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# UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

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## 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, 2012**

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**

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## 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.)

**130 WAVERLY STREET**  
**CAMBRIDGE, MASSACHUSETTS**  
(Address of principal executive  
offices)

**02139-4242**  
(Zip Code)

**(617) 444-6100**  
(Registrant's telephone number, including area code)

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

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

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

Large accelerated filer

Accelerated filer

Non-accelerated filer   
(Do not check if a  
smaller reporting company)

Smaller reporting company

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**

**215,807,482**



**VERTEX PHARMACEUTICALS INCORPORATED**  
**FORM 10-Q**  
**FOR THE QUARTER ENDED JUNE 30, 2012**

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"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," "INCIVEK" and "KALYDECO" are registered trademarks of Vertex. Other brands, names and trademarks contained in this Quarterly Report on Form 10-Q, including "INCIVO" and "TELAVIC," are the property of their respective owners.

**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,	
	2012	2011	2012	2011
<b>Revenues:</b>				
Product revenues, net	\$ 373,273	\$ 74,535	\$ 748,648	\$ 74,535
Royalty revenues	33,480	10,010	72,461	16,071
Collaborative revenues	11,552	29,879	35,933	97,480
<b>Total revenues</b>	<b>418,305</b>	<b>114,424</b>	<b>857,042</b>	<b>188,086</b>
<b>Costs and expenses:</b>				
Cost of product revenues (Note H)	104,549	5,404	130,467	5,404
Royalty expenses	9,874	3,902	23,167	6,568
Research and development expenses	196,544	173,604	392,915	332,216
Sales, general and administrative expenses	117,514	96,663	228,660	168,186
Restructuring expense	594	741	954	1,501
<b>Total costs and expenses</b>	<b>429,075</b>	<b>280,314</b>	<b>776,163</b>	<b>513,875</b>
<b>Income (loss) from operations</b>	<b>(10,770)</b>	<b>(165,890)</b>	<b>80,879</b>	<b>(325,789)</b>
Interest income	560	202	924	1,604
Interest expense	(4,195)	(6,962)	(8,300)	(18,963)
Change in fair value of derivative instruments	—	(2,220)	—	(7,818)
<b>Income (loss) before provision for income taxes</b>	<b>(14,405)</b>	<b>(174,870)</b>	<b>73,503</b>	<b>(350,966)</b>
Provision for income taxes	20,063	24,448	20,095	24,448
<b>Net income (loss)</b>	<b>(34,468)</b>	<b>(199,318)</b>	<b>53,408</b>	<b>(375,414)</b>
Net income (loss) attributable to noncontrolling interest (Alios)	30,463	(25,249)	26,749	(25,249)
<b>Net income (loss) attributable to Vertex</b>	<b>\$ (64,931)</b>	<b>\$ (174,069)</b>	<b>\$ 26,659</b>	<b>\$ (350,165)</b>
<b>Net income (loss) per share attributable to Vertex common shareholders:</b>				
Basic	\$ (0.31)	\$ (0.85)	\$ 0.13	\$ (1.72)
Diluted	\$ (0.31)	\$ (0.85)	\$ 0.12	\$ (1.72)
<b>Shares used in per share calculations:</b>				
Basic	211,344	204,413	209,681	203,377
Diluted	211,344	204,413	212,957	203,377

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

**Vertex Pharmaceuticals Incorporated**  
**Condensed Consolidated Statements of Comprehensive Income (Loss)**  
**(unaudited)**  
**(in thousands)**

	<u>Three Months Ended</u> <u>June 30,</u>		<u>Six Months Ended</u> <u>June 30,</u>	
	<u>2012</u>	<u>2011</u>	<u>2012</u>	<u>2011</u>
Comprehensive income (loss)	\$ (34,513)	\$ (199,392)	\$ 53,788	\$ (375,054)
Comprehensive income (loss) attributable to noncontrolling interest (Alios)	30,463	(25,249)	26,749	(25,249)
Comprehensive income (loss) attributable to Vertex	<u>\$ (64,976)</u>	<u>\$ (174,143)</u>	<u>\$ 27,039</u>	<u>\$ (349,805)</u>

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

**Vertex Pharmaceuticals Incorporated**  
**Condensed Consolidated Balance Sheets**

(unaudited)

(in thousands, except share and per share amounts)

	June 30, 2012(1)	December 31, 2011(1)
<b>Assets</b>		
Current assets:		
Cash and cash equivalents	\$ 454,061	\$ 475,320
Marketable securities, available for sale	769,273	493,602
Restricted cash and cash equivalents (Alios)	56,024	51,878
Accounts receivable, net	185,618	183,135
Inventories	87,805	112,430
Prepaid expenses and other current assets	40,524	14,889
<b>Total current assets</b>	<b>1,593,305</b>	<b>1,331,254</b>
Restricted cash	34,090	34,090
Property and equipment, net	272,561	133,176
Intangible assets	663,500	663,500
Goodwill	30,992	30,992
Other assets	10,408	11,268
<b>Total assets</b>	<b>\$ 2,604,856</b>	<b>\$ 2,204,280</b>
<b>Liabilities and Shareholders' Equity</b>		
Current liabilities:		
Accounts payable	\$ 59,352	\$ 74,642
Accrued expenses and other current liabilities	271,464	252,299
Accrued interest	3,363	3,363
Deferred revenues, current portion	27,296	45,037
Accrued restructuring expense, current portion	4,681	4,932
Other liabilities, current portion	13,353	—
Income taxes payable (Alios)	201	12,075
<b>Total current liabilities</b>	<b>379,710</b>	<b>392,348</b>
Deferred revenues, excluding current portion	110,072	118,095
Accrued restructuring expense, excluding current portion	20,149	21,381
Convertible senior subordinated notes (due 2015)	400,000	400,000
Deferred tax liability	263,017	243,707
Construction financing obligation	160,291	55,950
Other liabilities, excluding current portion	28,010	7,287
<b>Total liabilities</b>	<b>1,361,249</b>	<b>1,238,768</b>
Commitments and contingencies:		
Redeemable noncontrolling interest (Alios)	37,914	37,036
Shareholders' equity:		
Preferred stock, \$0.01 par value; 1,000,000 shares authorized; none issued and outstanding at June 30, 2012 and December 31, 2011	—	—
Common stock, \$0.01 par value; 300,000,000 shares authorized; 215,434,666 and 209,303,995 shares issued and outstanding at June 30, 2012 and December 31, 2011, respectively	2,133	2,072
Additional paid-in capital	4,424,489	4,200,659
Accumulated other comprehensive loss	(673)	(1,053)
Accumulated deficit	(3,388,176)	(3,414,835)
<b>Total Vertex shareholders' equity</b>	<b>1,037,773</b>	<b>786,843</b>
Noncontrolling interest (Alios)	167,920	141,633
<b>Total shareholders' equity</b>	<b>1,205,693</b>	<b>928,476</b>
<b>Total liabilities and shareholders' equity</b>	<b>\$ 2,604,856</b>	<b>\$ 2,204,280</b>

- (1) Amounts include the assets and liabilities of Vertex's variable interest entity ("VIE"), Alios BioPharma, Inc. ("Alios"). Vertex's interests and obligations with respect to the VIE's assets and liabilities are limited to those accorded to Vertex in its agreement with Alios. See Note C, "Collaborative Arrangements," to these condensed consolidated financial statements for amounts.

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

**Vertex Pharmaceuticals Incorporated**
**Condensed Consolidated Statements of Shareholders' Equity and Noncontrolling Interest**
**(unaudited)**
**(in thousands)**

	<u>Common Stock</u>		<u>Additional Paid-in Capital</u>	<u>Accumulated Other Comprehensive Income (Loss)</u>	<u>Accumulated Deficit</u>	<u>Total Vertex Shareholders' Equity</u>	<u>Noncontrolling Interest (Alios)</u>	<u>Total Shareholders' Equity</u>	<u>Redeemable Noncontrolling Interest (Alios)</u>
	<u>Shares</u>	<u>Amount</u>							
Balance, December 31, 2010	203,523	\$ 2,016	\$ 3,947,433	\$ (1,067)	\$ (3,444,409)	\$ 503,973	\$ —	\$ 503,973	\$ —
Unrealized holding gains on marketable securities				1		1	—	1	
Foreign currency translation adjustment				359		359	—	359	
Net loss					(350,165)	(350,165)	(25,249)	(375,414)	
Issuances of common stock:									
Benefit plans	3,950	39	93,048			93,087	—	93,087	
Stock-based compensation expense			60,294			60,294	—	60,294	
Alios noncontrolling interest upon consolidation						—	130,581	130,581	36,299
Balance, June 30, 2011	<u>207,473</u>	<u>\$ 2,055</u>	<u>\$ 4,100,775</u>	<u>\$ (707)</u>	<u>\$ (3,794,574)</u>	<u>\$ 307,549</u>	<u>\$ 105,332</u>	<u>\$ 412,881</u>	<u>\$ 36,299</u>

	<u>Common Stock</u>		<u>Additional Paid-in Capital</u>	<u>Accumulated Other Comprehensive Income (Loss)</u>	<u>Accumulated Deficit</u>	<u>Total Vertex Shareholders' Equity</u>	<u>Noncontrolling Interest (Alios)</u>	<u>Total Shareholders' Equity</u>	<u>Redeemable Noncontrolling Interest (Alios)</u>
	<u>Shares</u>	<u>Amount</u>							
Balance, December 31, 2011	209,304	\$ 2,072	\$ 4,200,659	\$ (1,053)	\$ (3,414,835)	\$ 786,843	\$ 141,633	\$ 928,476	\$ 37,036
Unrealized holding gains on marketable securities				255		255	—	255	
Foreign currency translation adjustment				125		125	—	125	
Net income					26,659	26,659	26,749	53,408	
Issuances of common stock:									
Benefit plans	6,131	61	163,271			163,332	145	163,477	
Stock-based compensation expense			59,345			59,345	271	59,616	
Tax benefit from equity compensation			1,214			1,214	—	1,214	
Change in liquidation value of redeemable noncontrolling interest						—	(878)	(878)	878
Balance, June 30, 2012	<u>215,435</u>	<u>\$ 2,133</u>	<u>\$ 4,424,489</u>	<u>\$ (673)</u>	<u>\$ (3,388,176)</u>	<u>\$ 1,037,773</u>	<u>\$ 167,920</u>	<u>\$ 1,205,693</u>	<u>\$ 37,914</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,	
	2012	2011
<b>Cash flows from operating activities:</b>		
Net income (loss)	\$ 53,408	\$(375,414)
Adjustments to reconcile net income (loss) to net cash provided by (used in) operating activities:		
Depreciation and amortization expense	17,225	17,567
Stock-based compensation expense	59,067	59,758
Other non-cash based compensation expense	5,469	4,408
Secured notes (due 2012) discount amortization expense	—	9,187
Change in fair value of derivative instruments	—	7,818
Deferred income taxes	19,310	9,330
Write-down of inventories to net realizable value	78,000	—
Other non-cash items, net	130	(223)
Changes in operating assets and liabilities, excluding the effect of the acquisition of a variable interest entity (Alios):		
Accounts receivable, net	(2,483)	(83,714)
Inventories	(34,288)	(52,086)
Prepaid expenses and other current assets	(28,179)	(8,692)
Accounts payable	(15,313)	30,147
Accrued expenses and other liabilities	9,310	995
Excess tax benefit from share-based payment arrangements	(1,214)	—
Accrued restructuring expense	(1,483)	(1,390)
Accrued interest	—	(112)
Income taxes payable (Alios)	(11,874)	15,212
Deferred revenues	(25,764)	(35,614)
Net cash provided by (used in) operating activities	121,321	(402,823)
<b>Cash flows from investing activities:</b>		
Purchases of marketable securities	(777,604)	(135,109)
Sales and maturities of marketable securities	502,188	788,029
Payment for acquisition of a variable interest entity (Alios)	—	(60,000)
Expenditures for property and equipment	(21,698)	(15,281)
Increase in restricted cash	—	(24)
Decrease (increase) in restricted cash and cash equivalents (Alios)	(4,146)	1,477
Increase in other assets	(485)	(350)
Net cash provided by (used in) investing activities	(301,745)	578,742
<b>Cash flows from financing activities:</b>		
Excess tax benefit from share-based payment arrangements	1,214	—
Issuances of common stock from employee benefit plans	158,003	88,673
Payments to redeem a portion of secured notes (due 2012)	—	(50,000)
Net cash provided by financing activities	159,217	38,673
Effect of changes in exchange rates on cash	(52)	406
Net increase (decrease) in cash and cash equivalents	(21,259)	214,998
Cash and cash equivalents—beginning of period	475,320	243,197
Cash and cash equivalents—end of period	\$ 454,061	\$ 458,195
<b>Supplemental disclosure of cash flow information:</b>		
Cash paid for interest	\$ 6,700	\$ 6,812
Capitalization of construction in-process related to financing lease transactions	\$ 104,341	\$ 9,887
Assets acquired under capital lease	\$ 29,072	\$ —

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 ("GAAP").

