirming that no such adverse effects have resulted from such work. In its grant of approval of any Tenant Work, in order to require that Tenant remove at Tenant's cost such Tenant Work at the end of the Term, Landlord must notify Tenant of such restoration requirement contemporaneously with Landlord's approval of the plans and specifications for such Tenant Work. If Tenant Work did not require prior approval by Landlord, Landlord may require that such Tenant Work be removed at the end of the Term if such Tenant Work is not readily useable for first class office and laboratory purposes.

(b) Construction Documents. No Tenant Work shall be effected except in accordance with complete, coordinated construction drawings and specifications ("Construction Documents") prepared in accordance with Exhibit 10.05(b). Before commencing any Tenant Work requiring Landlord's approval hereunder, Tenant shall obtain Landlord's prior written approval of the Construction Documents for such work, which approval shall not be unreasonably withheld, conditioned or delayed. The Construction Documents shall be prepared by an architect or, where applicable, a qualified engineer (in either case, "Tenant's Architect") registered in the Commonwealth of Massachusetts, experienced in the construction of tenant space improvements in comparable buildings in the area where the Premises are located and, if the value of such Tenant Work will equal or exceed the Tenant Work Threshold Amount or will affect any Core Building Systems or structural components of the Building, the identity of such Tenant's Architect shall be approved by Landlord

in advance, such approval not to be unreasonably withheld. Tenant shall be solely responsible for the liabilities associated with and expenses of all architectural and engineering services relating to Tenant Work and for the adequacy, accuracy, and completeness of the Construction Documents even if approved by Landlord (and even if Tenant's Architect has been otherwise engaged by Landlord in connection with the Building). The Construction Documents shall set forth in detail the requirements for construction of the Tenant Work and shall show all work necessary to complete the Tenant Work including all cutting, fitting, and patching and all connections to the mechanical, electrical, and plumbing systems and components of the Building. Submission of the Construction Documents to Landlord for approval shall be deemed a warranty that, except as is specifically and expressly set forth therein, all Tenant Work described in the Construction Documents (i) complies with all applicable laws, regulations, building codes, and highest design standards, (ii) does not materially and adversely affect any structural component of the Building, (iii) is compatible with and does not adversely affect the Core Building Systems, (iv) does not affect any property other than the Premises, and (v) conforms to floor loading limits specified by Landlord. The Construction Documents shall comply with Landlord's requirements for the uniform exterior appearance of the Building. Landlord's approval of Construction Documents shall signify only Landlord's consent to the Tenant Work shown and shall not result in any responsibility of Landlord concerning compliance of the Tenant Work with laws, regulations, or codes, or coordination or compatibility with any component or system of the Building, or the feasibility of constructing the Tenant Work without damage or harm to the Building, all of which shall be the sole responsibility of Tenant.

(c) Performance. The identity of any person or entity (including any employee or agent of Tenant) performing or designing any Tenant Work ("Tenant Contractor") shall, if the cost of such work in any instance is in excess of the Tenant Work Threshold Amount or will affect any Core Building Systems or structural components of the Building or involves any work other than interior, nonstructural alterations, be approved in advance by Landlord, such approval not to be unreasonably withheld. Once any Tenant Contractor has been approved, then the same Tenant Contractor may thereafter be used by Tenant for the same type of work until Landlord notifies Tenant that such Tenant Contractor is no longer approved. Tenant shall procure at Tenant's expense all necessary permits and licenses before undertaking any Tenant Work. Tenant shall perform all Tenant Work at Tenant's risk in compliance with all applicable laws and in a good and workmanlike manner employing new materials of good quality and producing a result at least equal in quality to the other parts of the Premises. When any Tenant Work is in progress, Tenant shall cause to be maintained insurance as described in the Tenant Work Insurance Schedule attached as Exhibit 10.05(c) and such other insurance as may be reasonably required by Landlord covering any additional hazards due to such Tenant Work, and, if the cost of such Tenant Work exceeds [***] also such bonds or other

assurances of satisfactory completion and payment as Landlord may reasonably require, in each case for the benefit of Landlord. If the Tenant Work in any instance requires Landlord's approval hereunder, Tenant shall reimburse Landlord for Landlord's reasonable third party, out of pocket costs of reviewing the Construction Documents and proposed Tenant Work and inspecting installation of the same, such reimbursement to be made within thirty (30) days after submission by Landlord of invoices for such costs and expenses. So long as the Construction Documents and Tenant Work comply with the requirements of this Lease, Tenant's obligation to reimburse Landlord pursuant to the immediately preceding sentence for review of Construction Documents shall not exceed [***], which amount shall be increased annually to reflect increases in the Consumer Price Index for all Urban Wage Earners and Clerical Workers, All Items, for Boston, Massachusetts published by the Bureau of Labor Statistics of the United States Department of Labor (base year 1982-84 = 100), with respect to any one project. At all times while performing Tenant Work, Tenant shall require any Tenant Contractor to comply with all applicable Legal Requirements and Landlord's Rules and Regulations relating to such work. Each Tenant Contractor working on the roof of the Building shall coordinate with Landlord's roofing contractor, shall comply with its requirements and shall not violate existing roof warranties. Each Tenant Contractor shall work on the Premises without causing delay to or impairing of any guaranties, warranties or the work of any other contractor.

(d) Payment. Tenant shall pay the entire cost of all Tenant Work, including without limitation any services provided to Tenant or those claiming by or through Tenant in connection with Tenant Work giving rise to a lien pursuant to the Massachusetts General Laws, so that the Premises, including Tenant's leasehold, shall always be free of liens for labor or materials or as otherwise provided under such statutes. If any such lien is filed, then Tenant shall promptly (and always within twenty (20) days) discharge the same.

(e) LEED Certification. The Base Building Work has been registered to qualify for Leadership in Energy and Environmental Design ("LEED") Core & Shell status as established by the U.S. Green Council based on the LEED Core & Shell standards in effect as of the date of such registration. Any Tenant Work shall comply with the standards necessary to maintain the applicable LEED Core & Shell certification of the Building.

(f) Other. Tenant must schedule and coordinate all aspects of Tenant Work with the Landlord's property manager or designated representative. If an operating engineer is required by any union regulations, Tenant shall pay for such engineer. If shutdown of risers and mains for electrical, mechanical and plumbing work is required, such work shall be supervised by Landlord's representative (the reasonable costs of which shall be included in Operating Expenses, notwithstanding anything to

the contrary set forth in Section 8.01). No work shall be performed to portions of Building systems that serve other tenants without Landlord's approval, which approval shall not be unreasonably withheld, conditioned or delayed, and all such work shall be performed under Landlord's supervision. Except in case of emergency, at least two (2) business days' prior notice must be given to the Building management office prior to the shutdown of fire, sprinkler and other alarm systems, and in case of emergency, prompt notice shall be given. In the event that such work unintentionally alerts the Fire or Police Department or any private alarm monitoring company through an alarm signal, Tenant shall be responsible for any fees or charges levied in connection with such alarm. Tenant shall pay to Landlord such charges as may from time to time be in effect with respect to any such shutdown. All demolition, installations, removals or other work that is reasonably likely to inconvenience other tenants of the Building or disturb Building operations must be scheduled with the Building manager at least twenty-four (24) hours in advance.

Each Tenant Contractor and Tenant shall assure that any Tenant Work is carried out without disruption from labor disputes arising from whatever cause, including disputes concerning union jurisdiction and the affiliation of workers employed by said Tenant Contractor or its subcontractors. Tenant shall be responsible for, and shall reimburse Landlord for, all actual costs and expenses, including reasonable attorneys' fees incurred by Landlord in connection with the breach by any Tenant Contractor of such obligations. If Tenant does not promptly resolve any labor dispute caused by or relating to any Tenant Contractor, Landlord may in its sole discretion request that Tenant remove such Tenant Contractor from the Property, and if such Tenant Contractor is not promptly removed, Landlord may prohibit such Tenant Contractor from entering the Property.

Upon completion of any Tenant Work, Tenant shall give to Landlord (i) a permanent certificate of occupancy and any other final governmental approvals required for such work, (ii) copies of "as built" plans, (iii) proof of payment for all labor and materials, and (iv) an assignment of all warranties for such Tenant Work to the extent such warranties extend beyond the then-scheduled expiration of the Term in compliance with, and subject to the terms of, such contracts or warranties.

10.06. Condition upon Termination. At the expiration or earlier termination of the Term, Tenant (and all persons claiming through Tenant) shall without the necessity of notice deliver the Premises broom-clean, in compliance with the requirements of Section 10.07 and in good and tenantable condition, reasonable wear and tear and (subject to the provisions of Article 12) damage by casualty or taking excepted. As part of such delivery, Tenant shall also provide keys (or lock combinations, codes or electronic passes) to any locks in and to the Premises to Landlord; provide Landlord with copies of any owners' manuals or software required for the operation of equipment or systems remaining in the Premises; remove all signs installed by Tenant wherever located (other

than those that are required under applicable laws, such as exit signs), all Tenant Work or Finish Work designated by Landlord for removal by Tenant at the time of approval of such Tenant Work or Finish Work or, with respect to work not requiring Landlord's approval, at the time Tenant gives notice to Landlord that Tenant is undertaking such work pursuant to this Article 10 (provided, however, that Landlord may only require the removal of Finish Work that results in changes to the structural components (including without limitation columns and floor slabs), exterior walls, and, other than Rooftop Equipment and related Finish Work that is integral to the function of Finish Work installations, equipment or systems that will remain in the Premises in compliance with this Lease, the roof of the Building); and remove all Tenant Property and other personal property whether or not bolted or otherwise attached (provided, however, than in no event shall the items described on Exhibit 10.06, attached, be considered Tenant Property or personal property, and such items shall remain in the Premises notwithstanding anything to the contrary in this Lease). [***]. Tenant shall repair all damage that results from such removal and restore the Premises substantially to the condition it was in prior to installation of the removed property (including the filling of all floor and wall holes, the removal of all disconnected wiring back to junction boxes and the replacement of all damaged ceiling tiles). Any property not so removed shall be deemed abandoned, shall at once become the property of Landlord, and may be disposed of in such manner as Landlord shall see fit; and Tenant shall pay the cost of removal and disposal to Landlord upon demand to the extent such cost exceeds the value received, if any, from any sale of such property. The covenants of this Section shall survive the expiration or earlier termination of the Term.