The condensed consolidated financial statements reflect the operations of (i) the Company, (ii) its wholly-owned subsidiaries and (iii) Alios BioPharma, Inc. ("Alios"), a collaborator that is a variable interest entity (a "VIE") for which the Company is deemed under applicable accounting guidance to be the primary beneficiary. All material intercompany balances and transactions have been eliminated. The Company operates in one segment, pharmaceuticals.

Certain information and footnote disclosures normally included in the Company's annual financial statements have been condensed or omitted. These interim financial statements, in the opinion of management, reflect all normal recurring adjustments (including accruals) necessary for a fair presentation of the financial position and results of operations for the interim periods ended June 30, 2012 and 2011.

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, 2011, which are contained in the Company's Annual Report on Form 10-K for the year ended December 31, 2011 that was filed with the Securities and Exchange Commission (the "SEC") on February 22, 2012 (the "2011 Annual Report on Form 10-K").

*Use of Estimates and Summary of Significant Accounting Policies*

The preparation of condensed consolidated financial statements in accordance with 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. Significant estimates in these condensed consolidated financial statements have been made in connection with the calculation of revenues, inventories, research and development expenses, stock-based compensation expense, restructuring expense, the fair value of intangible assets, noncontrolling interest (Alios), income tax provision, derivative instruments and debt securities. 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.

The Company's significant accounting policies are described in Note A, "Nature of Business and Accounting Policies," in the 2011 Annual Report on Form 10-K.

*Recent Accounting Pronouncements*

For a discussion of recent accounting pronouncements please refer to Note A, "Nature of Business and Accounting Policies—Recent Accounting Pronouncements," in the 2011 Annual Report on

**Vertex Pharmaceuticals Incorporated**

**Notes to Condensed Consolidated Financial Statements (Continued)**

(unaudited)

**A. Basis of Presentation and Accounting Policies (Continued)**

Form 10-K, as supplemented below. The Company did not adopt any new accounting pronouncements during the six months ended June 30, 2012 that had a material effect on the Company's condensed consolidated financial statements.

In the first quarter of 2012, the Company retrospectively adopted amended guidance issued in June 2011 by the Financial Accounting Standards Board ("FASB") that resulted in two separate, but consecutive, statements of operations and comprehensive income (loss) that affected the presentation of the Company's condensed consolidated financial statements.

In July 2012, the FASB issued amended guidance applicable to annual impairment tests of indefinite-lived intangible assets. The FASB added an optional qualitative assessment for determining whether an indefinite-lived intangible asset is impaired. Prior to this guidance, companies were required to perform an annual impairment test that included a calculation of the fair value of the asset and a comparison of that fair value with its carrying value. If the carrying value exceeded the fair value, an impairment was recorded. The amended guidance allows a company the option to perform a qualitative assessment, considering both negative and positive evidence, regarding the potential impairment of the indefinite-lived intangible asset. If, based on the qualitative analysis, the company determines that it is more likely than not that the fair value of such an asset exceeds its carrying value, the company would be permitted to conclude that the indefinite-lived intangible asset was not impaired without a quantitative calculation of the fair value of the asset. Otherwise, the company would perform the quantitative calculation of the fair value and the comparison with the carrying value. This amended guidance will be effective for annual impairment tests performed by the Company for fiscal years beginning on January 1, 2013 and early adoption is permitted.

**B. Product Revenues, Net**

The Company sells its products principally to a limited number of major wholesalers, as well as selected regional wholesalers and specialty pharmacy providers (collectively, its "Distributors"), that subsequently resell the products to patients and health care providers. The Company recognizes net revenues from product sales upon delivery as long as (i) there is persuasive evidence that an arrangement exists between the Company and the Distributor, (ii) collectibility is reasonably assured and (iii) the price is fixed or determinable.

The Company has written contracts with its Distributors and delivery occurs when a shipment of a product is received. The Company evaluates the creditworthiness of each of its Distributors to determine whether revenues can be recognized upon delivery, subject to satisfaction of the other requirements, or whether recognition is required to be delayed until receipt of payment. In order to conclude that the price is fixed or determinable, the Company must be able to (i) calculate its gross product revenues from sales to Distributors and (ii) reasonably estimate its net product revenues. The Company calculates gross product revenues based on the wholesale acquisition cost that the Company charges its Distributors. The Company estimates its net product revenues by deducting from its gross product revenues (a) trade allowances, such as invoice discounts for prompt payment and distributor fees, (b) estimated government and private payor rebates, chargebacks and discounts, such as Medicaid reimbursements, (c) reserves for expected product returns and (d) estimated costs of incentives offered to certain indirect customers, including patients.

**Vertex Pharmaceuticals Incorporated**

**Notes to Condensed Consolidated Financial Statements (Continued)**

**(unaudited)**

**B. Product Revenues, Net (Continued)**

*Trade Allowances:* The Company generally provides invoice discounts on product sales to its Distributors for prompt payment and pays fees for distribution services, such as fees for certain data that Distributors provide to the Company. The payment terms for sales to Distributors generally include a 2% discount for payment within 30 days. The Company expects that, based on its experience, its Distributors will earn these discounts and fees, and deducts the full amount of these discounts and fees from its gross product revenues and accounts receivable at the time such revenues are recognized.

*Rebates, Chargebacks and Discounts:* The Company contracts with Medicaid, other government agencies and various private organizations (collectively, its "Third-party Payors") so that products will be eligible for purchase by, or partial or full reimbursement from, such Third-party Payors. The Company estimates the rebates, chargebacks and discounts it will provide to Third-party Payors and deducts these estimated amounts from its gross product revenues at the time the revenues are recognized. For each product, the Company estimates the aggregate rebates, chargebacks and discounts that it will provide to Third-party Payors based upon (i) the Company's contracts with these Third-party Payors, (ii) the government-mandated discounts applicable to government-funded programs and (iii) information obtained from the Company's Distributors and other third parties regarding the payor mix for such product.

*Product Returns:* The Company estimates the amount of each product that will be returned and deducts these estimated amounts from its gross revenues at the time the revenues are recognized. The Company's Distributors have the right to return unopened unexpired packages beginning six months prior to the labeled expiration date and ending twelve months after the labeled expiration date. Based on the inventory levels held by its Distributors and its distribution model, the Company believes that returns of its products will be minimal.

*Other Incentives:* Other incentives that the Company offers to indirect customers include co-pay mitigation rebates provided by the Company to commercially insured patients who have coverage and who reside in states that permit co-pay mitigation programs. The Company's co-pay mitigation program is intended to reduce each participating patient's portion of the financial responsibility for a product's purchase price to a specified dollar amount. Based upon the terms of the Company's co-pay mitigation programs, the Company estimates average co-pay mitigation amounts for each of its products in order to establish its accruals for co-pay mitigation rebates and deducts these estimated amounts from its gross product revenues at the later of the date (i) the revenues are recognized or (ii) the incentive is offered. The Company's co-pay mitigation rebates are subject to expiration.

## Vertex Pharmaceuticals Incorporated

## Notes to Condensed Consolidated Financial Statements (Continued)

(unaudited)

**B. Product Revenues, Net (Continued)**

The following table summarizes activity in each of the product revenue allowance and reserve categories described above during the six months ended June 30, 2012:

	Trade Allowances	Rebates, Chargebacks and Discounts	Product Returns	Other Incentives	Total
	(in thousands)				
<b>Balance at December 31, 2011</b>	\$ 11,162	\$ 52,659	\$ 340	\$ 5,202	\$ 69,363
Provision related to current period sales	31,619	105,562	486	11,015	148,682
Adjustments related to prior period sales	—	3,225	—	73	3,298
Credits/payments made	(36,763)	(81,650)	(255)	(12,534)	(131,202)
<b>Balance at June 30, 2012</b>	<u>\$ 6,018</u>	<u>\$ 79,796</u>	<u>\$ 571</u>	<u>\$ 3,756</u>	<u>\$ 90,141</u>

**C. Collaborative Arrangements***Janssen Pharmaceutica, N.V.*

In 2006, the Company entered into a collaboration agreement with Janssen Pharmaceutica, N.V. ("Janssen") for the development, manufacture and commercialization of telaprevir, which Janssen began marketing under the brand name INCIVO™ in certain of its territories in September 2011. Under the collaboration agreement, Janssen agreed to be responsible for 50% of the drug development costs incurred under the development program for the parties' territories (North America for the Company, and the rest of the world, other than certain countries in Asia, for Janssen) and has exclusive rights to commercialize telaprevir in its territories including Europe, South America, the Middle East, Africa and Australia.

Janssen pays the Company a tiered royalty averaging in the mid-20% range as a percentage of net sales of INCIVO in Janssen's territories. Janssen is required under the agreement to use diligent efforts to maximize net sales of INCIVO in its territories through its commercial marketing, pricing and contracting strategies. In addition, Janssen is responsible for certain third-party royalties on net sales of INCIVO in its territories.

Janssen made a \$165.0 million up-front license payment to the Company in 2006. The up-front license payment is being amortized over the Company's estimated period of performance under the collaboration agreement. As of June 30, 2012, there were \$49.7 million in deferred revenues related to this up-front license payment that the Company expects to recognize over the remaining estimated period of performance.

Under the collaboration agreement, Janssen agreed to make contingent milestone payments for successful development, approval and launch of telaprevir as a product in its territories. At the inception of the agreement, the Company determined that all of these contingent milestones were substantive and would result in revenues in the period in which the milestone was achieved. The Company has earned \$350.0 million of these contingent milestone payments, including a \$50.0 million milestone payment earned in the first quarter of 2011 in connection with the European Medicines Agency's acceptance of the marketing authorization application for INCIVO. The Company does not expect to receive any further milestone payments under this agreement.

## Vertex Pharmaceuticals Incorporated

## Notes to Condensed Consolidated Financial Statements (Continued)

(unaudited)

## C. Collaborative Arrangements (Continued)

Under the Janssen collaboration agreement, each party incurs internal and external reimbursable expenses related to the telaprevir development program and is reimbursed by the other party for 50% of these expenses. The Company recognizes the full amount of the reimbursable costs it incurs as research and development expenses on its condensed consolidated statements of operations. The Company recognizes the amounts that Janssen is obligated to pay the Company with respect to reimbursable expenses, net of reimbursable expenses incurred by Janssen, as collaborative revenues. In the three and six months ended June 30, 2012 and 2011, Janssen incurred more reimbursable costs than the Company, and the net amounts payable by the Company to reimburse Janssen were recorded as a reduction of collaborative revenues.

Each of the parties is responsible for drug supply in its territories. In the three and six months ended June 30, 2011 and the three months ended March 31, 2012, the Company provided Janssen certain services through the Company's third-party manufacturing network for telaprevir. Reimbursements from Janssen for these manufacturing services were recorded as collaborative revenues.

Janssen may terminate the collaboration agreement upon the later of (i) one year's advance notice and (ii) such period as may be required to assign and transfer to the Company specified filings and approvals. The agreement also may be terminated by either party for a material breach by the other, subject to notice and cure provisions. Unless earlier terminated, the agreement will continue in effect until the expiration of Janssen's royalty obligations, which expire on a country-by-country basis with the last-to-expire patent covering telaprevir. In the European Union, the Company has a patent covering the composition-of-matter of telaprevir that expires in 2021 and expects to obtain extensions to the term of this patent through 2026.

During the three and six months ended June 30, 2012 and 2011, the Company recognized the following revenues attributable to the Janssen collaboration:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2012	2011	2012	2011
	(in thousands)			
Royalty revenues	\$ 27,970	\$ 2,549	\$ 60,854	\$ 2,549
Collaborative revenues:				
Amortized portion of up-front payment	\$ 3,107	\$ 3,107	\$ 6,214	\$ 6,214
Milestone revenues	—	—	—	50,000
Net payment for telaprevir development costs	(927)	(3,108)	(2,066)	(4,253)
Reimbursement for manufacturing services	—	9,059	4,449	13,213
Total collaborative revenues attributable to the Janssen collaboration	\$ 2,180	\$ 9,058	\$ 8,597	\$ 65,174
Total revenues attributable to the Janssen collaboration	\$ 30,150	\$ 11,607	\$ 69,451	\$ 67,723

## Vertex Pharmaceuticals Incorporated

## Notes to Condensed Consolidated Financial Statements (Continued)

(unaudited)

## C. Collaborative Arrangements (Continued)

*Mitsubishi Tanabe Pharma Corporation*

The Company has a collaboration agreement (the "MTPC Agreement") with Mitsubishi Tanabe Pharma Corporation ("Mitsubishi Tanabe") pursuant to which Mitsubishi Tanabe has a fully-paid license to manufacture and commercialize TELAVIC™ (the brand name under which Mitsubishi Tanabe is marketing telaprevir) in Japan and other specified countries in Asia. In September 2011, Mitsubishi Tanabe obtained approval to market TELAVIC in Japan.

The parties entered into the MTPC Agreement in 2004 and amended it in 2009. Pursuant to the MTPC Agreement, Mitsubishi Tanabe provided financial and other support for the development and commercialization of telaprevir, made a \$105.0 million payment in connection with the 2009 amendment of the collaboration agreement and made a \$65.0 million commercial milestone payment in the fourth quarter of 2011 related to the commercialization of TELAVIC in Japan. There are no further milestone payments under this collaboration agreement. Mitsubishi Tanabe is responsible for its own development and manufacturing costs in its territory.

Mitsubishi Tanabe may terminate the MTPC Agreement at any time without cause upon 60 days' prior written notice to the Company. The MTPC Agreement also may be terminated by either party for a material breach by the other, subject to notice and cure provisions. Unless earlier terminated, the MTPC Agreement will continue in effect until the expiration of the last-to-expire patent covering telaprevir in Mitsubishi Tanabe's territories. In Japan, the Company has a patent covering the composition-of-matter of telaprevir that expires in 2021.

The \$105.0 million payment that the Company received in the third quarter of 2009 in connection with the amendment is a nonrefundable, up-front license fee, and revenues related to the 2009 payment were recognized on a straight-line basis over the period of performance of the Company's obligations under the amended agreement. In connection with the amendment to the MTPC Agreement, the Company supplied manufacturing services to Mitsubishi Tanabe, until April 2012, through the Company's third-party manufacturing network for telaprevir. The final \$3.2 million in deferred revenues related to the 2009 up-front license payment was recognized in April 2012.

During the three and six months ended June 30, 2012 and 2011, the Company recognized the following collaborative revenues attributable to the Mitsubishi Tanabe collaboration:

	Three Months Ended		Six Months Ended June 30,	
	June 30, 2012	2011	2012	2011
	(in thousands)			
Amortized portion of up-front payments	\$ 3,186	\$ 9,558	\$ 12,744	\$ 19,116
Milestone revenues	—	182	485	1,394
Payments for manufacturing services	1,659	5,133	5,650	5,848
Total collaborative revenues attributable to the Mitsubishi Tanabe collaboration	<u>\$ 4,845</u>	<u>\$ 14,873</u>	<u>\$ 18,879</u>	<u>\$ 26,358</u>

**Vertex Pharmaceuticals Incorporated**

**Notes to Condensed Consolidated Financial Statements (Continued)**

(unaudited)

**C. Collaborative Arrangements (Continued)**

*Cystic Fibrosis Foundation Therapeutics Incorporated*

In April 2011, the Company entered into an amendment (the "April 2011 Amendment") to its existing collaboration agreement with Cystic Fibrosis Foundation Therapeutics Incorporated ("CFFT") pursuant to which CFFT agreed to provide financial support for (i) development activities for VX-661, a corrector compound discovered under the collaboration, and (ii) additional research and development activities directed at discovering new corrector compounds.

The Company entered into the original collaboration agreement with CFFT in 2004 and amended it several times to, among other things, provide partial funding for its cystic fibrosis drug discovery and development efforts. In 2006, the Company received a \$1.5 million milestone payment from CFFT. There are no additional milestones payable by CFFT to the Company pursuant to the collaboration agreement, as amended. Under the April 2011 Amendment, CFFT agreed to provide the Company with up to \$75.0 million in funding over approximately five years for corrector-compound research and development activities. The Company retains the right to develop and commercialize KALYDECO™ (ivacaftor), VX-809, VX-661 and any other compounds discovered during the course of the research collaboration with CFFT. The Company recognized collaborative revenues from this collaboration of \$4.5 million and \$8.5 million, respectively, during the three and six months ended June 30, 2012 and \$5.9 million during both the three and six months ended June 30, 2011.

In the original agreement, as amended prior to the April 2011 Amendment, the Company agreed to pay CFFT tiered royalties calculated as a percentage, ranging from single digits to sub-teens, of annual net sales of any approved drugs discovered during the research term that ended in 2008, including KALYDECO, VX-809 and VX-661. The April 2011 Amendment provides for a tiered royalty in the same range on net sales of corrector compounds discovered during the research term that began in 2011. The Company also is obligated to make two one-time commercial milestone payments upon achievement of certain sales levels for a potentiator compound such as KALYDECO and two one-time commercial milestone payments upon achievement of certain sales levels for a corrector compound such as VX-809 or VX-661. The Company began marketing KALYDECO in the United States in January 2012 and received approval to begin marketing KALYDECO in the European Union in July 2012.

The Company has royalty obligations to CFFT for each compound commercialized pursuant to this collaboration until the expiration of patents covering that compound. The Company has patents in the United States and European Union covering the composition-of-matter of ivacaftor that expire in 2027 and 2025, respectively, subject to potential patent life extensions. CFFT may terminate its funding obligations under the collaboration, as amended, in certain circumstances, in which case there will be a proportional adjustment to the royalty rates and commercial milestone payments for certain corrector compounds. The collaboration also may be terminated by either party for a material breach by the other, subject to notice and cure provisions.

*Alios BioPharma, Inc.*

License and Collaboration Agreement

On June 13, 2011, the Company entered into a license and collaboration agreement (the "Alios Agreement") with Alios, a privately-held biotechnology company. The Company and Alios are

**Vertex Pharmaceuticals Incorporated**

**Notes to Condensed Consolidated Financial Statements (Continued)**

(unaudited)

**C. Collaborative Arrangements (Continued)**

collaborating on the research, development and commercialization of two HCV nucleotide analogues discovered by Alios, ALS-2158 and ALS-2200, which are designed to act on the HCV polymerase. Alios and the Company began clinical development of these two HCV nucleotide analogues in December 2011. The Company is responsible for all costs related to development and commercialization of the compounds incurred after the effective date of the Alios Agreement, and manufacturing costs for the supply of ALS-2158 and ALS-2200 used after the effective date, and is providing funding to Alios to conduct the Phase 1 clinical trials for ALS-2158 and ALS-2200 and a research program directed to the discovery of additional HCV nucleotide analogues that act on the HCV polymerase.

Under the terms of the Alios Agreement, the Company received exclusive worldwide rights to ALS-2158 and ALS-2200, and has the option to select additional compounds discovered in the research program. The Company paid Alios a \$60.0 million up-front payment, and Alios is eligible to receive research and development milestone payments of up to \$715.0 million if two compounds are approved and commercialized. As of June 30, 2012, Alios had received \$35.0 million of these research and development milestones. Alios also is eligible to receive commercial milestone payments of up to \$750.0 million, as well as tiered royalties on net sales of approved drugs.

The Company may terminate the Alios Agreement (i) upon 30 days' notice to Alios if the Company ceases development after both ALS-2158 and ALS-2200 have experienced a technical failure and/or (ii) upon 60 days' notice to Alios at any time after the Company completes specified Phase 2a clinical trials. The Alios Agreement also may be terminated by either party for a material breach by the other, and by Alios for the Company's inactivity or if the Company challenges certain Alios patents, in each case subject to notice and cure provisions. Unless earlier terminated, the Alios Agreement will continue in effect until the expiration of the Company's royalty obligations, which expire on a country-by-country basis on the later of (a) the date the last-to-expire patent covering a licensed product expires or (b) ten years after the first commercial sale in the country.

Alios is continuing to operate as a separate entity, is engaged in other programs directed at developing novel drugs that are not covered by the Alios Agreement and maintains ownership of the underlying patent rights that are licensed to the Company pursuant to the Alios Agreement. Under applicable accounting guidance, the Company has determined that Alios is a VIE, that Alios is a business and that the Company is Alios' primary beneficiary. The Company based these determinations on, among other factors, the significance to Alios of the two licensed compounds and on the Company's power, through the joint steering committee for the licensed compounds established under the Alios Agreement, to direct the activities that most significantly affect the economic performance of Alios.

Accordingly, the Company consolidated Alios' statements of operations and financial condition with the Company's consolidated financial statements beginning on June 13, 2011. However, the Company's interests in Alios are limited to those accorded to the Company in the Alios Agreement. In particular, the Company did not acquire any equity interest in Alios, any interest in Alios' cash and cash equivalents or any control over Alios' activities that do not relate to the Alios Agreement. Alios does not have any right to the Company's assets except as provided in the Alios Agreement.

The initial consolidation of a VIE that is determined to be a business is accounted for as a business combination. As a result, as of June 13, 2011 the Company recorded all of Alios' assets and



## Vertex Pharmaceuticals Incorporated

## Notes to Condensed Consolidated Financial Statements (Continued)

(unaudited)

## C. Collaborative Arrangements (Continued)

liabilities at fair value on the Company's condensed consolidated balance sheet. The Company continues to consolidate Alios' financial statements by (A) eliminating all intercompany balances and transactions and (B) allocating the noncontrolling interest in Alios between redeemable noncontrolling interest (Alios) and noncontrolling interest (Alios) on the Company's condensed consolidated balance sheet and reflecting net income (loss) attributable to noncontrolling interest (Alios) in the Company's condensed consolidated statement of operations.

Intangible Assets and Goodwill

As of June 30, 2012 and December 31, 2011, the Company had \$250.6 million of intangible assets and \$4.9 million of goodwill related to Alios. The Company tests Alios' intangible assets and goodwill for impairment on an annual basis as of October 1, and more frequently if indicators are present or changes in circumstance suggest that impairment may exist. In connection with each annual impairment assessment and any interim impairment assessment, the Company compares the fair value of the asset as of the date of the assessment with the carrying value of the asset on the Company's condensed consolidated balance sheet. No impairment has been found with respect to these intangible assets or goodwill since the effective date of the collaboration.

Noncontrolling Interest (Alios)

The Company records noncontrolling interest (Alios) on two lines on its condensed consolidated balance sheets. The noncontrolling interest (Alios) is reflected on two separate lines because Alios has both common shareholders and preferred shareholders that are entitled to redemption rights in certain circumstances. The Company records net income (loss) attributable to noncontrolling interest (Alios) on its condensed consolidated statements of operations, reflecting Alios' net income (loss) for the reporting period, adjusted for changes in the fair value of contingent milestone and royalty payments, which are evaluated each reporting period. A summary of net income (loss) attributable to noncontrolling interest (Alios) for the three and six months ended June 30, 2012 and 2011 is as follows:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2012	2011	2012	2011
	(in thousands)			
Loss before provision for income taxes	\$ (4,467)	\$ (801)	\$ (9,491)	\$ (801)
Change in fair value of contingent milestone and royalty payments	56,170	—	55,200	—
Provision for income taxes	(21,240)	(24,448)	(18,960)	(24,448)
Net income (loss) attributable to noncontrolling interest (Alios)	<u>\$ 30,463</u>	<u>\$ (25,249)</u>	<u>\$ 26,749</u>	<u>\$ (25,249)</u>

The Company uses present-value models to determine the estimated fair value of the potential contingent milestone and royalty payments, based on assumptions regarding the probability of achieving the relevant milestones, estimates regarding the time to develop the Alios HCV nucleotide analogues, estimates of future cash flows from potential product sales and assumptions regarding the appropriate discount rates. In the three and six months ended June 30, 2012, the fair value of contingent milestone

## Vertex Pharmaceuticals Incorporated

## Notes to Condensed Consolidated Financial Statements (Continued)

(unaudited)

**C. Collaborative Arrangements (Continued)**

and royalty payments increased by \$56.2 million and \$55.2 million, respectively, primarily because the Company received positive clinical data from a Phase 1 clinical trial evaluating ALS-2200, which increased the probability that Alios will earn future payments from the Company under the Alios Agreement. If the Alios HCV nucleotide analogues continue to advance in clinical development, the Company expects it will record additional increases in the fair value of the contingent milestone and royalty payments in future periods. Any such increase will reduce net income attributable to Vertex in the period of adjustment, and any such reduction may be material.