10.07. Decommissioning of the Premises. Prior to the expiration of this Lease (or within sixty (60) 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 and/or serving the Premises, and all exhaust or other ductwork in and/or serving the Premises, in each case which has carried or released or been exposed to any Hazardous Substances (as defined in Section 9.04 hereof), and shall otherwise clean the Premises so as to permit the report hereinafter called for by this Section 10.07 to be issued. Prior to the expiration of this Lease (or within sixty (60) 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 that is designated by Tenant and acceptable to Landlord in Landlord's reasonable discretion, which report shall be based on the environmental engineer's inspection of the Premises and shall show:

(a) that the Hazardous Substances described in the first sentence of the immediately preceding paragraph, to the extent, if any, existing prior to such decommissioning, have been removed in accordance with applicable Environmental Laws; and

(b) that Hazardous Substances described in the first sentence of this Section 10.07, if any, have been removed in accordance with applicable Environmental 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 reused by a subsequent tenant or disposed of in compliance with applicable Environmental Laws (as defined in Section 9.04 hereof) without incurring special costs or undertaking special procedures for demolition, disposal, investigation, assessment, cleaning or removal of such Hazardous Substances and without giving notice in connection with such Hazardous Substances; and

(c) that the Premises may be reoccupied for office or laboratory use, as applicable, demolished or renovated without incurring special costs or undertaking special procedures for disposal, investigation, assessment, cleaning or removal of Hazardous Substances and without incurring regulatory requirements or giving notice in connection with Hazardous Substances.

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 Substances as Hazardous Substances instead of non-hazardous materials (and in no event shall “special costs” or “special procedures” mean costs or procedures incurred in the removal of any materials, property or equipment that (i) contain Hazardous Substances as a component material, or which component materials are inherently hazardous (i.e., copper piping/wiring), and (ii) are ordinarily and customarily used in connection with first class office use, such as the component parts of light bulbs, joint compounds, ordinary building materials and the like). The report shall include reasonable detail concerning the clean-up location, the tests run and the analytic results.

If Tenant fails to perform its obligations under this Section 10.07, 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 promptly reimburse Landlord upon demand for all costs and expenses incurred by Landlord in connection with such work. In addition, any such reimbursement shall include a [***] administrative fee [***] to cover Landlord’s overhead in undertaking such work. Tenant’s obligations under this Section 10.07 shall survive the expiration or earlier termination of this Lease.

ARTICLE 11.
ROOFTOP LICENSE; ANTENNAS

11.01. Rooftop License. Effective as of the Commencement Date and subject to Legal Requirements, including without limitation Federal Aviation Administration height restrictions, Landlord grants Tenant the appurtenant and irrevocable (except upon the expiration or earlier termination of this Lease) rights at no additional rental charge, but otherwise subject to the terms and conditions of this Lease, to install, operate, maintain, repair, replace, upgrade and remove, at no additional cost to Tenant and solely for accessory use to operations within the Premises, certain equipment customarily installed on rooftops at Class A office and laboratory buildings in the City of Boston including, without limitation, cable, wiring, rooftop antennae, satellite dishes, microwave dishes and other equipment associated with telecommunications on the roof of the Building (the “Rooftop Equipment”) in locations reasonably approved by Landlord (Tenant acknowledging that Landlord requires certain rooftop areas on the roof of the upper mechanical penthouse of the Building for use by other tenants in the Building and for use by Landlord) and as necessary to connect such equipment, in the common areas of the Building.

11.02. Installation and Maintenance of Rooftop Equipment. Tenant shall install the Rooftop Equipment at its sole cost and expense (except as otherwise provided with respect to the Finish Work), at such times and in such manner as Landlord may reasonably designate and in accordance with all of the applicable provisions of this Lease regarding Tenant Work. Tenant shall not install or operate the Rooftop Equipment until it receives prior written approval of the Construction Documents in accordance with Section 10.05(a). Landlord may withhold approval of the installation or operation of the Rooftop Equipment if the same reasonably would be expected to damage the structural integrity of the Building or interfere with Building operations or systems.

Tenant shall engage Landlord’s roofer (or another roofing contractor reasonably approved by Landlord and approved by Landlord’s roof manufacturer) before beginning any rooftop installations or repairs of the Rooftop Equipment, whether under this Article 11 or otherwise, and shall always comply with the roof warranty governing the protection of the roof and modifications to the roof. Tenant shall obtain a letter from Landlord’s roof manufacturer following completion of such work stating that the roof warranty remains in effect, if required pursuant to the terms of the roof warranty. Tenant, at its sole cost and expense, shall inspect areas on the rooftop where the Rooftop Equipment is located at least twice annually and correct any loose bolts, fittings or other appurtenances and shall repair any damage to the roof caused by the installation or operation of the Rooftop Equipment. Tenant covenants that the installation, existence, maintenance and operation of the Rooftop Equipment shall not violate any Legal Requirements or constitute a nuisance under law. Tenant shall pay Landlord on demand (i) all applicable taxes or governmental charges, fees, or impositions imposed on Landlord because of Tenant’s use of the Rooftop Equipment under this Article 11 and (ii) the amount of any increase in Landlord’s insurance premiums as a result of the installation or existence of the Rooftop Equipment. Landlord shall provide in every other lease of space in the

Building that permits rooftop access, and in every license or other agreement regarding use of the roof of the Building, (any of the foregoing, a “Rooftop Agreement”) that if such other tenant’s rooftop equipment interferes with Tenant’s Rooftop Equipment, such other tenant will remove or relocate its equipment as necessary to avoid such interference. Landlord assumes no responsibility for interference in the operation of the Rooftop Equipment caused by other tenants’ equipment, or for interference in the operation of other tenants’ equipment caused by the Rooftop Equipment, but Landlord shall reasonably cooperate with Tenant (at no cost to Landlord) to resolve any such interference and shall use commercially reasonable efforts to (at no cost to Landlord) enforce Landlord’s rights under any Rooftop Agreements to prevent such interference.

11.03. Interference by Rooftop Equipment. If Tenant’s Rooftop Equipment (i) causes physical damage to the structural integrity of the Building, or (ii) materially, adversely interferes with any of the Building’s mechanical or other systems, Tenant shall within five (5) business days of notice (which may be by e-mail if given to vertex_operations@vrtx.com or an alternative e-mail address provided to Landlord in writing from time to time) of a claim of interference or damage reasonably cooperate with Landlord to determine the source of the damage or interference and effect a prompt solution at Tenant’s expense (if Rooftop Equipment caused such interference or damage). In the event Tenant disputes Landlord’s allegation that Rooftop Equipment is causing a problem with the Building (including, but not limited to, the electrical, HVAC, and mechanical systems of the Building), in writing delivered within five (5) days of receiving Landlord’s notice claiming such interference, then Landlord and Tenant shall meet to discuss a solution, and if within seven (7) days of their initial meeting Landlord and Tenant are unable to resolve the dispute, then the matter shall be submitted to arbitration in accordance with the provisions set forth below.

The parties shall direct the Boston office of the AAA to appoint an arbitrator who shall have a minimum of ten (10) years’ experience in commercial real estate disputes and who shall not be affiliated with either Landlord or Tenant and has not worked for either party or its affiliates at any time during the prior five (5) years. Both Landlord and Tenant shall have the opportunity to present evidence and outside consultants to the arbitrator.

The arbitration shall be conducted in accordance with the expedited commercial arbitration rules of the AAA insofar as such rules are not inconsistent with the provisions of this Lease (in which case the provisions of this Lease shall govern). The cost of the arbitration (exclusive of each party’s witness and attorneys’ fees, which shall be paid by such party) shall be borne equally by the parties. Any such arbitration shall be commenced within ten (10) days after demand (or, if later, appointment of the arbitrator).

Within ten (10) days of appointment, the arbitrator shall determine whether or not the Rooftop Equipment is causing a problem with the Building or Property and/or any

other tenants' equipment in the Building or Property as set forth above, and the appropriate resolution, if any. The arbitrator's decision shall be final and binding on the parties. If Tenant shall fail to cooperate with Landlord in resolving any such interference or if Tenant shall fail to implement the arbitrator's decision within twenty (20) days after it is issued, Landlord may at any time thereafter and at Tenant's sole costs and expense relocate the item(s) of the Rooftop Equipment in dispute in a manner consistent with the arbitral decision in addition to pursuing any other remedies under this Lease.

11.04. Relocation of Rooftop Equipment. Based solely on Landlord's good faith determination that such a relocation is necessary for the use of the upper penthouse roof for retail and restaurant tenants of the Building, Landlord reserves the right to cause Tenant to relocate any (x) Rooftop Equipment or (y) any other pipes, ducts, conduits, wires and appurtenant fixtures, in each case to the extent necessary for use of, and access to, the lower penthouse roof to comparably functional space on the roof, penthouse, or Premises, as applicable (which space shall be subject to the prior written approval of Tenant, which approval shall not be unreasonably withheld, conditioned or delayed) by giving Tenant prior notice of such intention to relocate. If within thirty (30) days after receipt of such notice Tenant has not agreed with Landlord on the space to which such equipment is to be relocated, the timing of such relocation, and the terms of such relocation, then the parties may arbitrate the dispute in accordance with the process set forth in Section 11.03 above. Landlord agrees to pay the reasonable cost of moving such equipment to such other space, taking such other steps necessary to ensure comparable functionality of equipment, and finishing such space to a condition comparable to the then condition of the current location of such equipment. Tenant shall arrange for the relocation of the affected equipment within sixty (60) days after a comparable space is agreed upon or selected by Landlord. Any actions by Landlord in connection with a relocation under this Section 11.04 shall be performed in a manner designed to minimize interference with Tenant's business.