Alios Balance Sheet Information

The following table summarizes items related to Alios included in the Company's condensed consolidated balance sheets as of June 30, 2012 and December 31, 2011:

	As of June 30, 2012	As of December 31, 2011
	(in thousands)	
Restricted cash and cash equivalents (Alios)	\$ 56,024	\$ 51,878
Prepaid expenses and other current assets	1,952	2,299
Property and equipment, net	1,820	1,925
Intangible assets	250,600	250,600
Goodwill	4,890	4,890
Other assets	145	133
Accounts payable	1,686	4,132
Accrued expenses and other current liabilities	5,647	4,291
Accrued interest	13	13
Income taxes payable (Alios)	201	12,075
Deferred tax liability	135,431	116,121
Other liabilities	762	1,030
Redeemable noncontrolling interest (Alios)	37,914	37,036
Noncontrolling interest (Alios)	167,920	141,633

The Company has recorded Alios' cash and cash equivalents as restricted cash and cash equivalents (Alios) because (i) the Company does not have any interest in or control over Alios' cash and cash equivalents and (ii) the Alios Agreement does not provide for these assets to be used for the development of the assets that the Company licensed from Alios pursuant to the collaboration. Assets recorded as a result of consolidating Alios' financial condition into the Company's condensed consolidated balance sheets do not represent additional assets that could be used to satisfy claims against the Company's general assets.

*Research and Development Funding*

The Company's collaborators funded portions of the Company's research and development programs related to specific drugs, drug candidates and research targets, including telaprevir, VX-661 and research directed toward identifying additional corrector compounds for the treatment of cystic fibrosis. The Company's collaborative revenues, including amortization of up-front license fees and milestone revenues, were \$11.6 million and \$29.9 million in the three months ended June 30, 2012 and

**Vertex Pharmaceuticals Incorporated**

**Notes to Condensed Consolidated Financial Statements (Continued)**

(unaudited)

**C. Collaborative Arrangements (Continued)**

2011, respectively, and \$35.9 million and \$97.5 million in the six months ended June 30, 2012 and 2011, respectively. The Company's research and development expenses allocated to programs in which a collaborator funded at least a portion of the research and development expenses were approximately \$30 million and \$40 million in the three months ended June 30, 2012 and 2011, respectively, and approximately \$66 million and \$64 million in the six months ended June 30, 2012 and 2011, respectively.

**D. Acquisition of ViroChem Pharma Inc.**

On March 12, 2009, the Company acquired 100% of the outstanding equity of ViroChem Pharma Inc. ("ViroChem"), a privately-held biotechnology company based in Canada. As of June 30, 2012 and December 31, 2011, the Company reflected on its condensed consolidated balance sheets \$412.9 million of intangible assets related to VX-222, a non-nucleoside HCV polymerase inhibitor that it added to its HCV drug development portfolio when the Company acquired ViroChem. The Company's condensed consolidated balance sheets as of June 30, 2012 and December 31, 2011 also reflected goodwill of \$26.1 million related to the ViroChem acquisition. Goodwill and VX-222 are tested for impairment on an annual basis as of October 1, and more frequently if indicators are present or changes in circumstance suggest that impairment may exist. No impairment has been found with respect to goodwill or VX-222 since the acquisition date.

A deferred tax liability related to ViroChem of \$127.6 million recorded as of June 30, 2012 and December 31, 2011 primarily relates to the tax effect of future amortization or impairments associated with VX-222, which are not deductible for tax purposes.

**E. Earnings Per Share**

Basic and diluted net income per share attributable to Vertex common shareholders are presented in conformity with the two-class method required for participating securities. Under the two-class method, earnings are allocated to (i) Vertex common shares, excluding shares of restricted stock that have been issued but have not yet vested, and (ii) participating securities, based on their respective weighted-average shares outstanding for the period. Shares of unvested restricted stock have the non-forfeitable right to receive dividends on an equal basis with other outstanding common stock. As a result, these unvested shares of restricted stock are considered participating securities that must be included in the calculation of basic and diluted net income per share attributable to Vertex common shareholders using the two-class method. Potentially dilutive shares result from the assumed exercise of outstanding stock options (the proceeds of which are then assumed to have been used to repurchase outstanding stock using the treasury stock method) and the assumed conversion of convertible notes.

Basic net loss per share attributable to Vertex common shareholders is based upon the weighted-average number of common shares outstanding during the period, excluding restricted stock that has been issued but is not yet vested. Diluted net loss per share attributable to Vertex common shareholders 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 (Continued)

(unaudited)

## E. Earnings Per Share (Continued)

The following table sets forth the computation of basic and diluted net income (loss) per share for the three and six months ended June 30, 2012 and 2011:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2012	2011	2012	2011
(in thousands, except per share amounts)				
<i>Basic net income (loss) attributable to Vertex per common share calculation:</i>				
Net income (loss) attributable to Vertex common shareholders	\$ (64,931)	\$ (174,069)	\$ 26,659	\$ (350,165)
Less: Undistributed earnings allocated to participating securities	—	—	(260)	—
Net income (loss) attributable to Vertex common shareholders— basic	\$ (64,931)	\$ (174,069)	\$ 26,399	\$ (350,165)
Basic weighted-average common shares outstanding	211,344	204,413	209,681	203,377
Basic net income (loss) attributable to Vertex per common share	\$ (0.31)	\$ (0.85)	\$ 0.13	\$ (1.72)
<i>Diluted net income (loss) attributable to Vertex per common share calculation:</i>				
Net income (loss) attributable to Vertex common shareholders	\$ (64,931)	\$ (174,069)	\$ 26,659	\$ (350,165)
Less: Undistributed earnings allocated to participating securities	—	—	(256)	—
Net income (loss) attributable to Vertex common shareholders— diluted	\$ (64,931)	\$ (174,069)	\$ 26,403	\$ (350,165)
Weighted-average shares used to compute basic net income (loss) per common share	211,344	204,413	209,681	203,377
Effect of potentially dilutive securities:				
Stock options	—	—	3,188	—
Other	—	—	88	—
Weighted-average shares used to compute diluted net income (loss) per common share	211,344	204,413	212,957	203,377
Diluted net income (loss) attributable to Vertex per common share	\$ (0.31)	\$ (0.85)	\$ 0.12	\$ (1.72)

## Vertex Pharmaceuticals Incorporated

## Notes to Condensed Consolidated Financial Statements (Continued)

(unaudited)

**E. Earnings Per Share (Continued)**

The Company did not include the securities described in the following table in the computation of the net income (loss) attributable to Vertex per common share calculations because the effect would have been anti-dilutive during each such period:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2012	2011	2012	2011
	(in thousands)			
Stock options	18,771	20,589	10,624	20,589
Convertible senior subordinated notes	8,192	8,192	8,192	8,192
Unvested restricted stock and restricted stock units	2,087	1,971	8	1,971

**F. Fair Value of Financial Instruments**

The fair value of the Company's financial assets and liabilities reflects the Company's estimate of amounts that it would have received in connection with the sale of the assets or paid in connection with the transfer of the liabilities in an orderly transaction between market participants at the measurement date. In connection with measuring the fair value of its assets and liabilities, the Company seeks to maximize the use of observable inputs (market data obtained from sources independent from the Company) and to minimize the use of unobservable inputs (the Company's assumptions about how market participants would price assets and liabilities). The following fair value hierarchy is used to classify assets and liabilities based on the observable inputs and unobservable inputs used in order to value the 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. As of June 30, 2012, the Company's investments were in a money market fund, short-term U.S. Treasury securities and short-term government-sponsored enterprise securities, corporate debt securities and commercial paper.

As of June 30, 2012, all of the Company's financial assets that were subject to fair value measurements were valued using observable inputs. The Company's financial assets valued based on Level 1 inputs consisted of a money market fund, U.S. Treasury securities and government-sponsored enterprise securities. The Company's financial assets valued based on Level 2 inputs consisted of corporate debt securities and commercial paper, which consist of investments in highly-rated

## Vertex Pharmaceuticals Incorporated

## Notes to Condensed Consolidated Financial Statements (Continued)

(unaudited)

## F. Fair Value of Financial Instruments (Continued)

investment-grade corporations. During the three and six months ended June 30, 2012 and 2011, the Company did not record an other-than-temporary impairment charge related to its financial assets. The Company's noncontrolling interest (Alios) includes the fair value of the contingent milestone and royalty payments, which is valued based on Level 3 inputs. Please refer to Note C, "Collaborative Arrangements," for further information.

The following table sets forth the Company's financial assets (excluding Alios' cash equivalents) subject to fair value measurements as of June 30, 2012:

	Fair Value Measurements as of			
	June 30, 2012			
	Total	Fair Value Hierarchy		
Level 1		Level 2	Level 3	
(in thousands)				
Financial assets carried at fair value:				
Cash equivalents:				
Money market funds	\$ 149,094	\$ 149,094	\$ —	\$ —
U.S. Treasury securities	181,221	181,221	—	—
Marketable securities:				
U.S. Treasury securities	114,055	114,055	—	—
Government-sponsored enterprise securities	371,158	371,158	—	—
Commercial paper	229,435	—	229,435	—
Corporate debt securities	54,625	—	54,625	—
Restricted cash	34,090	34,090	—	—
Total	\$ 1,133,678	\$ 849,618	\$ 284,060	\$ —

Alios' cash equivalents of \$53.3 million as of June 30, 2012 consisted of money market funds, which are valued based on Level 1 inputs.

As of June 30, 2012, the Company had \$400.0 million in aggregate principal amount of 3.35% convertible senior subordinated notes due 2015 (the "2015 Notes") on its condensed consolidated balance sheet. At June 30, 2012, these 2015 Notes had a fair value of approximately \$488 million, based on Level 2 inputs.

## Vertex Pharmaceuticals Incorporated

## Notes to Condensed Consolidated Financial Statements (Continued)

(unaudited)

## G. Marketable Securities

A summary of the Company's cash, cash equivalents and marketable securities is shown below:

	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
	(in thousands)			
<b>As of June 30, 2012</b>				
Cash and cash equivalents:				
Cash and money market funds	\$ 272,840	\$ —	\$ —	\$ 272,840
U.S. Treasury securities	181,234	—	(13)	181,221
<b>Total cash and cash equivalents</b>	<b>\$ 454,074</b>	<b>\$ —</b>	<b>\$ (13)</b>	<b>\$ 454,061</b>
Marketable securities:				
U.S. Treasury securities (due within 1 year)	\$ 114,060	\$ 2	\$ (7)	\$ 114,055
Government-sponsored enterprise securities (due within 1 year)	371,170	15	(27)	371,158
Commercial paper (due within 1 year)	229,243	192	—	229,435
Corporate debt securities (due within 1 year)	54,641	—	(16)	54,625
<b>Total marketable securities</b>	<b>\$ 769,114</b>	<b>\$ 209</b>	<b>\$ (50)</b>	<b>\$ 769,273</b>
<b>Total cash, cash equivalents and marketable securities</b>	<b>\$ 1,223,188</b>	<b>\$ 209</b>	<b>\$ (63)</b>	<b>\$ 1,223,334</b>
<b>As of December 31, 2011</b>				
Cash and cash equivalents:				
Cash and money market funds	\$ 362,035	\$ —	\$ —	\$ 362,035
Government-sponsored enterprise securities	113,302	—	(17)	113,285
<b>Total cash and cash equivalents</b>	<b>\$ 475,337</b>	<b>\$ —</b>	<b>\$ (17)</b>	<b>\$ 475,320</b>
Marketable securities:				
U.S. Treasury securities (due within 1 year)	\$ 22,105	\$ 2	\$ —	\$ 22,107
Government-sponsored enterprise securities (due within 1 year)	471,589	8	(102)	471,495
<b>Total marketable securities</b>	<b>\$ 493,694</b>	<b>\$ 10</b>	<b>\$ (102)</b>	<b>\$ 493,602</b>
<b>Total cash, cash equivalents and marketable securities</b>	<b>\$ 969,031</b>	<b>\$ 10</b>	<b>\$ (119)</b>	<b>\$ 968,922</b>

Alios' \$56.0 million and \$51.9 million of cash and money market funds as of June 30, 2012 and December 31, 2011, respectively, recorded on the Company's condensed consolidated balance sheets in "Restricted cash and cash equivalents (Alios)," are not included in the above table.