ARTICLE 12. DAMAGE OR DESTRUCTION; CONDEMNATION

12.01. Damage or Destruction of Premises. If the Premises or any part thereof shall be damaged by fire or other insured casualty, then, subject to the last paragraph of this Section, Landlord shall proceed with diligence, subject to then applicable Legal Requirements, and at the expense of Landlord (but only to the extent of insurance proceeds made available to Landlord by any mortgagee of the Building and any ground lessor) to repair or cause to be repaired such damage (other than any Tenant Work). In no event shall Landlord be responsible for contributing more than [***] of any deductible or co-payment towards the completion of such repairs unless (a) (i) Tenant and any mortgagee of the Property have agreed that Landlord may carry a larger deductible and (ii) Tenant pays its Pro Rata Share of the amount of any such deductible or co-payment in excess of [***] (it being the intent that Tenant shall share in the payment of such

increased deductible in consideration for any savings of Operating Expenses that would result) or (b) Landlord is then maintaining a higher deductible in violation of the provisions of Section 7.04. All such repairs made necessary by the negligence or willful misconduct of Tenant shall be made at the Tenant's expense to the extent that the cost of such repairs are less than the deductible amount in Landlord's insurance policy. The cost of any repairs performed under this Section by Landlord at Tenant's expense (including costs of design fees, financing, and charges for administration, overhead and construction management services by Landlord and Landlord's contractor) shall constitute Additional Rent hereunder. All repairs to and replacements of Tenant's personal property shall be made by and at the expense of Tenant, and Tenant shall promptly restore any Tenant Work, or, if the Lease has been terminated pursuant to the provisions of this Section 12.01, demolish and remove any damaged Tenant Work prior to surrendering the Premises (but in any event only to the extent of insurance proceeds received by Tenant or, if Tenant fails to carry any required insurance hereunder, the insurance proceeds that would have been received by Tenant if Tenant had been maintaining the required coverages). If the Premises or any part thereof shall have been rendered unfit for use and occupation for the Permitted Use hereunder by reason of such damage, the Base Rent, Tenant's Pro Rata Share of Total Operating Costs, and (other than then-outstanding amounts of Rent and reimbursements or payments that are not in the nature of an occupancy charge, such as applicable reimbursements of Landlord's third-party costs under Section 10.05, allocations of excess security services under Section 9.07, reimbursements of Tenant Shortfall under Section 18.01(b), reimbursements under Section 10.04(b), or Additional Rent payable under this Article 12) all other Additional Rent, or a just and proportionate part thereof, according to the nature and extent to which the Premises shall have been so rendered unfit, shall be abated until the Premises (except as to Tenant Property, and any Tenant Work) shall have been restored as nearly as practicable to the condition in which they were immediately prior to such fire or other casualty, plus an additional thirty (30) day period. Landlord shall not be liable for delays in the making of any such repairs that are due to Force Majeure, nor shall Landlord be liable for any inconvenience or annoyance to Tenant or injury to the business of Tenant resulting from delays in repairing such damage, provided, however, that Base Rent, Tenant's Pro Rata Share of Total Operating Costs, and all other Additional Rent (other than then-outstanding amounts of Rent and reimbursements or payments that are not in the nature of an occupancy charge, such as applicable reimbursements of Landlord's third-party costs under Section 10.05, allocations of excess security services under Section 9.07, reimbursements of Tenant Shortfall under Section 18.01(b), reimbursements under Section 10.04(b), or Additional Rent payable under this Article 12) shall be abated to the extent set forth above during any delay not caused by Tenant.

If (i) the Premises are so damaged by fire or other casualty (whether or not insured) at any time during the last eighteen (18) months of the Term, as the Term may have been extended, that the cost to repair such damage is reasonably estimated to exceed one-half of the total Base Rent payable hereunder for the period from the estimated

completion date of repair until the end of the Term, (ii) Legal Requirements prohibit Landlord from restoring the Building to the condition substantially existing prior to such casualty, or (iii) at any time damage to the Building occurs by fire or other insured casualty and any mortgagee or ground lessor shall refuse to permit insurance proceeds to be utilized for the repair or replacement of such property and Landlord determines not to repair such damage, then and in any of such events, this Lease and the term hereof may be terminated at the election of Landlord by a notice from Landlord to Tenant within sixty (60) days, or such longer period as is required to complete arrangements with any mortgagee or ground lessor regarding such situation, following such fire or other casualty; the effective termination date pursuant to such notice shall be not less than thirty (30) days after the day on which such termination notice is received by Tenant. If any mortgagee or ground lessor refuses to permit insurance proceeds to be applied to replacement of the Premises, and neither Landlord, such mortgagee or ground lessor has commenced such replacement within three (3) months following adjustment of such casualty loss with the insurer, then Tenant may, until any such replacement commences, terminate this Lease by giving at least thirty (30) days prior written notice thereof to Landlord and such termination shall be effective on the date specified if such replacement has not then commenced. In the event of any termination, the Term shall expire as though such effective termination date were the date originally stipulated in Article 1 for the end of the Term and the Base Rent and Additional Rent (to the extent not abated as set forth above) shall be apportioned as of such date.

If less than eighteen (18) months remain in the Term at the time of such [***] or (ii) in Landlord's reasonable estimate the time to restore the Premises will take more than one-half of the then remaining Term, then Tenant may upon thirty (30) days' prior written notice terminate this Lease provided that such termination election shall be null and void if Landlord completes such restoration within thirty (30) days of such notice or if Tenant exercises its right to extend the term pursuant to Section 3.03(a) of this Lease.

12.02. Eminent Domain. In the event that all or any substantial part of the Premises or the Building or the common areas at the Property necessary for use and operation of the Premises or Building are taken (other than for temporary use, hereafter described) by public authority under power of eminent domain (or by conveyance in lieu thereof), then by notice given within three months following the recording of such taking (or conveyance) in the appropriate registry of deeds, this Lease may be terminated at either party's election thirty (30) days after such notice, and Rent shall be apportioned as of the date of termination. If this Lease is not terminated as aforesaid, subject to the rights of mortgagees Landlord shall within a reasonable time thereafter, diligently restore what may remain of the Premises (excluding any personal property of Tenant, Tenant Work or other items installed or paid for by Tenant that Tenant is permitted or may be required to remove upon expiration) to a tenantable condition for occupancy by Tenant for the Permitted Uses. In the event some portion of rentable floor area of the Premises is taken (other than for temporary use) and this Lease is not terminated, Base Rent shall be

proportionally abated for the remainder of the Term. In the event of any taking of the Premises or any part thereof for temporary use, (i) this Lease shall be and remain unaffected thereby and rent shall not abate, and (ii) Tenant shall be entitled to receive for itself such portion or portions of any award made for such use with respect to the period of the taking that is within the Term, provided that if such taking shall remain in force at the expiration or earlier termination of this Lease, then Tenant shall pay to Landlord a sum equal to the reasonable cost of performing Tenant's obligations hereunder with respect to surrender of the Premises and upon such payment shall be excused from such obligations.

If in the last two years of the Term of this Lease, any Taking renders 50% or more of the Premises untenable, and in either case restoration of the effects of such Taking cannot be repaired or restored in Landlord's reasonable estimate within the lesser of one (1) year or one-half of the then-remaining Term from the date of such Taking, Tenant may upon thirty (30) days' prior written notice terminate this Lease provided that such termination election shall be null and void if Landlord completes such restoration within thirty (30) days of such notice or if Tenant exercises its right to extend the Term pursuant to Section 3.03(a) of this Lease.

Any damages that are expressly awarded to Tenant on account of its relocation expenses, and specifically so designated, shall belong to Tenant. Except as provided in the preceding sentence of this paragraph, Landlord reserves to itself, and Tenant releases and assigns to Landlord, all rights to damages accruing on account of any taking or by reason of any act of any public authority for which damages are payable, provided, however, that Tenant shall receive, subordinate to the repayment of any mortgage lender holding a mortgage on the Property out of any amount actually received by Landlord and *pari passu* with amounts payable to Landlord, an amount equal to the unamortized expense of the Excess Costs actually paid by Tenant under the Work Letter, amortized on a straight line item over the initial Term of this Lease. Subject to its rights hereunder, Tenant agrees to execute such further instruments of assignment as may be reasonably requested by Landlord, and to turn over to Landlord any damages that may be recovered in any proceeding or otherwise.

ARTICLE 13. ASSIGNMENT AND SUBLETTING

13.01. Landlord's Consent Required. Except for a Permitted Transfer, as defined below, Tenant shall not transfer any part of the Premises or of its interest in this Lease to any other entity, whether by sale, assignment, mortgage, sublease, license, transfer, operation of law (including, without limitation by merger, consolidation, sale or other transfer of all or substantially all of the stock or assets of Tenant, or otherwise) or act of Tenant (each a "Transfer") without Landlord's prior written consent as provided in Section 13.02 below. Consent to one Transfer does not imply consent to any other

Transfer or waive the consent requirement. Any attempted Transfer without consent shall be void at the election of Landlord. Any entity to which a Transfer is made is a “Transferee.”

The following transactions (any of them, a “Permitted Transfer”) shall not require the consent of Landlord provided that Landlord shall receive prior notice thereof plus reasonable evidence upon closing that the transaction is in fact one of the following (and provided further that the proposed Transfer complies with all other provisions of this Lease, including, without limitation, this Article 13 (other than the first paragraph of this Section 13.01), does not alter Landlord’s rights under this Lease, and does not impose any additional obligation on Landlord):

(a) Any Transfer to an entity acquiring all or substantially all of the stock or assets of Tenant, whether by way of merger, consolidation, acquisition or otherwise (any such entity, a “Successor Entity”), so long as the resulting tenant under the Lease has a creditworthiness at least equal to or greater than Tenant’s as of the date of this Lease or at the time of proposed Transfer, whichever is greater; or

(b) Any Transfer to an entity directly or indirectly controlled, controlling, or under common control with Tenant (any such entity, a “Related Entity”) so long as in the case of an assignment either the original Tenant or the assignee has a creditworthiness at least equal to or greater than Tenant’s as of the date of this Lease or at the time of proposed Transfer, whichever is greater. For purposes of this clause (b), “control” shall mean possession of more than 50 percent ownership of the shares of beneficial interest of the entity in question together with the power to control and manage the affairs thereof either directly or by election of directors and/or officers.

For purposes of this Section 13.01, “substantially all” of Tenant’s assets shall include without limitation the transfer of assets having a value of more than 75% of the total value, as opposed to number, of Tenant’s assets other than (i) by license of the right to use pharmaceutical products developed by Tenant in the ordinary course of Tenant’s business, or (ii) in an arm’s length transaction in which Tenant obtains market value for such assets and the consideration paid to Tenant is retained by Tenant and available to pay amounts due under the Lease as they become due, and/or otherwise used by Tenant in the ordinary course of business (i.e., such consideration is not distributed to stockholders or otherwise transferred to another party).

Notwithstanding anything to the contrary herein, so long as Tenant’s shares are traded on a nationally recognized stock exchange, any sale of Tenant’s shares shall not be deemed a Transfer subject to the provisions of this Article 13. Tenant acknowledges that the covenants contained in this Section 13.01 are material to the transaction contained herein and that Landlord shall have, in addition to any other rights and remedies available under this Lease or at law, the right to seek injunctive relief and/or specific performance in order to enforce such covenants.

13.02. Landlord's Consent. Tenant's request for Landlord's consent to any Transfer shall be made at least thirty (30) days prior to the effective date of the proposed Transfer, describe the details of the proposed Transfer, including the name, business and financial condition of the prospective Transferee, and the financial terms of the proposed Transfer (e.g., payments in consideration of the proposed Transfer, term, rent and security deposit); Tenant shall also provide any other information Landlord reasonably deems relevant, including without limitation the proposed form of Transfer documentation. Landlord shall not unreasonably withhold, condition or delay (more than ten (10) business days following receipt of Tenant's request for consent with all information required herein) its consent to any assignment or subletting of the Premises, provided that Tenant is not then in default under this Lease (following the giving of notice of such default, where applicable) but it shall not be deemed unreasonable for Landlord to deny consent for the following reasons, among others: **[***]**.