**Vertex Pharmaceuticals Incorporated****Notes to Condensed Consolidated Financial Statements (Continued)****(unaudited)****H. Inventories**

The following table sets forth the Company's inventories as of June 30, 2012 and December 31, 2011:

	<u>As of June 30,</u> 2012	<u>As of December 31,</u> 2011
	(in thousands)	
Raw materials	\$ 5,075	\$ 32,213
Work-in-process	59,223	47,010
Finished goods	23,507	33,207
Total	<u>\$ 87,805</u>	<u>\$ 112,430</u>

The Company's inventories as of June 30, 2012 consisted of INCIVEK™ and KALYDECO inventory costs and as of December 31, 2011 consisted solely of INCIVEK inventory costs. The Company began capitalizing inventory costs for KALYDECO on January 1, 2012.

The Company values its inventories at the lower of cost or market. The Company determines the cost of its inventories, which includes amounts related to materials and manufacturing overhead, on a first-in, first-out basis. The Company performs an assessment of the recoverability of capitalized inventory during each reporting period, and writes down any excess and obsolete inventories to their net realizable value in the period in which the impairment is first identified.

The field of treatment of HCV infection is highly competitive and characterized by rapid technological advances. In the second quarter of 2012, the Company recorded within cost of product revenues a \$78.0 million lower of cost or market charge for excess and obsolete INCIVEK inventories, which included an accrual for estimated expenses related to the Company's non-cancelable purchase commitments. The charge and corresponding inventory write-down were based on the Company's analysis of its INCIVEK inventory levels as of June 30, 2012 in relation to its commercial outlook for INCIVEK. As part of the analysis, the Company considered, among other factors, (i) recent decreases in demand for INCIVEK and the Company's expectation that demand will decrease further in the second half of 2012, (ii) the potential development by the Company and its competitors of other drugs and combination treatments for HCV infection, (iii) positive results released in the second quarter of 2012 from Phase 2 clinical trials of drug candidates being developed by its competitors and (iv) the recent initiation by the Company's competitors of a number of additional Phase 2 and Phase 3 clinical trials of drug candidates for the treatment of HCV infection.

**I. Fan Pier Leases**

On May 5, 2011, the Company entered into two leases, pursuant to which the Company agreed to lease approximately 1.1 million square feet of office and laboratory space in two buildings (the "Buildings") to be built at Fan Pier in Boston, Massachusetts (the "Fan Pier Leases"). The Company expects to commence lease payments in late 2013 or early 2014, and to make payments for the period ending 15 years from the commencement date. The Company has an option to extend the term of the Fan Pier Leases for an additional ten years.

Because the Company is involved in the construction project, including having responsibility to pay for a portion of the costs of tenant improvements and structural elements of the Buildings, the



**Vertex Pharmaceuticals Incorporated**

**Notes to Condensed Consolidated Financial Statements (Continued)**

**(unaudited)**

**I. Fan Pier Leases (Continued)**

Company is deemed for accounting purposes to be the owner of the Buildings during the construction period. Accordingly, the Company has recorded, as of June 30, 2012 and December 31, 2011, \$159.0 million and \$54.7 million, respectively, of project construction costs incurred by the landlord as an asset and a corresponding financing obligation in "Property and equipment, net" and "Construction financing obligation," respectively, on the Company's condensed consolidated balance sheets.

The Company bifurcates its future lease payments pursuant to the Fan Pier Leases into (i) a portion that is allocated to the Buildings and (ii) a portion that is allocated to the land on which the Buildings are being constructed. Although the Company will not begin making lease payments pursuant to the Fan Pier Leases until the Company occupies the Buildings, the portion of the lease obligations allocated to the land is treated for accounting purposes as an operating lease that commenced in the second quarter of 2011. During the three and six months ended June 30, 2012, the Company recorded \$1.7 million and \$3.3 million, respectively, in expense related to this operating lease. During the three and six months ended June 30, 2011, the Company recorded \$0.6 million in expense related to this operating lease.

Once the construction of the Buildings is completed, the Company will evaluate the Fan Pier Leases in order to determine whether or not the leases meet the criteria for "sale-leaseback" treatment. If the Fan Pier Leases meet the "sale-leaseback" criteria, the Company will remove the asset and the related liability from its condensed consolidated balance sheet and treat the Fan Pier Leases as either operating or capital leases based on the Company's assessment of the accounting guidance. The Company expects that upon completion of construction of the Buildings the Fan Pier Leases will not meet the "sale-leaseback" criteria. If the Fan Pier Leases do not meet "sale-leaseback" criteria, the Company will treat the Fan Pier Leases as a financing obligation and the asset will be depreciated over its estimated useful life.

**J. Convertible Senior Subordinated Notes due 2015**

In September 2010, the Company completed an offering of \$400.0 million in aggregate principal amount of 2015 Notes. This offering resulted in \$391.6 million of net proceeds to the Company. The underwriting discount of \$8.0 million and other expenses of \$0.4 million were recorded as debt issuance costs and are included in other assets on the Company's condensed consolidated balance sheets. The 2015 Notes were issued pursuant to and are governed by the terms of an indenture (as supplemented, the "Indenture").

The 2015 Notes are convertible at any time, at the option of the holder, into common stock at a price equal to approximately \$48.83 per share, or 20.4794 shares of common stock per \$1,000 principal amount of the 2015 Notes, subject to adjustment. The 2015 Notes bear interest at the rate of 3.35% per annum, and the Company is required to make semi-annual interest payments on the outstanding principal balance of the 2015 Notes on April 1 and October 1 of each year. The 2015 Notes mature on October 1, 2015.

Prior to October 1, 2013, if the closing price of the Company's common stock has exceeded 130% of the then applicable conversion price for at least 20 trading days within a period of 30 consecutive trading days, the Company may redeem the 2015 Notes at its option, in whole or in part, at a redemption price equal to 100% of the principal amount of the 2015 Notes to be redeemed. If the

**Vertex Pharmaceuticals Incorporated**

**Notes to Condensed Consolidated Financial Statements (Continued)**

**(unaudited)**

**J. Convertible Senior Subordinated Notes due 2015 (Continued)**

Company elects to redeem the 2015 Notes prior to October 1, 2013, or the holder elects to convert the 2015 Notes into shares of the Company's common stock after receiving notice of such redemption, the Company will be obligated to make an additional payment, payable in cash or, subject to certain conditions, shares of the Company's common stock, so that the Company's total interest payments on the 2015 Notes being redeemed and such additional payment shall equal three years of interest. On or after October 1, 2013, the Company may redeem the 2015 Notes at its option, in whole or in part, at the redemption prices stated in the Indenture plus accrued and unpaid interest, if any, to, but excluding, the redemption date.

Holders may require the Company to repurchase some or all of their 2015 Notes upon the occurrence of certain fundamental changes of Vertex, as set forth in the Indenture, at 100% of the principal amount of the 2015 Notes to be repurchased, plus any accrued and unpaid interest, if any, to, but excluding, the repurchase date.

If a fundamental change occurs that is also a specific type of change of control under the Indenture, the Company will pay a make-whole premium upon the conversion of the 2015 Notes in connection with any such transaction by increasing the applicable conversion rate on such 2015 Notes. The make-whole premium will be in addition to, and not in substitution for, any cash, securities or other assets otherwise due to holders of the 2015 Notes upon conversion. The make-whole premium will be determined by reference to the Indenture and is based on the date on which the fundamental change becomes effective and the price paid, or deemed to be paid, per share of the Company's common stock in the transaction constituting the fundamental change, subject to adjustment.

Based on the Company's evaluation of the 2015 Notes, the Company determined that the 2015 Notes contain a single embedded derivative. This embedded derivative relates to potential penalty interest payments that could be imposed on the Company for a failure to comply with its securities reporting obligations pursuant to the 2015 Notes. This embedded derivative required bifurcation because it was not clearly and closely related to the host instrument. The Company has determined that the value of this embedded derivative was nominal as of September 28, 2010, the issue date of the 2015 Notes, December 31, 2011, and June 30, 2012.

**K. Stock-based Compensation Expense**

The Company issues stock options, restricted stock and restricted stock units with service conditions, which are generally the vesting periods of the awards. The Company also has issued, to certain members of senior management, restricted stock and restricted stock units that vest upon the earlier of the satisfaction of (i) a performance condition or (ii) a service condition, and stock options that vest upon the earlier of the satisfaction of (a) performance conditions or (b) a service condition. In addition, the Company issues shares pursuant to an employee stock purchase plan ("ESPP").

**Vertex Pharmaceuticals Incorporated**
**Notes to Condensed Consolidated Financial Statements (Continued)**
**(unaudited)**
**K. Stock-based Compensation Expense (Continued)**

The effect of stock-based compensation expense during the three and six months ended June 30, 2012 and 2011 was as follows:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2012	2011	2012	2011
	(in thousands)			
Stock-based compensation expense by type of award:				
Stock options	\$ 22,683	\$ 23,903	\$ 40,905	\$ 43,527
Restricted stock and restricted stock units	7,253	6,835	14,539	13,665
ESPP share issuances	1,742	1,523	4,172	3,102
Less stock-based compensation expense capitalized to inventories	(299)	(382)	(549)	(536)
Total stock-based compensation expense included in costs and expenses	<u>\$ 31,379</u>	<u>\$ 31,879</u>	<u>\$ 59,067</u>	<u>\$ 59,758</u>
Stock-based compensation expense by line item:				
Research and development expenses	\$ 19,777	\$ 20,453	\$ 36,981	\$ 39,002
Sales, general and administrative expenses	11,602	11,426	22,086	20,756
Total stock-based compensation expense included in costs and expenses	<u>\$ 31,379</u>	<u>\$ 31,879</u>	<u>\$ 59,067</u>	<u>\$ 59,758</u>

The Company capitalized \$0.3 million and \$0.5 million, respectively, of stock-based compensation expense to inventories, in the three and six months ended June 30, 2012 and \$0.4 million and \$0.5 million, respectively, of stock-based compensation expense to inventories, in the three and six months ended June 30, 2011. All of this stock-based compensation expense was attributable to employees who supported the Company's manufacturing operations for the Company's products.

The following table sets forth the Company's unrecognized stock-based compensation expense, net of estimated forfeitures, as of June 30, 2012 by type of award and the weighted-average period over which that expense is expected to be recognized:

	As of June 30, 2012	
	Unrecognized Expense Net of Estimated Forfeitures (in thousands)	Weighted-average Recognition Period (in years)
Type of award:		
Stock options	\$ 152,789	2.78
Restricted stock and restricted stock units	53,914	2.59
ESPP share issuances	2,298	0.51

## Vertex Pharmaceuticals Incorporated

## Notes to Condensed Consolidated Financial Statements (Continued)

(unaudited)

**K. Stock-based Compensation Expense (Continued)**

The following table summarizes information about stock options outstanding and exercisable at June 30, 2012:

Range of Exercise Prices	Options Outstanding			Options Exercisable	
	Number Outstanding (in thousands)	Weighted-average Remaining Contractual Life (in years)	Weighted-average Exercise Price (per share)	Number Exercisable (in thousands)	Weighted-average Exercise Price (per share)
\$9.07–\$20.00	1,273	3.27	\$ 15.57	1,273	\$ 15.57
\$20.01–\$30.00	1,484	6.79	29.22	1,035	28.99
\$30.01–\$40.00	13,413	7.42	36.11	6,815	35.09
\$40.01–\$50.00	345	8.81	44.28	51	44.59
\$50.01–\$60.00	2,191	9.11	53.14	591	54.73
\$60.01–\$64.30	65	9.89	63.10	—	n/a

**L. September 2009 Financial Transactions***2012 Notes*

In September 2009, the Company sold \$155.0 million in aggregate of secured notes due 2012 (the "2012 Notes") for an aggregate of \$122.2 million pursuant to a note purchase agreement with Olmsted Park S.A. (the "Purchaser"). The 2012 Notes were scheduled to mature on October 31, 2012, subject to earlier mandatory redemption to the extent that specified milestone events set forth in the Company's collaboration with Janssen occurred prior to October 31, 2012. In February 2011, the Company received a milestone payment of \$50.0 million and subsequently redeemed \$50.0 million of 2012 Notes pursuant to their terms. The remaining \$105.0 million of 2012 Notes were redeemed on October 31, 2011, with the proceeds of milestone payments received from Janssen in October 2011. The 2012 Notes contained an embedded derivative related to the potential mandatory redemption or early repayment of the 2012 Notes at the face amount prior to their maturity date. The fair value of this embedded derivative was evaluated quarterly, with changes in the fair value of the embedded derivative resulting in a corresponding loss or gain. The Company recorded quarterly interest expense related to the 2012 Notes using the effective interest rate method.

*Sale of Contingent Milestone Payments*

In September 2009, the Company entered into two purchase agreements with the Purchaser pursuant to which the Company sold its rights to an aggregate of \$95.0 million in contingent milestone payments under the Janssen agreement related to the launch of telaprevir in the European Union, for nonrefundable payments totaling \$32.8 million. The Purchaser received the \$95.0 million in milestone payments from Janssen in the fourth quarter of 2011. The Company determined that this sale of a future revenue stream should be accounted for as a liability. The fair value of the rights sold to the Purchaser pursuant to the purchase agreements was evaluated each reporting period until the payments were received in the fourth quarter of 2011, with changes in the fair value of the derivative instruments based on the probability of achieving the milestones, the timing of achieving the milestones or discount rates resulting in a corresponding gain or loss.

## Vertex Pharmaceuticals Incorporated

## Notes to Condensed Consolidated Financial Statements (Continued)

(unaudited)

**L. September 2009 Financial Transactions (Continued)***Expenses Related to September 2009 Financial Transactions*

The table below sets forth the total expenses related to the September 2009 financial transactions for the three and six months ended June 30, 2012 and 2011:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2012	2011	2012	2011
	(in thousands)			
<b>Expenses and Losses (Gains):</b>				
Interest expense related to 2012 Notes	\$ —	\$ 2,863	\$ —	\$ 10,797
Change in fair value of embedded derivative related to 2012 Notes	—	(18)	—	(1,514)
Change in fair value of free-standing derivatives related to the sale of milestone payments	—	2,238	—	9,332
Total September 2009 financial transaction expenses	<u>\$ —</u>	<u>\$ 5,083</u>	<u>\$ —</u>	<u>\$ 18,615</u>

**M. Sale of HIV Protease Inhibitor Royalty Stream**

In 2008, the Company sold to a third party its rights to receive royalty payments from GlaxoSmithKline plc, net of royalty amounts to be earned by and due to a third party, for a one-time cash payment of \$160.0 million. These royalty payments relate to net sales of HIV protease inhibitors, which had been developed pursuant to a collaboration agreement between the Company and GlaxoSmithKline plc. As of June 30, 2012, the Company had \$87.7 million in deferred revenues related to the one-time cash payment, which it is recognizing over the life of the collaboration agreement with GlaxoSmithKline plc based on the units-of-revenue method. In addition, the Company continues to recognize royalty revenues equal to the amount of the third-party subroyalty and an offsetting royalty expense for the third-party subroyalty payment.

**N. Credit Agreement**

In January 2011, the Company entered into a credit agreement with Bank of America, N.A., as administrative agent and lender. The credit agreement provided for a \$100.0 million revolving credit facility that was unsecured. The Company did not borrow any amount under the credit agreement during its term, which expired on July 6, 2012.

**O. Income Taxes**

For the three months ended June 30, 2012, the Company recorded a benefit from income taxes attributable to Vertex of \$1.2 million. For the six months ended June 30, 2012, the Company recorded a provision for income taxes attributable to Vertex of \$1.1 million. These were due to state income taxes.

For the three and six months ended June 30, 2012, the Company recorded a provision for income taxes attributable to noncontrolling interest (Alios) of \$21.2 million and \$19.0 million, respectively. For the three and six months ended June 30, 2011, the Company recorded a provision for income taxes attributable to noncontrolling interest (Alios) of \$24.4 million related to the estimated income tax

**Vertex Pharmaceuticals Incorporated**

**Notes to Condensed Consolidated Financial Statements (Continued)**

**(unaudited)**

**O. Income Taxes (Continued)**

effect on Alios of Vertex's \$60.0 million up-front payment to Alios. The Company has no liability for taxes payable by Alios. As such, the portion of the income tax provision related to Alios has been allocated to noncontrolling interest (Alios). As of June 30, 2012, Alios had income taxes payable of \$0.2 million and a deferred tax liability of \$135.4 million reflected on the condensed consolidated balance sheet. As of December 31, 2011, Alios had income taxes payable of \$12.1 million and a deferred tax liability of \$116.1 million reflected on the Company's condensed consolidated balance sheet.

As of June 30, 2012 and December 31, 2011, the Company had no material unrecognized tax benefits and no adjustments to liabilities or operations were required. The Company does not expect that its unrecognized tax benefits will materially increase within the next twelve months. The Company did not recognize any material interest or penalties related to uncertain tax positions as of June 30, 2012 and December 31, 2011.

The Company was profitable in 2011 and the six months ended June 30, 2012, but continues to maintain a valuation allowance on its net operating losses and other deferred tax assets because of its extended history of annual losses. The Company's U.S. federal net operating loss carryforwards totaled approximately \$2.7 billion as of December 31, 2011. On a quarterly basis, the Company reassesses the valuation allowance for deferred income tax assets. The Company would consider reversing a significant portion of the valuation allowance upon assessment of certain factors, including (i) a demonstration of sustained profitability and (ii) the support of internal financial forecasts demonstrating the utilization of the net operating loss carryforwards prior to their expiration. If the Company determines that the reversal of all or a portion of the valuation allowance is appropriate, a significant benefit could be recognized against its income tax provision in the period of the reversal.

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 United States before 2007 and any other major taxing jurisdiction for years before 2005, except where the Company has net operating losses or tax credit carryforwards that originated before 2005. The Company currently is under examination by Revenue Quebec for the year ended March 11, 2009 and the year ended December 31, 2007. No adjustments have been reported. The Company is not under examination by any other jurisdictions for any tax year.

The Company intends to reinvest the total amount of its unremitted earnings in the local international jurisdiction or to repatriate the earnings only when tax-effective. As such, the Company has not provided for U.S. federal income taxes on the unremitted earnings of its international subsidiaries. Upon repatriation of those earnings, in the form of dividends or otherwise, the Company would be subject to U.S. federal income taxes (subject to an adjustment for foreign tax credits) and withholding taxes payable to the various foreign countries. Determination of the amount of the unrecognized deferred U.S. federal income tax liability is not practical due to the complexity associated with this hypothetical calculation; however, unrecognized foreign tax credits would be available to reduce some portion of the U.S. federal income tax liability.

**Vertex Pharmaceuticals Incorporated**

**Notes to Condensed Consolidated Financial Statements (Continued)**

**(unaudited)**

**P. Restructuring Expense**

In June 2003, Vertex adopted a plan to restructure its operations to coincide with its increasing internal emphasis on advancing drug candidates through clinical development to commercialization. The restructuring was designed to re-balance the Company's relative investments in research and development to better support the Company's long-term strategy. At that time, the restructuring plan included a workforce reduction, write-offs of certain assets and a decision not to occupy approximately 290,000 square feet of specialized laboratory and office space in Cambridge, Massachusetts under lease to Vertex (the "Kendall Square Lease"). The Kendall Square Lease commenced in January 2003 and has a 15-year term. In the second quarter of 2005, the Company revised its assessment of its real estate requirements and decided to use approximately 120,000 square feet of the facility subject to the Kendall Square Lease (the "Kendall Square Facility") for its operations, beginning in 2006. The remaining rentable square footage of the Kendall Square Facility currently is subleased to third parties.

The restructuring expense incurred in the three and six months ended June 30, 2012 and 2011 relates only to the portion of the Kendall Square Facility that the Company is not occupying and does not intend to occupy for its operations. The remaining lease obligations, which are associated with the portion of the Kendall Square Facility that the Company occupies and uses for its operations, are recorded as rental expense in the period incurred.

In estimating the expense and liability under its Kendall Square Lease obligation, the Company estimated (i) the costs to be incurred to satisfy rental and build-out commitments under the lease (including operating costs), (ii) the lead-time necessary to sublease the space, (iii) the projected sublease rental rates and (iv) the anticipated durations of subleases. The Company uses a credit-adjusted risk-free rate of approximately 10% to discount the estimated cash flows. The Company reviews its estimates and assumptions on at least a quarterly basis, and intends to continue such reviews until the termination of the Kendall Square Lease, and will make whatever modifications the Company believes necessary, based on the Company's best judgment, to reflect any changed circumstances. The Company's estimates have changed in the past, and may change in the future, resulting in additional adjustments to the estimate of the liability. Changes to the Company's estimate of the liability are recorded as additional restructuring expense (credit). In addition, because the Company's estimate of the liability includes the application of a discount rate to reflect the time-value of money, the Company records imputed interest costs related to the liability each quarter. These costs are included in restructuring expense on the Company's condensed consolidated statements of operations.

In each period, the Company records lease restructuring expense attributable to imputed interest related to the restructuring liability. In certain periods, the restructuring expense also reflects the revision of certain key estimates and assumptions about building operating expenses and sublease

## Vertex Pharmaceuticals Incorporated

## Notes to Condensed Consolidated Financial Statements (Continued)

(unaudited)

**P. Restructuring Expense (Continued)**

income. The activities related to the restructuring liability for the three and six months ended June 30, 2012 and 2011 were as follows:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2012	2011	2012	2011
	(in thousands)			
Liability, beginning of the period	\$ 25,473	\$ 28,814	\$ 26,313	\$ 29,595
Cash payments	(3,725)	(3,737)	(7,411)	(7,473)
Cash received from subleases	2,488	2,387	4,974	4,582
Restructuring expense	594	741	954	1,501
Liability, end of the period	<u>\$ 24,830</u>	<u>\$ 28,205</u>	<u>\$ 24,830</u>	<u>\$ 28,205</u>

**Q. 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. There were no material contingent liabilities accrued as of June 30, 2012 or December 31, 2011.

**R. Guarantees**

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 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



**Vertex Pharmaceuticals Incorporated**

**Notes to Condensed Consolidated Financial Statements (Continued)**

**(unaudited)**

**R. Guarantees (Continued)**

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.

The Company entered into an underwriting agreement with Merrill Lynch, Pierce, Fenner & Smith Incorporated dated September 23, 2010 (the "Underwriting Agreement"), relating to the public offering and sale of the 2015 Notes. The Underwriting Agreement requires the Company to indemnify the underwriter against any loss it may suffer by reason of the Company's breach of any representation or warranty relating to the public offering, the Company's failure to perform certain covenants in the Underwriting Agreement, the inclusion of any untrue statement of material fact in the prospectus used in connection with the offering, the omission of any material fact needed to make those materials not misleading and any actions taken by the Company or its representatives in connection with the offering. The representations, warranties, covenants and indemnification provisions in the Underwriting Agreement are of a type customary in agreements of this sort. The Company believes the estimated fair value of this indemnification arrangement is minimal.