[*]**.

At Landlord's election, Tenant shall pay to Landlord as Additional Rent fifty percent (50%) of the Profits on any Transfer other than a Permitted Transfer as and when received by Tenant, unless Landlord notifies Tenant and the Transferee that the Transferee shall pay Landlord's share of the Profits directly to Landlord. "Profits" means (A) all rent, fees and other consideration paid for or in respect of the Transfer, including fees in excess of reasonable amounts under any collateral agreements (the intent being to prohibit Tenant from shifting occupancy costs to collateral agreements), less (B) the Rent and other sums payable under this Lease (or if the Transfer is a sublease of part of the Premises, allocable to the subleased premises) and all reasonable costs and expenses directly incurred by Tenant for reasonable real estate broker's commissions and reasonable costs of renovation or construction of tenant improvements required by the Transfer, and reasonable legal fees (collectively, "Transfer Expenses"). Without limiting the generality of the first sentence of this section, any lump-sum payment or series of payments (including for the purchase or use of Tenant Work and Finish Work) on account of any Transfer shall be deemed to be Profits to the extent to which such lump sum payments exceed the sum of (x) the present value of the Rent and other charges to be paid hereunder discounted at the rate of four percent (4%) and (y) Tenant's Transfer Expenses (pro rated based (a) on floor area in the case of a subletting, license or other occupancy of less than the entire area of the Premises and (b) over the remaining Term). Tenant may recover these reasonable costs and expenses before paying Profits to Landlord. Tenant shall give Landlord a written statement certifying all amounts to be paid from any Transfer (including any collateral agreements) within thirty (30) days after the transfer agreement is signed and from time to time thereafter on Landlord's request, and Landlord may inspect Tenant's books and records to verify the accuracy of such statements. On written request, Tenant shall promptly furnish to Landlord copies of all Transfer documents, certified by Tenant to be complete, true and correct.

13.03. No Release. Notwithstanding any Transfer and whether or not the same is consented to, the liability of Tenant to Landlord shall remain direct and primary. Any Transferee (other than a subtenant of less than all or substantially all of Tenant's interest in the Premises) shall be jointly and severally liable with Tenant to Landlord for the performance of all of Tenant's covenants under this Lease; and such Transferee shall upon request execute and deliver such instruments as Landlord reasonably requests in confirmation thereof (and agrees that its failure to do so shall be a default). Tenant hereby irrevocably authorizes Landlord, upon the occurrence of a default (following the giving of notice of such default, where applicable) to collect Rent from any Transferee (and upon notice any Transferee shall pay directly to Landlord) and apply the net amount collected to the Rent and other charges reserved under this Lease. No Transfer (whether or not consented to by Landlord, and whether or not such consent is required) shall be deemed a waiver of the provisions of this Section, or the acceptance of the Transferee as a tenant, or a release of Tenant from direct and primary liability for the performance of all of the covenants of this Lease. The consent by Landlord to any Transfer shall not relieve Tenant or any Transferee from the obligation of obtaining the express consent of Landlord to any modification of such Transfer or a further Transfer by Tenant or such Transferee. Notwithstanding anything to the contrary in the documents effecting the Transfer, Landlord's consent shall not alter in any manner whatsoever the terms of this Lease, to which any Transfer at all times shall be subject and subordinate.

13.04. [*].** In the event that Tenant disputes [***], either party may submit such dispute to mediation and the parties shall seek to identify [***] a mutually acceptable mediator, who shall mediate the dispute in accordance with the AAA Commercial Mediation Rules, except that the mediator selected pursuant to this paragraph shall act as the administrator of the mediation and shall have all of the powers and duties conferred on the AAA pursuant to said Rules. Any conflicts between said Rules and this paragraph shall be resolved in favor of this paragraph. If the parties are unable or fail timely to agree upon the mediator, upon request of either party, the dispute shall be submitted for mediation to Boston office of the AAA or its successor entity. If neither the AAA nor any successor entity exists at the time of the dispute, the dispute shall be submitted for mediation to the largest private provider of dispute resolution services then doing business in the greater Boston area.

Attendance at the mediation shall be limited to the parties and their counsel. All information exchanged or presented to the mediator in these proceedings, whether in oral, written, or other form, and the results of the proceedings, shall be confidential and except as required by law shall not be disclosed to any person or entity, without prior written permission from both parties. A party offering evidence or information in mediation shall not be precluded thereby from offering that evidence or information in any other proceeding. The mediation proceeding shall take place, and the mediator shall issue his or her report, within [***] following the submission of the dispute to mediation.

Following any such mediation, if any such dispute remains unresolved, either party may initiate litigation to resolve such dispute and, notwithstanding anything to the contrary contained in this paragraph, the mediator's report shall be admissible in any such court proceeding as evidence.

[***].

13.05. [***] Tenant shall deliver to Landlord (i) a true and complete copy of the fully executed instrument or instruments evidencing any Transfer, and (ii) a written agreement of the Transferee agreeing with Landlord to perform and observe all of the terms, covenants, and conditions of this Lease undertaken by such Transferee. [***].

ARTICLE 14. EVENTS OF DEFAULT AND REMEDIES

14.01. Covenants and Conditions. Tenant's performance of each of its obligations under this Lease is a condition as well as a covenant. Tenant's right to continue in possession of the Premises is conditioned upon such performance. Time is of the essence in performance of all covenants and conditions set forth herein.

14.02. Events of Default. If Tenant fails to pay amounts of Base Rent or regular monthly recurring payments of Additional Rent (such as Operating Costs or parking charges) when due and such default continues for five (5) days, or, with respect to any non-recurring payment of Additional Rent, fails to pay any such Additional Rent when due and such default continues for five (5) days following notice from Landlord, or if more than three default notices are properly given in any 12-month period, or if Tenant (or any Transferee of Tenant) makes any Transfer of the Premises in violation of this Lease, or if a petition is filed by Tenant (or any Transferee) for insolvency or for appointment of a receiver, trustee or assignee or for adjudication, reorganization or arrangement under any bankruptcy act, or if any similar petition is filed against Tenant (or any transferee) and such petition filed against Tenant or any transferee is not dismissed within sixty (60) days thereafter, or if any representation or warranty made by Tenant is untrue in any material respect, or if Tenant fails to perform any other covenant or condition hereunder and such default continues longer than any period (following notice, if expressly required) expressly provided for the correction thereof (and if no period is expressly provided then for thirty (30) days after notice is given, provided, however, that such period shall be reasonably extended in the case of any such non-monetary default that cannot be cured within such period (but in any event shall not exceed 180 days in the aggregate) only if the matter complained of can be cured, Tenant begins promptly and thereafter diligently completes the cure, and Tenant gives Landlord notice of such intent to cure within ten (10) days after notice of such default), then, and in any such case, Landlord and its agents lawfully may, in addition to any remedies for any preceding breach, immediately or at any time thereafter without further demand or notice

in accordance with process of law, enter upon any part of the Premises in the name of the whole, or mail or deliver a notice of termination of the Term of this Lease addressed to Tenant at the Premises or any other address herein, and thereby terminate the Term and repossess the Premises as of Landlord's former estate. Any default beyond applicable notice and cure periods by Tenant is referred to herein as an "Event of Default". At Landlord's election such notice of termination may be included in any notice of default, subject to any applicable cure period. Upon such entry or mailing the Term shall terminate, all executory rights of Tenant and all obligations of Landlord will immediately cease, and Landlord may expel Tenant and all persons claiming under Tenant and remove their effects without any trespass and without prejudice to any remedies for arrears of Rent or prior breach; and Tenant waives all statutory and equitable rights to its leasehold (including rights in the nature of further cure or redemption, if any, to the extent such rights may be waived). If Landlord engages attorneys in connection with any failure to perform by Tenant hereunder, Tenant shall reimburse Landlord for the reasonable fees of such attorneys on demand as Additional Rent. Without implying that other provisions do not survive, the provisions of this Article shall survive the Term or earlier termination of this Lease.

14.03. Remedies for Default.

(a) Reletting Expenses Damages. If the Term of this Lease is terminated for default, Tenant covenants, as an additional cumulative obligation after such termination, to pay all of Landlord's reasonable costs, including reasonable attorneys fees, related to Tenant's default and in collecting amounts due and all reasonable expenses in connection with reletting, including tenant inducements to new tenants, brokerage commissions, fees for legal services, expenses of preparing the Premises for reletting and the like (together, "Reletting Expenses"). It is agreed that Landlord may (i) relet the Premises or part or parts thereof for a term or terms that may be equal to, less than or exceed the period that would otherwise have constituted the balance of the Term, and may grant such tenant inducements, including free rent, as Landlord in its sole discretion considers advisable, and (ii) make such alterations to the Premises as Landlord in its sole discretion considers advisable, and no failure to relet or to collect rent under any reletting shall operate to reduce Tenant's liability. Landlord shall use reasonable efforts to relet the Premises. Any such obligation to relet will be subject to Landlord's reasonable objectives of developing its property and the Project in a harmonious manner with appropriate mixes of tenants, uses, floor areas, terms and the like. Landlord's Reletting Expenses together with all other sums provided for whether incurred prior to or after such termination will be due upon demand.

(b) Termination Damages. If the Term of this Lease is terminated for default, unless and until Landlord elects lump sum liquidated damages described in the next paragraph, Tenant covenants, as an additional, cumulative obligation after any such

termination, to pay punctually to Landlord all the sums and perform all of its obligations in the same manner as if the Term had not been terminated. In calculating such amounts Tenant will be credited with the net proceeds of any rent then actually received by Landlord from a reletting of the Premises after deducting all Rent that has not then been paid by Tenant, provided that Tenant shall never be entitled to receive any portion of the re-letting proceeds, even if the same exceed the Rent originally due hereunder.