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

### Overview

We are in the business of discovering, developing, manufacturing and commercializing small molecule drugs for the treatment of serious diseases. Our two products are INCIVEK™ (telaprevir), which is approved in the United States and Canada for the treatment of adults with genotype 1 hepatitis C virus, or HCV, infection, and KALYDECO™ (ivacaftor), which is approved in the United States and European Union for the treatment of patients six years of age or older with cystic fibrosis, or CF, who have a specific mutation that is referred to as the G551D mutation. Our collaborator, Janssen Pharmaceutica, N.V., or Janssen, markets telaprevir in Europe and its other territories under the brand name INCIVO™, and our collaborator, Mitsubishi Tanabe Pharma Corporation, or Mitsubishi Tanabe, markets telaprevir in Japan under the brand name TELAVIC™. We obtained approval to market KALYDECO in the United States in January 2012 and in the European Union in July 2012.

As of June 30, 2012, we had cash, cash equivalents and marketable securities, excluding Alios' cash and cash equivalents, of \$1.2 billion. In the first and second quarters of 2012, we had net product revenues of \$375.4 million and \$373.3 million, respectively. Our net product revenues from INCIVEK and KALYDECO were \$327.7 million and \$45.5 million, respectively, in the second quarter of 2012. The slight decrease in total net product revenues in the second quarter of 2012 as compared to the first quarter of 2012 was the result of a decrease in INCIVEK net product revenues offset by an increase in KALYDECO net product revenues. We expect these trends to continue with KALYDECO revenues increasing as a result of its recent approval in the European Union and INCIVEK revenues decreasing in future periods. Although our net product revenues in the second quarter of 2012 were similar to our net product revenues in the first quarter of 2012, we incurred a net loss attributable to us in the second quarter of 2012 of \$(64.9) million as compared to net income attributable to us in the first quarter of 2012 of \$91.6 million because we incurred two significant charges in the second quarter of 2012. These charges were \$78.0 million related to excess and obsolete INCIVEK inventories, and \$56.2 million related to an increase in the fair market value of our liabilities pursuant to our Alios collaboration due to positive clinical data we received from a Phase 1 clinical trial evaluating ALS-2200.

We believe that our long-term success will depend on our ability to continue to generate and develop innovative molecules for the treatment of serious diseases. We have ongoing clinical programs involving drug candidates intended for the treatment of HCV infection, CF, rheumatoid arthritis, epilepsy and influenza. Our HCV clinical programs are focused on fulfilling INCIVEK post-marketing commitments to regulatory agencies and on developing all-oral, interferon-free combinations of HCV drugs and drug candidates that have the potential to further improve treatment options available to patients with HCV infection. In July 2012, we announced positive data from a Phase 1 clinical trial evaluating ALS-2200's activity against genotype 1 HCV infection over a seven-day dosing period. In this clinical trial, there was a median 4.54 log<sub>10</sub> reduction in HCV RNA levels in eight treatment-naïve patients after seven days of dosing with 200 mg of ALS-2200 once daily. ALS-2200 was well-tolerated and no patients discontinued due to adverse events. Based on these results, we plan to initiate Phase 2 clinical trials in 2012 to evaluate 12-week all-oral regimens including ALS-2200 in patients with genotype 1 HCV infection, pending discussions with regulatory agencies. In our CF program, we are investigating the use of KALYDECO as a monotherapy in additional populations of patients with CF, and combinations of KALYDECO and our other CF drug candidates, with the goal of expanding the group of patients with CF who can benefit from our medicines. In June 2012, we announced final data from Part 2 of a Phase 2 clinical trial of VX-809 in combination with KALYDECO. We plan to initiate a pivotal clinical program to evaluate KALYDECO in combination with VX-809 in CF patients with two copies of the F508del mutation in the cystic fibrosis transmembrane conductance regulatory, or *CFTR*, gene, pending discussions with regulatory agencies. We expect to continue investing in research

programs directed toward the identification of new drug candidates and to develop and commercialize selected drug candidates that emerge from those programs, alone or with third-party collaborators.

### *Competition*

#### HCV

The field of HCV infection treatment is highly competitive and characterized by rapid technological advances. We and Janssen are competing with Merck & Co., Inc.'s VICTRELIS™ (boceprevir), another HCV protease inhibitor that was approved for sale in the United States and Europe in 2011. Increased competition from currently approved drugs, the introduction of new competitive drugs or drug combinations, adverse information regarding the safety characteristics or efficacy of the drug, significant new information regarding potential future treatment regimens that are being evaluated in clinical trials or enrollment by patients in clinical trials being conducted by us or our competitors could result in abrupt shifts in the HCV market. Several of our competitors are conducting Phase 3 clinical trials evaluating their drug candidates for the treatment of genotype 1 HCV infection. For example, Janssen is evaluating an HCV protease inhibitor, TMC-435, in combination with pegylated-interferon, or peg-IFN, and ribavirin in Phase 3 clinical trials that were initiated in early 2011, and Gilead Sciences, Inc., or Gilead, initiated a Phase 3 clinical trial in June 2012 to evaluate its HCV nucleotide analogue, GS-7977, in combination with peg-IFN and ribavirin. We believe that final data from these Phase 3 clinical trials may become available within the next twelve months and that, if approved, these drugs will compete directly with INCIVEK.

We, along with a number of our competitors, are pursuing development programs involving all-oral combinations of HCV drugs and drug candidates with the goal of developing improved treatment regimens for HCV infection that could render current and future treatment regimens that include the administration of peg-IFN by injection uncompetitive. In particular, we and our competitors, Abbott Laboratories, Bristol-Myers Squibb Company and Gilead, are actively pursuing development of all-oral combination treatment regimens to treat HCV infection. To date, potential all-oral combination treatment regimens have been evaluated in Phase 2 clinical trials involving relatively small numbers of patients. However, we expect that one or more of our competitors may begin registration programs evaluating potential all-oral combination regimens for the treatment of genotype 1 HCV infection in the second half of 2012. While the development and regulatory timelines for these drug candidates are subject to risk and uncertainty, we believe that substantial additional clinical data regarding these drug candidates and potential all-oral treatment regimens will become available in 2012 and 2013 and that one or more all-oral treatment regimens could be commercially available as early as 2014.

#### CF

KALYDECO (ivacaftor) is approved in the United States and the European Union for the treatment of patients with CF six years of age or older who have the G551D mutation on at least one allele of the *CFTR* gene. We are focused on continuing our launch of KALYDECO in the United States and launching KALYDECO in Europe. KALYDECO has received Priority Review from the Therapeutic Product Directorate of Health Canada, and we have submitted a marketing authorization application for KALYDECO to the Therapeutic Goods Administration of Australia. We recently initiated two Phase 3 clinical trials to evaluate KALYDECO as a monotherapy in CF patients with mutations other than the G551D mutation, and are planning a Phase 3 clinical trial of KALYDECO as a monotherapy in CF patients two to five years of age who have a gating mutation in the *CFTR* gene. If these clinical trials are successful, we expect we would obtain approval for the use of KALYDECO in additional populations in 2013 or later.

We are aware of several companies that are engaged in researching and/or developing treatments for CF, including Genzyme Corporation, which has a research program directed at identifying CFTR

corrector compounds. We believe that the programs that could result in drugs that are directly competitive with KALYDECO or the combination treatment regimens that we are developing are several years behind our programs.

In addition to the factors described above, approved drugs continue to be subject to, among other things, numerous regulatory risks, post-approval safety monitoring and risks related to supply chain disruptions.

#### *Drug 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 and can take 10 to 15 years or more. 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. We cannot predict whether or not we will encounter problems with any of our completed, ongoing or planned clinical trials that could cause us or regulatory authorities to delay or suspend the clinical trial. Because 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 relatively abrupt changes in focus and priority as new information becomes available and we gain additional understanding of our ongoing programs and potential new programs, as well as our competitors' programs.

If we believe the data from a completed registration program support approval of a drug candidate, we submit a New Drug Application, or NDA, to the United States Food and Drug Administration, or FDA, requesting approval to market the drug candidate in the United States. We also may seek analogous approvals from comparable regulatory authorities in foreign jurisdictions, such as a marketing authorization in the European Union. 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 foreign 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.

#### *Drug Supply and INCIVEK Inventory Write-down*

We rely on an international network of third parties to manufacture and distribute our products and for supplies of compounds for clinical trials, and we expect that we will continue to rely on third parties to provide these manufacturing services for the foreseeable future. Third-party contract manufacturers, including some in China, supply us with raw materials, and contract manufacturers in the European Union and the United States convert these raw materials into drug substance and convert the drug substance into final dosage form. Establishing and managing this global supply chain requires a significant financial commitment and the creation and maintenance of numerous third-party relationships. Although we believe we effectively manage the business relationships with companies in our supply chain, we do not have complete control over their activities. Also, we have limited flexibility

to adjust our supply of INCIVEK in response to changes in demand, due to the significant lead times required to manufacture INCIVEK.

In the second quarter of 2012, following a periodic assessment of the recoverability of capitalized costs, we recorded within cost of product revenues a \$78.0 million charge for excess and obsolete INCIVEK inventories. Periodic assessments of the recoverability of capitalized costs involve significant estimates and judgments on the part of management. The charge and corresponding inventory write-down were based on our analysis of our INCIVEK inventory levels in relation to our commercial outlook for INCIVEK. As part of the analysis, we considered, among other factors, (i) recent decreases in demand for INCIVEK and our expectation the demand will decrease further in the second half of 2012, (ii) the potential development by us and our competitors of other drugs and combination treatments for HCV infection, (iii) positive results released in the second quarter of 2012 from Phase 2 clinical trials of drug candidates being developed by our competitors and (iv) the recent initiation by our competitors of a number of additional Phase 2 and Phase 3 clinical trials of drug candidates for the treatment of HCV infection. We will continue to evaluate our INCIVEK inventories on a quarterly basis, and future changes in the outlook for commercial sales of INCIVEK, including changes due to future developments with respect to demand for INCIVEK or the advancement or approval of other drugs or combination treatments for HCV infection, could result in additional inventory write-downs and related charges in future periods.

#### *Regulatory Compliance*

Our marketing of pharmaceutical products, which began in May 2011, is subject to extensive and complex laws and regulations. We have a corporate compliance program designed to promote a culture of compliance and to actively identify, prevent and mitigate risk. Among other laws, regulations and standards, we are subject to various U.S. federal and state laws and comparable foreign laws pertaining to health care fraud and abuse, including anti-kickback and false claims statutes, and laws prohibiting the promotion of drugs for unapproved, or off-label, uses. Anti-kickback laws make it illegal for a prescription drug manufacturer to solicit, offer, receive or pay any remuneration in exchange for, or to induce, the referral of business, including the purchase or prescription of a particular drug. False claims laws prohibit anyone from 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 expect to continue to devote substantial resources to maintain, administer and expand these compliance programs globally.

#### *Recent Developments*

### **CF**

#### *KALYDECO—Phase 3 Clinical Trials of KALYDECO Monotherapy*

In June 2012, we initiated a Phase 3 clinical trial to evaluate KALYDECO monotherapy in patients six years of age and older who have the R117H mutation on at least one allele of the *CFTR* gene. In July 2012, we initiated a Phase 3 clinical trial to evaluate KALYDECO monotherapy in patients six years of age and older with non-G551D gating mutations in the *CFTR* gene. In the second half of 2012, we plan to initiate a Phase 3 clinical trial to evaluate KALYDECO monotherapy in patients ages two to five years old with a gating mutation on at least one allele of the *CFTR* gene.

#### *VX-809/KALYDECO—Phase 2 Clinical Trial*

In June 2012, we announced the final data from Part 2 of a Phase 2 clinical trial of VX-809 and KALYDECO. This part of the clinical trial enrolled 109 people with CF ages 18 years and older with one (heterozygous) or two (homozygous) copies of the F508del mutation in the *CFTR* gene, who were

divided into five treatment groups of approximately 20 patients each. Three groups of homozygous patients were randomized to receive VX-809 alone (200mg, 400mg or 600mg) for 28 days and then in combination with KALYDECO (250mg) for an additional 28 days. One group of heterozygous patients received VX-809 alone (600mg) for 28 days and then in combination with KALYDECO (250mg) for an additional 28 days. The placebo group included both homozygous and heterozygous patients.