(c) Lump Sum Liquidated Damages. If this Lease is terminated for default, Tenant covenants, as an additional, cumulative obligation after any such termination, to pay forthwith to Landlord at Landlord's election made by written notice at any time after termination, as liquidated damages a single lump sum payment equal to either (x) the sum of (i) all sums to be paid by Tenant and not then paid at the time of such election, plus, (ii) the excess of the present value of all of the Rent reserved for the residue of the Term (with Additional Rent deemed to increase 5% in each year on a compounding basis) over the present value of the aggregate fair market rent and Additional Rent payable (if less than the Rent payable hereunder) on account of the Premises during such period, which fair market rent shall be reduced by reasonable projections of vacancies and by Landlord's Reletting Expenses described above to the extent not theretofore paid to Landlord) or (y) twelve (12) months (or such lesser number of months as may then be remaining in the Term) of Base Rent and Additional Rent at the rate last payable by Tenant under this Lease. (The Federal Reserve discount rate (or equivalent) shall be used in calculating such present values under clause (x)(ii), and in the event the parties are unable to agree on such fair market rent, the matter shall be submitted, upon the demand of either party, to the office of the AAA closest to the Property, with a request for arbitration in accordance with the rules of the Association by a single arbitrator who shall be a licensed real estate broker with at least ten (10) years experience in the leasing of 1,000,000 or more square feet of floor area of buildings similar in character and location to the Premises, and who shall not be affiliated with either Landlord

(d) Remedies Cumulative; Jury Waiver; Late Performance. The remedies to which Landlord may resort under this Lease, and all other rights and remedies of Landlord are cumulative, and any two or more may be exercised at the same time except where this Lease specifically provides otherwise, such as the provisions of Sections 14.03(b) and (c) and the provisions of Sections 14.03(c)(x) and (y). Nothing in this Lease shall limit the right of Landlord to prove and obtain in proceedings for bankruptcy or insolvency an amount equal to the maximum allowed by any statute or rule of law in effect at the time, but not to exceed the limitations set forth in this Section 14.03; and Tenant agrees that the fair value for occupancy of all or any part of the Premises at all times shall never be less than the Base Rent and all Additional Rent payable from time to time. Tenant shall also indemnify and hold Landlord harmless in the manner provided in Section 9.02 if Landlord shall become

or be made a party to any claim or action necessary to protect Landlord's interest under this Lease in a bankruptcy proceeding, or other proceeding under Title 11 of the United States Code, as amended. LANDLORD AND TENANT WAIVE TRIAL BY JURY IN ANY ACTION TO WHICH THEY ARE PARTIES, and further agree that any action arising out of this Lease (except an action for possession by Landlord, which may be brought in whatever manner or place provided by law) shall be brought in the Trial Court, Superior Court Department, in the county where the Premises are located.

(e) Waivers; Accord and Satisfaction. No consent by Landlord or Tenant to any act or omission that otherwise would be a default shall be construed to permit other similar acts or omissions. Neither party's failure to seek redress for violation or to insist upon the strict performance of any covenant, nor the receipt by Landlord of Rent with knowledge of any breach of covenant, shall be deemed a consent to or waiver of such breach. No breach of covenant shall be implied to have been waived unless such is in writing, signed by the party benefiting from such covenant and delivered to the other party; and no acceptance by Landlord of a lesser sum than the Rent due shall be deemed to be other than on account of the earliest installment of such Rent. No endorsement or statement on any check or in any letter accompanying any check or payment shall be deemed an accord and satisfaction; and Landlord may accept such check or payment without prejudice to Landlord's right to recover the balance of such installment or pursue any other right or remedy. The acceptance by Landlord of any Rent following the giving of any default and/or termination notice shall not be deemed a waiver of such notice. Tenant shall not interpose any counterclaim or counterclaims (other than compulsory counterclaims that would be lost if not interposed) in a summary proceeding or in any action based on non-payment of Rent.

(f) Landlord's Curing. If Tenant fails to perform any covenant within any applicable cure period, then Landlord at its option may (without waiving any right or remedy for Tenant's non-performance) at any time thereafter perform the covenant for the account of Tenant. Tenant shall upon demand reimburse Landlord's cost (including reasonable attorneys' fees) of so performing on demand as Additional Rent. Notwithstanding any other provision concerning cure periods, Landlord may cure any non-performance for the account of Tenant after such notice to Tenant, if any, as is reasonable under the circumstances if curing prior to the expiration of the applicable cure period is reasonably necessary to prevent likely damage to the Premises or Building or possible injury to persons, or to protect Landlord's interest in the Premises or Building.

**ARTICLE 15.
PROTECTION OF LENDERS**

15.01. Subordination and Superiority of Lease. Tenant agrees that this Lease and the rights of Tenant hereunder will be subject and subordinate to any lien of the holder of any future mortgage, and to the rights of any lessor under any ground or improvements lease of the Building (all mortgages and ground or improvements leases of any priority are collectively referred to in this Lease as “mortgage,” and the holder or lessor thereof from time to time as a “mortgagee”), and to all advances and interest thereunder and all modifications, renewals, extensions and consolidations thereof; provided that any subordination of this Lease shall be conditioned upon Landlord delivering to Tenant a written, recordable subordination, non-disturbance and attornment agreement from the mortgagee seeking to have this Lease subordinated to its interest in the form attached as Exhibit 15.01 (or in such other form as such mortgagee may reasonably request). Tenant shall not be required to execute any subordination, non-disturbance and attornment agreement and this Lease shall not be subordinate to any junior mortgage where a mortgagee having priority over such junior mortgage has prohibited execution of a further subordination, nondisturbance and attornment agreement in any agreement with Tenant and has not consented to Tenant so executing a subordination, nondisturbance and attornment agreement with respect to such junior mortgage. Landlord represents and warrants that the only mortgage to which this Lease is subject as of the execution date is that certain mortgage (the “Existing Mortgage”) to Anglo Irish Bank Corporation plc, dated September 29, 2005, and recorded at Book 38144, Page 301 of the Suffolk County Registry of Deeds. Landlord shall provide to Tenant, within 45 days after the date of this Lease, a written agreement from the lender (and upon which Tenant may rely) under the Existing Mortgage confirming that such lender will deliver a discharge or partial release of the Existing Mortgage upon the issuance of a building permit and closing of the construction loan for the Base Building Work.

Tenant agrees that this Lease shall survive the merger of estates of ground (or improvements) lessor and lessee, if any. Until a mortgagee (either superior or subordinate to this Lease) forecloses Landlord’s equity of redemption (or terminates or succeeds to a new lease in the case of a ground or improvements lease) no mortgagee shall be liable for failure to perform any of Landlord’s obligations (and such mortgagee shall thereafter be liable only after it succeeds to and holds Landlord’s interest and then only as limited herein). Tenant shall, if requested by Landlord or any mortgagee, give notice of any alleged non-performance on the part of Landlord to any such mortgagee provided that an address for such mortgagee has been designated to Tenant in writing, and Tenant agrees that such mortgagee shall have a separate, consecutive reasonable cure period of no less than thirty (30) days (to be reasonably extended in the same manner Landlord’s cure period is to be extended and for such additional periods as is necessary to allow such Mortgagee to take possession of the Property) following Landlord’s cure period during which such mortgagee may, but need not, cure any non-performance by Landlord. The agreements in this Lease with respect to the rights and powers of a mortgagee constitute a continuing offer to any person that may be accepted by taking a mortgage (or entering into a ground or improvements lease) of the Premises. This Section

shall be self-operative, but in confirmation thereof, Tenant shall execute and deliver the subordination, nondisturbance and attornment agreement in the form of Exhibit 15.01 (or in such other form as such mortgagee may reasonably request).

15.02. Attornment. If Landlord's interest in the Property is acquired by mortgagee or purchaser at a foreclosure sale, Tenant shall, at the election of such mortgagee or purchaser, attorn to the transferee of or successor to Landlord's interest in the Property and recognize it as Landlord under this Lease. Tenant waives the protection of any statute or rule of law which gives Tenant any right to terminate this Lease or surrender possession of the Premises upon the transfer of Landlord's interest. Upon such attornment, this Lease shall continue in full force and effect as a direct lease between the mortgagee and Tenant upon all of the terms, conditions and covenants as are set forth in this Lease, except that the mortgagee shall not be (i) liable in any way to Tenant for any act or omission, neglect or default on the part of Landlord under this Lease (nothing in this clause (i) being deemed to relieve any mortgagee succeeding to the interest of Landlord hereunder of its continuing obligations as landlord under this Lease from and after the date of such succession), (ii) responsible for any monies owing by or on deposit with Landlord to the credit of Tenant (except to the extent any such deposit is actually received by such mortgagee), (iii) subject to any counterclaim or setoff which theretofore accrued to Tenant against Landlord, (iv) bound by any amendment or modification of this Lease subsequent to such mortgage, or by any previous prepayment of Rent for more than one (1) month, which was not approved in writing by the mortgagee, or bound by the indemnity set forth in Section 9.04, (v) liable beyond mortgagee's interest in the Property, (vi) responsible for the performance of any work to be done by the Landlord under this Lease to render the Premises ready for occupancy by the Tenant or the payment of the Finish Work Allowance, or (vii) required to remove any person occupying the Premises or any part thereof, except if such person claims under the mortgagee. Tenant agrees that any present or future mortgagee may at its option unilaterally elect to subordinate, in whole or in part and by instrument in form and substance satisfactory to such mortgagee alone, the lien of its mortgagee (or the priority of its ground lease) to some or all provisions of this Lease. Nothing in the preceding sentences of this Section 15.02 shall prohibit Tenant from exercising its right to terminate this Lease pursuant to Section 3.01(c) and clause (x) of Section 3.01(e) of this Lease on the conditions set forth therein. Notwithstanding the foregoing, in the event that mortgagee or, other than an entity controlling, controlled by or under common control with Landlord, a purchaser at a foreclosure sale (a "Successor") succeeds to the interest of Landlord prior to the completion of Building (including Base Building and Finish Work), such Successor shall have thirty (30) days to send written notice to Tenant stating whether or not it intends to be bound to perform work remaining to be done by the Landlord under this Lease to render the Premises ready for occupancy by the Tenant and agrees to advance the Finish Work Allowance. For the purposes of the immediately preceding sentence, control shall have the meaning set forth in Section 13.01(b). In the event in such notice it states that it intends to be so bound, then such provisions of this

Lease shall be binding on the Successor. In the event the Successor states that it does not intend to be so bound or fails to timely provide notice to Tenant within such thirty (30) day period, then (A) prior to the date that Tenant has made Tenant's first payment towards the Excess Costs under the FW Contract under the Work Letter, Tenant shall have the right, by written notice to the Successor (a "Succession Election Notice") within sixty (60) days following notice of such acquisition, to either (I) terminate this Lease, or (II) continue this Lease, deposit such Excess Costs in escrow with the Successor to be held and disbursed against the costs to construct the Finish Work as they are incurred on behalf of Tenant in the manner provided under the Work Letter, and complete the Finish Work itself at its expense and otherwise in accordance with the terms of this Lease and (to the extent the Finish Work Allowance is not disbursed by the Successor) reduce the Rent by the amount of the unadvanced Finish Work Allowance amortized over the Term with interest at the rate of 8% per annum; or (B) from and after the date that Tenant has made Tenant's first payment towards the Excess Costs under the FW Contract under the Work Letter, Tenant shall have the right, by giving a Succession Election Notice to the Successor within sixty (60) days following notice of such acquisition, to either (X) terminate this Lease, or (Y) continue this Lease and complete the Finish Work itself at its expense and otherwise in accordance with the terms of this Lease and (to the extent the Finish Work Allowance is not disbursed by the Successor) reduce the Rent by the amount of the unadvanced Finish Work Allowance amortized over the Term with interest at the rate of 8% per annum; provided, however, that the Successor can render any Succession Election Notice pursuant to clause (A) or (B), above, null and void and of no force and effect if, within thirty (30) days after the giving of such notice by Tenant, the Successor agrees to be bound by the applicable provisions of this Lease. Tenant's failure to give a Succession Election Notice in the time period(s) required above shall be deemed to be an election pursuant to the clause (II) or (Y) of the immediately preceding sentence, as applicable.

15.03. Rent Assignment. If from time to time Landlord assigns this Lease or the rents payable hereunder to any person, whether such assignment is conditional in nature or otherwise, such assignment shall not be deemed an assumption by the assignee of any obligations of Landlord; but, subject to the limitations herein including Sections 15.01 and 10.02(b), the assignee shall be responsible only for non-performance of Landlord's obligations that occur after it succeeds to, and only during the period it holds possession of, Landlord's interest in the Premises after foreclosure or voluntary deed in lieu of foreclosure.

15.04. Other Instruments. The provisions of this Article shall be self-operative; nevertheless, Tenant agrees to execute, acknowledge and deliver any subordination, attornment or priority agreements or other instruments conforming to the provisions of this Lease (and being otherwise commercially reasonable) from time to time requested by Landlord or any mortgagee, consistent with the terms of this Lease with respect to the rights of Tenant, and further agrees that its failure to do so within ten (10) days after

written request shall be a default for which this Lease may be terminated without further notice. Without limitation, where Tenant in this Lease indemnifies or otherwise covenants for the benefit of mortgagees, such agreements are for the benefit of mortgagees as third party beneficiaries; and at the request of Landlord, Tenant from time to time will confirm such matters directly with such mortgagee.

15.05. Estoppel Certificates. Within ten (10) days after request by a party to this Lease, the other party shall execute, acknowledge and deliver a written statement certifying: (i) that none of the terms or provisions of this Lease have been changed (or if they have been changed, stating how); (ii) that this Lease has not been canceled or terminated; (iii) the last date of payment of Base Rent and other charges and the time period covered; (iv) that to the knowledge of the party executing the certificate, the party requesting such certificate is not in default under this Lease (or, if in default, describing it in reasonable detail); and (v) such other information with respect this Lease as may be reasonably requested or which any prospective purchaser or encumbrancer of the Property may require (which with respect to a statement requested of the Tenant may include whether the Tenant then meets the Financial Standard). **[***]**. The party receiving any such statement may deliver the statement to any such prospective purchaser or encumbrancer, or with respect to a statement requested by Tenant, Tenant's auditor, which may rely conclusively upon such statement as true and correct. The party requesting such estoppel certificate shall promptly reimburse the other party upon written demand for the reasonable out-of-pocket attorneys' fees and expenses incurred to review, modify, and prepare such certificate, but in any event not to exceed \$1,500 in any one instance.

ARTICLE 16. MISCELLANEOUS PROVISIONS

16.01. Landlord's Consent Fees. In addition to fees and expenses in connection with Tenant Work, as described in Section 10.05, Tenant shall pay Landlord's reasonable fees and expenses, including legal, engineering and other consultants' fees and expenses, incurred in connection with Tenant's request for Landlord's consent under Article 13 (Assignment and Subletting) or in connection with any other act by Tenant which requires Landlord's consent or approval under this Lease.

16.02. Notice of Landlord's Default. Tenant shall give notice of Landlord's failure to perform any of its obligations under this Lease to Landlord, and to any mortgagee or beneficiary under any deed of trust encumbering the Property whose name and address have been given to Tenant. Landlord shall not be in default under this Lease unless Landlord (or such mortgagee or beneficiary) fails to cure such non-performance within thirty (30) days after receipt of Tenant's notice. However, if such non-performance requires more than thirty (30) days to cure, such period shall be reasonably extended in the case of any such non-performance that cannot be cured by the payment of money

where such non-performance can be cured (but in any event shall not exceed 180 days in the aggregate), and Landlord begins promptly within said thirty (30) day period and thereafter diligently completes the cure. In no event shall Landlord be liable for indirect or consequential damages arising out of any default by Landlord under this Lease.

16.03. Quiet Enjoyment. Landlord agrees that, so long as Tenant is not in default under the terms of this Lease, Tenant shall lawfully and quietly hold, occupy and enjoy the Premises during the Term of this Lease without disturbance by Landlord or by any person claiming through or under Landlord, subject to the terms of this Lease.

16.04. Cooperation With Accounting. Upon the written request of Tenant, not more often than quarterly (other than as set forth in the Work Letter), Landlord will provide Tenant with financial information with respect to Operating Expenses and Taxes incurred to date for the then-current year (including capital expenditures for the Building even if not includable within Operating Expenses hereunder) to the extent available to Landlord, as is reasonably required by Tenant's accountants and auditors for Tenant to comply with lease accounting requirements applicable to Tenant (provided that nothing herein shall be deemed to expand, modify or limit Tenant's rights under Article 4 of this Lease, and any such information and Tenant's rights to the same shall be subject to the provisions of Section 4.06 as if it were an audit of Landlord's books and records). Tenant shall reimburse Landlord for the reasonable out-of-pocket costs to provide such information as Additional Rent within 30 days after invoice.

16.05. Notices. All notices, requests and other communications required under this Lease shall be in writing, addressed as specified in Article 1, and shall be (i) personally delivered, (ii) sent by certified mail, return receipt requested, postage prepaid, or (iii) delivered by a national overnight delivery service that maintains delivery records. All notices shall be effective upon delivery (or refusal to accept delivery). Either party may change its notice address upon written notice to the other party. Notices under this Lease may be given by counsel for either party.

16.06. No Recordation. Tenant shall not record this Lease. Either Landlord or Tenant may require that a statutory notice, short form or memorandum of this Lease executed by both parties be recorded. Tenant may record any subordination agreement (notifying Landlord of the date and book and page number) or request Landlord to record it on Tenant's behalf. The party requesting or requiring such recording shall pay all expenses, transfer taxes and recording fees.

16.07. Corporate Authority. Tenant warrants and represents that (a) Tenant is duly organized, validly existing and in good standing under the laws of the jurisdiction in which such entity was organized; (b) Tenant has the authority to own its property and to carry on its business as contemplated under this Lease; (c) Tenant has duly executed and delivered this Lease; (d) the execution, delivery and performance by Tenant of this Lease

(i) are within the powers of Tenant, (ii) have been duly authorized by all requisite action, (iii) will not violate any provision of law or any order of any court or agency of government, or any agreement or other instrument to which Tenant is a party or by which it or any of its property is bound, and (iv) will not result in the imposition of any lien or charge on any of Tenant's property, except by the provisions of this Lease; and (e) this Lease is a valid and binding obligation of Tenant in accordance with its terms. This warranty and representation shall survive the termination of the Term.

Landlord represents and warrants that (a) Landlord is duly organized, validly existing and in good standing under the laws of the jurisdiction in which such entity was organized; (b) Landlord has the authority to own its property and to carry on its business as contemplated under this Lease; (c) Landlord has duly executed and delivered this Lease; (d) the execution, delivery and performance by Landlord of this Lease (i) are within the powers of Landlord, (ii) have been duly authorized by all requisite action, (iii) will not violate any provisions of law or any order of any court or agency of government, or any agreement or other instrument to which Landlord is a party or by which it or any of its property is bound, and (iv) will not result in the imposition of any lien or charge on any of Landlord's property, except by the provisions of this Lease; and (e) this Lease is a valid and binding obligation of Landlord in accordance with its terms. This warranty and representation shall survive the termination of the Term.

16.08. Joint and Several Liability. If more than one party signs this Lease as Tenant, they shall be jointly and severally liable for all obligations of Tenant.

16.09. Force Majeure. Except where Force Majeure is expressly excluded elsewhere in this Lease, if a party cannot perform any of its obligations due to events beyond its reasonable control (other than the inability to make payments when due), the time provided for performing such obligations shall be extended by a period of time equal to the duration of the events. Events beyond a party's reasonable control include without limitation acts of God, war, civil commotion, labor disputes, strikes, terrorist attacks, fire, flood or other casualty, the inability to obtain labor or material from customary sources on customary terms, government regulation or restriction (as distinguished from inability to obtain permits in the ordinary course), abnormal weather conditions (meaning circumstances in which adverse weather conditions significantly exceed those that have historically been encountered, or may reasonably be expected to be encountered, at the Property, and, with respect to the construction of Landlord Work, solely to the extent the applicable contractor is entitled to a delay in time for performance on account of such abnormal weather conditions), neglects or delays of the other party, or any similar event to the foregoing. Events described in this Section 16.09 are referred to herein as "Force Majeure".

16.10. Limitation of Warranties. Landlord and Tenant expressly agree that, other than those warranties expressly set forth in this Lease, there are and shall be no implied

warranties of merchantability, habitability, suitability, fitness for a particular purpose or of any other kind arising out of this Lease.

16.11. No Other Brokers. Landlord and Tenant represent and warrant to each other that the Broker(s) named in Article 1 are the only agents, brokers, finders or other parties with whom such party has dealt who may be entitled to any commission or fee with respect to this Lease or the Premises or the Property. Landlord and Tenant agree to indemnify and hold the other harmless from any claim, demand, cost or liability, including attorneys' fees and expenses, asserted by any party other than the brokers named in Article 1 based upon dealings of that party with the indemnifying party. Landlord shall be responsible for the payment of any brokerage fees to the brokers named in Article 1. The provisions of this Section shall survive the Term or early termination of this Lease.

16.12. Applicable Law and Construction. This Lease may be executed in counterparts, shall be construed as a sealed instrument, and shall be governed exclusively by the provisions hereof and by the laws of the state where the Property is located without regard to principles of choice of law or conflicts of law. A facsimile signature to this Lease shall be sufficient to prove the execution by a party. If any provisions shall to any extent be invalid, the remainder shall not be affected. Other than contemporaneous instruments executed and delivered of even date, if any, this Lease contains all of the agreements between Landlord and Tenant relating in any way to the Premises and supersedes all prior agreements and dealings between them. There are no oral agreements between Landlord and Tenant relating to this Lease or the Premises. This Lease may be amended only by instrument in writing executed and delivered by both Landlord and Tenant. The provisions of this Lease shall bind Landlord and Tenant and their respective successors and assigns, and shall inure to the benefit of Landlord and its successors and assigns and of Tenant and its permitted successors and assigns, subject to Article 13. The titles are for convenience only and shall not be considered a part of this Lease. This Lease shall not be construed more strictly against one party than against the other merely by virtue of the fact that it may have been prepared primarily by counsel for one of the parties, it being recognized that both Landlord and Tenant have contributed substantially and materially to the preparation of this Lease. If Tenant is granted any extension or other option, to be effective the exercise (and notice thereof) shall be unconditional; and if Tenant purports to condition the exercise of any option or to vary its terms in any manner, then the purported exercise shall be ineffective. The enumeration of specific examples of a general provision shall not be construed as a limitation of the general provision. Unless a party's approval or consent is required by the express terms of this Lease not to be unreasonably withheld, such approval or consent may be withheld in the party's sole discretion. The submission of a form of this Lease or any summary of its terms shall not constitute an offer by Landlord to Tenant; but a leasehold shall only be created and the parties bound when this Lease is executed and delivered by both Landlord and Tenant and approved by the holder of any mortgage of the Premises having the right

to approve this Lease. Nothing herein shall be construed as creating the relationship between Landlord and Tenant of principal and agent, or of partners or joint venturers or any relationship other than landlord and tenant. This Lease and all consents, notices, approvals and all other related documents may be reproduced by any party by any electronic means or by facsimile, photographic, microfilm, microfiche or other reproduction process and the originals may be destroyed; and each party agrees that any reproductions shall be as admissible in evidence in any judicial or administrative proceeding as the original itself (whether or not the original is in existence and whether or not reproduction was made in the regular course of business), and that any further reproduction of such reproduction shall likewise be admissible. If any payment in the nature of interest provided for in this Lease shall exceed the maximum interest permitted under controlling law, as established by final judgment of a court, then such interest shall instead be at the maximum permitted interest rate as established by such judgment.

16.13. Construction on the Property or Adjacent Property.

(a.) Tenant acknowledges that Landlord and/or its affiliates is or are undertaking or may undertake major renovations and/or construction at the Project. Landlord shall have the right, in connection with the development, redevelopment, alteration, improvement, operation, maintenance, or repair of the Project, to subject the Property and its appurtenant rights to easements for the construction, reconstruction, alteration, improvement, operation, repair or maintenance of elements thereof, for access and egress, for parking, for the installation, maintenance, repair, replacement or relocation of utilities serving the Project and to subject the Property to such other rights, agreements, and covenants for such purposes as Landlord may determine. Tenant hereby agrees that this Lease shall be subject and subordinate to any such matters that do not materially interfere with Tenant's use of the Premises. Neither Tenant nor any persons acting under Tenant shall take any action to oppose the Project, nor, to the extent within Tenant's control, shall the Tenant knowingly permit any Tenant Parties to take any action in opposition to the Project.

Landlord and its affiliates and their respective agents, employees, licensees and contractors shall also have the right to enter on the Property or Building to undertake work pursuant to any easement granted pursuant to the above paragraph; to shore up the foundations and/or walls of the Building; to erect scaffolding and protective barricades around, within or adjacent to the Building; and to do any other act necessary for the safety of the Building or the expeditious completion of such work. Landlord shall not be liable to Tenant for any compensation or reduction of Rent by reason of inconvenience or annoyance or for loss of business resulting from any act by Landlord pursuant to this Section provided that Landlord complies with this Section 16.13. [***]. For the purposes of mitigating against potential adverse impacts on Tenant's operations as a result of activities permitted under this Section

16.13, Landlord and Tenant agree to cooperate with each other as is reasonably required during the design of the Finish Work and any Tenant Work to identify reasonable measures to reduce vibration risk to any unusually vibration-sensitive Tenant equipment in the Premises.

16.14. Confidentiality of Information.

Landlord agrees to hold any proprietary information identified as confidential by Tenant in writing and supplied to Landlord pursuant to this Lease, excluding any information required to be filed with a governmental agency (“Confidential Information”) in confidence. Notwithstanding the foregoing, Landlord may disclose such Confidential Information to its attorneys, accountants, property managers, real estate brokers, investors, lenders, attorneys, and consultants in connection with the financing or sale of the Property or Landlord’s review of such information to the extent (a) such parties need to know the Confidential Information for the purpose of evaluating the proposed transaction, (b) Landlord informs such parties of the confidential nature of the Confidential Information and (c) such parties agree to hold the Confidential Information in confidence. Landlord will use reasonable efforts to cause such parties to observe the terms of this agreement, and Landlord will be responsible for any breach of this provisions by any such parties.

Landlord acknowledges and agrees that Tenant shall not have an adequate remedy at law in the event of a breach of this provision by Landlord, that Tenant will suffer irreparable damage and injury if Landlord breaches this Section 16.14, and that Tenant, in addition to any other rights and remedies available under this Lease or otherwise, shall be entitled to an injunction to be issued by a court of competent jurisdiction restricting Landlord from committing or continuing any violation of this Section 16.14.

The term “Confidential Information” does not include information that (i) is publicly known at the time of delivery, (ii) subsequently becomes publicly known through no breach of this Section 16.14 by Landlord or its representatives, (iii) Landlord can demonstrate was in its possession at the time of disclosure and was not acquired by it directly or indirectly from Tenant on a confidential basis, (iv) becomes available to Landlord on a non-confidential basis from a source other than the Tenant and which source, to the best of Landlord’s knowledge, is not under an obligation of confidence to Tenant or (v) is disclosed in the course of litigation between Landlord and Tenant or Landlord and any other third party.

16.15. Equal Employment Opportunity. If and to the extent applicable to each of them, Landlord and Tenant shall comply with the requirements of 41 C.F.R. Sections 60-1.4(a)(7), 60-300.5(d), 60-741.5(d), and 29 C.F.R. part 471, Appendix A to Subpart A.

ARTICLE 17.
SECURITY DEPOSIT

17.01. Letter of Credit. If, at any time following the Telaprevir Approval, Tenant has an unrestricted cash, cash equivalent and marketable securities balance of [***], as determined in accordance with generally accepted accounting principles, consistently applied (the “Financial Standard”) then Tenant shall provide to Landlord as security for the performance of the obligations of Tenant hereunder a letter of credit in the amount specified in Section 1.13 in accordance with this Section (as renewed, replaced, and/or reduced pursuant to this Section, the “Letter of Credit”). The Letter of Credit shall be in the form attached as Exhibit 17.01 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 that has an office in Boston, Massachusetts, (ii) shall require only the presentation to the issuer of a certificate of the holder of the Letter of Credit stating either (a) that Landlord is entitled to draw on the Letter of Credit in accordance with this Lease or (b) 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 this Lease, (iii) shall be payable to Landlord and its successors in interest as the Landlord and shall be freely transferable at nominal cost, (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 sixty (60) 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 than the date sixty (60) days after the last day of the Term.

If (x) Tenant shall be in default under this 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); (y) 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; or (z) (i) the credit rating of the long-term debt of the issuer of the Letter of Credit (according to Moody’s, Standard & Poor’s or similar national rating agency reasonably identified by Landlord) is downgraded to a grade below investment grade; or (ii) the issuer of the Letter of Credit enters into any supervisory agreement with any governmental authority; or (iii) the issuer of the Letter of Credit fails to meet any capital requirements imposed by applicable law, then, in any of such events under this clause (z), unless Tenant delivers to Landlord a replacement Letter of Credit complying with the terms of this Lease within ten (10) days after demand therefor from Landlord, Landlord shall have the right to draw upon the

Letter of Credit in full or in part without giving any further notice to Tenant. Such failure to timely deliver a new Letter of Credit pursuant to this Section 17.01 shall be deemed to be an Event of Default by Tenant (without the necessity of further notice or cure period notwithstanding anything in this Lease to the contrary). Landlord may, but shall not be obligated to, apply the amount so drawn to the extent necessary to cure Tenant's default and/or any other damages to which Landlord is entitled under this 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 against amounts due hereunder 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. 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 Tenant provided that no default of which Tenant then has notice (to the extent that such notice is required) is then continuing.

17.02. Letter of Credit Pledge. The Landlord may pledge its right and interest in and to the Letter of Credit to any mortgagee or ground lessor and, in order to perfect such pledge, have such 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 ("Letter of Credit 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 mortgagee or ground lessee. In the event that the Letter of Credit is ever held by any party in escrow including but not limited to a Letter of Credit Pledgee, Landlord shall provide in the documentation of any such escrow or pledge or other assignment of the Letter of Credit to a Letter of Credit Pledgee, and the Letter of Credit Pledgee or other party given possession of the Letter of Credit shall agree, that the Letter of Credit Pledgee or such other party shall release the Letter of Credit in the event Landlord is required to release the Letter of Credit pursuant to Section 17.04 hereunder.

17.03. 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 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 shall be responsible for any of the costs associated with such transfer that are in excess of nominal costs. 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.

17.04. Release of the Security Deposit. At any time (but no more than once per calendar year) after Tenant provides the Letter of Credit hereunder, if Tenant meets the Financial Standard and provided that there is not an ongoing Event of Default hereunder at the time of such request, Landlord shall release the Letter of Credit, if any, then held by Landlord. If Landlord has so released the Letter of Credit (whether one or more times), and thereafter Tenant fails to meet the Financial Standard, as reasonably determined by Landlord, Tenant shall, within ten (10) days thereafter, be obligated to reinstate the Letter of Credit.

17.05. Reporting Obligations. Unless Tenant is a public company, and Tenant's applicable quarterly and annual filings clearly set forth the information necessary to determine whether Tenant meets the Financial Standard in connection with the periodic determination of whether Tenant meets the Financial Standard, Tenant shall, upon request in each instance by Landlord, furnish to Landlord the following: (x) within sixty (60) days after each of its first three fiscal quarters during each fiscal year of the Term (and ninety (90) days after the fourth fiscal quarter during each fiscal year) an unaudited financial statement of Tenant together with a letter from the chief financial officer of Tenant stating, to the best of his or her knowledge, whether or not Tenant meets the Financial Standard (together with a copy of the most recently filed United States Securities and Exchange Commission form 10Q, if Tenant is lawfully required to file such a report), and (y) within one hundred fifty (150) days after each of Tenant's fiscal years during the Term audited financial statements of the Tenant for the prior fiscal year (together with a copy of the most recently filed United States Securities and Exchange Commission form 10K, if Tenant is lawfully required to file such a report). If any of the financial documentation required under Section 17.05 is not provided when required, and if Tenant fails to furnish the same to Landlord within fifteen (15) days of Landlord's written request therefor, and if Tenant has not cured such failure within five (5) business days after receiving a second written request from Landlord (provided both of such notices contain a prominent reference to this Section in bold print stating that the failure to provide such financial statements shall result in a default under this Lease), then Tenant shall be in default under this Lease and the unrestricted cash, cash equivalent and marketable securities of the Tenant shall be deemed to be zero until financial statements are provided in accordance with this Section 17.05. Unless public by other means, Landlord will maintain confidential such statements, except as required by applicable law or Court order; however Landlord may provide information from such statements to Landlord's accountants, lenders, attorneys and partners, as long as Landlord advises the recipients of the existence of Landlord's confidentiality obligation.

ARTICLE 18.
GOVERNMENT INCENTIVES

18.01. Government Incentives.

(a) The parties acknowledge that Landlord or an affiliate of Landlord has submitted to The Commonwealth of Massachusetts an application for approval of the Project as an Economic Development District under St. 2006, c.293 §§5-12, as amended by St. 2008, c.129 (the "I³ Program") for state infrastructure development assistance that will finance, through tax exempt bonds issued by The Massachusetts Development Finance Agency, the cost of certain of the utilities, streets, sidewalks, water transportation facilities, parks and other public infrastructure to be constructed at the Project in the amount of \$50,000,000.00 pursuant to a Preliminary Economic Development Proposal dated April 8, 2011, as supplemented on April 22, 2011, to the Secretary of the Massachusetts Executive Office of Administration and Finance (the "Secretary"), the Mayor of the City of Boston, the Massachusetts Development Finance Agency (the "Agency") and the Commissioner of the Massachusetts Department of Revenue, a copy of which has been provided to Tenant (the "Preliminary Application"). Pursuant to the Preliminary Application and the I³ Program, such bonds would be paid by dedication of new state tax revenue from income taxes to be generated by eligible new jobs created by Tenant in the Building and the premises leased under the Building A Lease and, to the extent includable under the I³ Program, the Building F Lease and the Building E Lease. Tenant shall reasonably cooperate with Landlord and/or an affiliate of Landlord in providing employment and wage information in connection with such application and the I³ Program. Landlord shall use commercially reasonable, good faith efforts to obtain approval for the funding of such infrastructure development under the I³ Program, including without limitation, the submission of an Economic Development Proposal (the "Final Application") to the Secretary and the Agency for final approval if the Preliminary Application (as it may be supplemented or amended in accordance with the I³ Program) is approved by the Secretary and the City of Boston, but it shall not be a default of the Landlord hereunder if the Preliminary Application or the Final Application is not so approved or if by reason of any condition in the approved Final Application any portion of the bonds are not issued. Landlord's obligations under this Section 18(a) and Section 18(b) below shall terminate on the earlier to occur of the date that either the Preliminary Application or the Final Application for coverage under the I³ Program is first denied or rejected, whether by the City of Boston, the Secretary, the Agency or any other state agency with jurisdiction over the I³ Program, or the I³ Program is no longer in full force and effect.

(b) Tenant shall be entitled to an increase in the Finish Work Allowance equal to an amount (the "I³ Amount") equal to forty-nine percent (49%) of the amount of the net proceeds (i.e. net of all transaction and issuance costs associated therewith incurred by Landlord or its affiliates) of that portion of the state infrastructure development assistance actually received by the Landlord or its affiliates for the

Project based upon the new state tax revenue from eligible new jobs created by Tenant to the extent approved by the Commonwealth of Massachusetts (the “Tenant Supported Bonds”), as such assistance is actually received from time to time by Landlord or its affiliates on account of I³ Program funds obtained pursuant to the application by Landlord as described in Section 18(a), above. If and to the extent that Landlord or any of its affiliates is required to reimburse the City of Boston the amount of any shortfall of the allocable debt service apportioned to the Property under the I³ Program (the “Tenant Shortfall”) from time to time, in consideration of any Finish Work Allowance actually received by Tenant on account of the I³ Program, then Tenant shall pay to Landlord, as Additional Rent, one hundred percent (100%) of the amount of any Tenant Shortfall that Landlord is required to pay (whether contractually, through liens placed by the City of Boston on the Property, or otherwise) within thirty (30) days following written demand by Landlord so that Landlord can pay such amounts as and when due from Landlord or an affiliate of Landlord to the City of Boston. From and after the date the Final Application is approved, if Tenant is entitled to an increase in the Finish Work Allowance pursuant to the terms of this subsection (b), then Tenant shall provide to Landlord, within 10 days of Landlord’s written request from time to time, such information regarding the number of Tenant’s current and projected employees, payroll, and income taxes withheld thereon as may be required for compliance by Landlord or any affiliate of Landlord with respect to Chapter 293 §§ 5 through 12 of the 2006 Massachusetts Acts and Resolves, as amended by Chapter 129 of the 2008 Massachusetts Acts and Resolves; 801 C.M.R 51.00 et seq; and Technical Information Release 08-18 issued by the Massachusetts Department of Revenue. Tenant’s obligations to pay any Tenant Shortfall to Landlord pursuant to this paragraph shall survive the termination or earlier expiration of this Lease.

(b) Prior to the Final Commencement Date, Landlord and Landlord affiliates shall reasonably cooperate with Tenant at no cost and expense to Landlord and Landlord affiliates in applying for available forms of state financial assistance for life science companies at the Building, including without limitation for a MassWorks Infrastructure Program grant (a “MIP grant”), if legally possible. Such cooperation shall include Landlord’s (and as applicable, Landlord affiliates’) application for a MIP grant to be used for infrastructure costs at the Project, if legally possible. Landlord will increase the Finish Work Allowance by an amount equal to forty-nine percent (49%) of the amount of the net proceeds (i.e. net of all transaction costs incurred by Landlord or its affiliates) of any MIP grant or financial assistance actually received by Landlord expressly by reason of Tenant’s tenancy in the Premises and as a result of an application filed prior to the Commencement Date, as such MIP grant funds or other assistance are actually received from time to time by Landlord. Landlord shall use commercially reasonable, good faith efforts to obtain a MIP grant for infrastructure costs at the Project prior to the Commencement Date, if legally

possible, but it shall not be a default of the Landlord hereunder if the Project is not so approved.

(c) Landlord shall reasonably cooperate with Tenant at no cost and expense to Landlord in making application for other available forms of state financial assistance with respect to Tenant's relocation to the Building. The whole of any economic benefit from any such state financial assistance based solely on Tenant's occupancy of the Premises shall inure solely to Tenant. If legally required, Landlord or its affiliate shall join as applicant with Tenant for a Tax Increment Financing Agreement for the Project with the City of Boston, but all of the benefits from such agreement (and any obligations associated therewith) shall accrue solely to Tenant.

(d) To the extent any costs, expenses or benefits must be allocated among one or more buildings occupied by Tenant at Fan Pier under this Section 18.01 and equivalent provisions under other leases between Tenant and Landlord or its affiliates, such allocations shall be made based upon the square footage of the buildings, the qualified Tenant employees therein, or such other method as is reasonably determined by Landlord.

(e) Tenant intends to apply to the Massachusetts Economic Assistance Coordinating Council for designation of the Building as a Certified Project, as defined in 402 C.M.R. Section 2, and for approval of a Tax Increment Financing Agreement (a "TIFA") with the City of Boston with respect to the Premises. If Tenant actually so applies and the Certified Project Application, including a TIFA providing for an exemption percentage as would result in a projected total savings of approximately \$12,000,000 commencing July 1, 2014 in the aggregate with all other TIFAs Tenant obtains at the Project applicable during such period from the real estate taxes that would otherwise be payable with respect to the Premises and the premises under the Building A Lease, in the aggregate, is not approved by the City of Boston on or before June 1, 2011, then Tenant at Tenant's option by notice to the Landlord given no earlier than June 2, 2011 and no later than June 10, 2011 may, in conjunction with a simultaneous termination of all other Tenant leases at the Project, terminate this Lease by written notice to Landlord, effective as of the date of such notice (provided, however, that Landlord may render such termination notice null and void by, within thirty (30) days thereafter, irrevocably committing in writing to provide Tenant with an alternate economic benefit of equal or better value based on the standards set forth on Exhibit 18.01(f), attached). If legally required, Landlord and any affiliate of Landlord, including Fan Pier Development LLC, shall join as applicant with Tenant for a TIFA with the City of Boston.

(f) To the extent the Finish Work Allowance as increased by the I3 Amount and, if legally possible, the MIP Grant (collectively, the "Governmental Incentives") exceeds the Excess Costs, or any portion of the Governmental Incentives is received

by Landlord after the Tenant has paid all of the Excess Costs such that Tenant would not otherwise receive the benefit of such Governmental Incentives, Landlord shall pay to Tenant such excess following the final reconciliation contemplated by Sections 11.02 and 11.06 of the Work Letter.

[BALANCE OF PAGE HAS BEEN INTENTIONALLY LEFT BLANK.]

IN WITNESS WHEREOF, the undersigned have caused this Lease to be executed as of the day and year first above written.

LANDLORD:

ELEVEN FAN PIER BOULEVARD LLC, a Delaware limited liability company

By: Fan Pier Development LLC, a Delaware limited liability company, its Manager

By: Cornerstone Real Estate Advisers LLC, a Delaware limited liability company, its Manager

By: /s/ David J. Reilly
Name: David J. Reilly
Title: President/Chief Executive Officer

TENANT:

VERTEX PHARMACEUTICALS INCORPORATED, a Massachusetts corporation

By: /s/ Ian F. Smith
Name: Ian F. Smith
Title: Chief Financial Officer

By: /s/ Matthew W. Emmens
Name: Matthew W. Emmens
Title: President & CEO

CERTIFICATION

I, Reshma Kewalramani, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Vertex Pharmaceuticals Incorporated;
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)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b) designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c) evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d) disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer 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: July 30, 2021

/s/ Reshma Kewalramani

Reshma Kewalramani
Chief Executive Officer and President

CERTIFICATION

I, Charles F. Wagner, Jr., certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Vertex Pharmaceuticals Incorporated;
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)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b) designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c) evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d) disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer 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: July 30, 2021

/s/ Charles F. Wagner, Jr.

Charles F. Wagner, Jr.

Executive Vice President and Chief Financial Officer

SECTION 906 CEO/CFO CERTIFICATION

Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (Subsections (a) and (b) of Section 1350, Chapter 63 of Title 18, United States Code) each of the undersigned officers of Vertex Pharmaceuticals Incorporated, a Massachusetts corporation (the "Company"), does hereby certify, to such officer's knowledge, that the Quarterly Report on Form 10-Q for the quarter ended June 30, 2021 (the "Form 10-Q") of the Company fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, and the information contained in the Form 10-Q fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: July 30, 2021

/s/ Reshma Kewalramani

Reshma Kewalramani
Chief Executive Officer and President

Date: July 30, 2021

/s/ Charles F. Wagner, Jr.

Charles F. Wagner, Jr.
Executive Vice President and Chief Financial Officer