The data from this Phase 2 clinical trial of VX-809 and KALYDECO showed statistically significant improvements in lung function, percent predicted forced expiratory volume in one second, or FEV<sub>1</sub>, in each of the homozygous treatment groups compared to placebo from Day 28 to Day 56. The greatest improvements in lung function were observed in patients who received 600mg of VX-809, the highest dose evaluated in this clinical trial, in combination with KALYDECO. Most adverse events observed during the 56-day clinical trial were mild to moderate in severity across all treatment groups and similar between treatment and placebo groups. We are preparing to initiate a pivotal clinical trial program, which is expected to evaluate VX-809 (600mg) in combination with KALYDECO (250mg) in homozygous patients and begin in early 2013, pending discussions with regulatory agencies.

Lung Function

Homozygous patients treated with the highest dose of VX-809 (600mg) in combination with KALYDECO from Day 28 to Day 56 experienced a mean absolute improvement in lung function of 8.6 percentage points compared to placebo (p<0.001) and a mean absolute improvement of 6.1 percentage points within group (p<0.001). The following table sets forth the mean absolute change in percent predicted FEV<sub>1</sub> for homozygous patients who received the highest dose of VX-809 and patients for the placebo treatment arm:

	Day 0 to Day 28	Day 28 to Day 56
<b>Placebo, including homozygous and heterozygous patients, within group</b>	-0.9 (p=0.54)	-2.5 (p=0.08)
<b>VX-809 alone (600mg; QD) for 28 days followed by the addition of KALYDECO (250mg, q12h) for 28 days within group</b>	-2.9 (p=0.07)	+6.1 (p<0.001)
<b>VX-809 alone (600mg; QD) for 28 days followed by the addition of KALYDECO (250mg, q12h) for 28 days compared to placebo</b>	-2.0 (p=0.36)	+8.6 (p<0.001)

The following table sets forth the percentage of patients who received the highest dose of VX-809 and percentage of patients in the placebo group who experienced absolute improvements in lung function of 5 percentage points or more and 10 percentage points or more during the periods from Day 0 to Day 28 and from Day 28 to Day 56:

	Day 0 to Day 28		Day 28 to Day 56	
	Placebo	VX-809 (600mg) monotherapy	Placebo	VX-809 (600mg) and KALYDECO (250mg)
<sup>3</sup> 5 percentage point absolute improvement FEV <sub>1</sub>	13.0% (3/23)	10.0% (2/20)	9.5% (2/21)	55.0% (11/20)
<sup>3</sup> 10 percentage point absolute improvement FEV <sub>1</sub>	4.3% (1/23)	5.0% (1/20)	0.0% (0/21)	25.0% (5/20)

From Day 0 to Day 56, patients receiving VX-809 (600mg) and KALYDECO experienced a mean absolute improvement in lung function of 6.7 percentage points compared to placebo (p=0.002) and a 3.4 percentage point improvement within group (p=0.03). Patients receiving placebo experienced a mean absolute decline in lung function of 3.3 percentage points (p=0.03) over the same time period.

### Sweat Chloride

The two primary endpoints in this clinical trial were safety and change in sweat chloride from Day 28 to Day 56 compared to placebo. Although not a clinically validated endpoint, a reduction in sweat chloride is considered to be a biomarker of improved CFTR function in the skin. There was no decrease in sweat chloride among those receiving placebo from Day 0 to Day 28 or from Day 28 to Day 56. In homozygous patients treated with 600mg of VX-809 alone for 28 days, there was a statistically significant mean decrease in sweat chloride of 6.4 mmol/L compared to placebo ( $p=0.01$ ). In these patients, an additional mean decrease in sweat chloride of 3.7 mmol/L compared to placebo was observed with combination treatment between Day 28 and Day 56, which was not statistically significant.

A statistically significant reduction in sweat chloride was observed from Day 0 to Day 28 in homozygous patients treated with VX-809 (200mg, 400mg) alone compared to patients who received placebo, and additional reductions in sweat chloride were observed with the combination treatment between Day 28 and Day 56, but these reductions were not statistically significant.

### Heterozygous patients

In heterozygous patients who received 600mg of VX-809 in combination with KALYDECO, there was a mean absolute improvement in lung function from Day 28 to Day 56 compared to placebo. This improvement in lung function was smaller than the improvement seen in homozygous patients receiving 600mg of VX-809 in combination with KALYDECO. Based on these data, we plan to conduct additional clinical studies of VX-809 and KALYDECO in heterozygous patients.

### Safety

VX-809 was generally well tolerated alone and in combination with KALYDECO. The most common adverse events were pulmonary in nature. Most adverse events were mild to moderate in severity and similar between treatment and placebo groups. The rate of serious adverse events was also similar between treatment and placebo groups.

### *VX-661/KALYDECO*

A Phase 2 clinical trial of VX-661, a second CFTR corrector being evaluated in combination with KALYDECO for patients with CF homozygous for the F508del mutation, is ongoing, with final data expected in 2013.

### **HCV**

#### *Alios Nucleotide Analogues*

In July 2012, we announced positive results from a Phase 1 clinical trial that evaluated the safety and tolerability of single ascending doses of ALS-2200 in healthy volunteers, and the safety, tolerability and effects on viral kinetics of multiple ascending doses of ALS-2200 in treatment-naïve patients with genotype 1 HCV infection. In this clinical trial, patients with HCV infection dosed with ALS-2200 had a dose-dependent, consistent and rapid decline in HCV RNA levels. In the treatment group in which patients with genotype 1 HCV infection received seven days of dosing with 200 mg of ALS-2200 once

daily, there was a median 4.54 log<sub>10</sub> reduction in HCV RNA levels at the end of the dosing period. The results from each of the dose groups in this clinical trial are included in the following table:

<b>Dose Group</b>	<b>Number of Patients(1)</b>	<b>Median Baseline HCV RNA levels (Log<sub>10</sub> IU/mL) (Min, Max)</b>	<b>Median Change From Baseline After 3 Days of Treatment (Log<sub>10</sub> IU/mL) (Min, Max)</b>	<b>Median Change From Baseline After 7 Days of Treatment (Log<sub>10</sub> IU/mL) (Min, Max)</b>
<b>Placebo</b>	8	6.30 (5.70, 6.90)	0.13 (-0.34, 1.22)	0.11 (-0.28, 0.66)
<b>ALS-2200</b> alone (15mg; once daily) for seven days	8	6.11 (5.46, 7.00)	-0.49 (-0.20, -0.99)	-0.97 (-0.17, -1.59)
<b>ALS-2200</b> alone (50mg; once daily) for seven days	8	6.19 (5.73, 7.21)	-1.83 (-1.41, -2.20)	-3.02 (-2.21, -3.57)
<b>ALS-2200</b> alone (100mg; once daily) for seven days(2)	8	6.49 (5.67, 7.00)	-2.60 (-1.81, -3.78)	-3.95 (-3.39, -4.51)
<b>ALS-2200</b> alone (200mg; once daily) for seven days(3)	8	6.18 (5.66, 6.72)	-3.85 (-2.87, -4.17)	-4.54 (-3.81, -5.08)

- (1) Of the patients with HCV infection in the ALS-2200 treatment groups, two had genotype 1a HCV infection, 29 had genotype 1b HCV infection and one patient's HCV genotype 1 subtype was not able to be determined.
- (2) One patient had an HCV RNA level below the limit of detection (Roche COBAS Taqman HCV test, Version 2) during the clinical trial.
- (3) Four patients had HCV RNA levels below the limit of quantification (<LOQ = < 25 IU/mL) during the clinical trial.

In this clinical trial, ALS-2200 was well-tolerated. There were no serious adverse events observed in patients dosed with ALS-2200 and no patients discontinued due to adverse events.

Based on these results, we plan to initiate Phase 2 clinical trials in 2012 to evaluate 12-week all-oral regimens incorporating ALS-2200 in patients with genotype 1 HCV infection, pending discussions with regulatory agencies. We expect these Phase 2 clinical trials to include a clinical trial evaluating ALS-2200 in combination with INCIVEK and a clinical trial evaluating ALS-2200 in combination with ribavirin.

We also are conducting a Phase 1 clinical trial to evaluate the safety, tolerability and effects on viral kinetics of ALS-2158, a second HCV nucleotide analogue that we are developing in collaboration with Alios. Data from this Phase 1 clinical trial are expected in the next few months.

#### *INCIVEK*

We have an ongoing pivotal clinical trial evaluating whether treatment with INCIVEK can be effectively reduced to twice-daily (BID) dosing instead of three-times-daily dosing. We expect to obtain data from this clinical trial in the second half of 2012 and, if supported by the data, plan to submit this revised dosing schedule to the FDA as part of a supplemental NDA. To fulfill post-marketing commitments, we also have several additional clinical trials ongoing to evaluate patients co-infected with HCV and HIV, patients with recurrent HCV infection following a liver transplant and African American patients who were not cured with a prior treatment of peg-IFN and ribavirin.

#### *VX-222*

In June 2012, we initiated a Phase 2 clinical trial that is expected to enroll approximately 60 patients with genotype 1a HCV infection. This clinical trial is evaluating an all-oral treatment regimen of INCIVEK, VX-222 and ribavirin with treatment regimens as short as 12 weeks.



## **Rheumatoid Arthritis**

We are enrolling patients with moderate to severe rheumatoid arthritis in a Phase 2b clinical trial evaluating once-daily and twice-daily doses of VX-509 over a six-month dosing period. We expect to enroll approximately 350 patients in this clinical trial. VX-509 is being evaluated in combination with methotrexate, a commonly prescribed disease-modifying antirheumatic drug that frequently is used in combination with other rheumatoid arthritis drugs. We also are preparing to initiate additional clinical trials of VX-509 in other immune-mediated inflammatory diseases beginning in early 2013.

## **Influenza**

We expect data in the second half of 2012 from an ongoing Phase 2 clinical trial of VX-787 that is expected to enroll approximately 140 healthy volunteers who are being infected with live influenza virus as part of this clinical trial. We are evaluating VX-787 as a potential treatment for influenza A, including recent H1 (pandemic) and H5 (avian) influenza strains.

**Results of Operations—Three and Six Months Ended June 30, 2012 Compared with Three and Six Months Ended June 30, 2011**

	Three Months Ended June 30,		Increase/	Increase/	Six Months Ended June 30,		Increase/	Increase/
	2012	2011	(Decrease)	(Decrease)	2012	2011	(Decrease)	(Decrease)
	(in thousands)		\$	%	(in thousands)		\$	%
Revenues	\$ 418,305	\$ 114,424	\$ 303,881	266%	\$ 857,042	\$ 188,086	\$ 668,956	356%
Operating costs and expenses	429,075	280,314	148,761	53%	776,163	513,875	262,288	51%
Other loss, net	23,698	33,428	(9,730)	(29)%	27,471	49,625	(22,154)	(45)%
Net income (loss) attributable to noncontrolling interest (Alios)	30,463	(25,249)	n/a	n/a	26,749	(25,249)	n/a	n/a
Net income (loss) attributable to Vertex	\$ (64,931)	\$ (174,069)	\$ (109,138)	(63)%	\$ 26,659	\$ (350,165)	n/a	n/a

**Net Income (Loss) Attributable to Vertex**

In the second quarter of 2012, we had a net loss attributable to Vertex of \$(64.9) million as compared to a net loss attributable to Vertex of \$(174.1) million in the second quarter of 2011. Our total revenues increased significantly in the second quarter of 2012 compared to the second quarter of 2011 due to a \$298.7 million increase in our net product revenues and a \$23.5 million increase in our royalty revenues, partially offset by an \$18.3 million decrease in our collaborative revenues. Our operating costs and expenses increased from \$280.3 million, including \$31.9 million of stock-based compensation expense, in the second quarter of 2011 to \$429.1 million, including \$31.4 million of stock-based compensation expense, in the second quarter of 2012. The increase in operating expenses was primarily due to a \$99.1 million increase in cost of product revenues, a \$22.9 million increase in research and development expenses and a \$20.9 million increase in sales, general and administrative expenses. The cost of product revenues increased in the second quarter of 2012 as compared to the same period in 2011 because of the increase in net product revenues of \$298.7 million and because we recorded a \$78.0 million charge in the second quarter of 2012 for excess and obsolete INCIVEK inventories. In addition, the \$56.2 million increase in the fair value of the contingent milestone payments and royalties payable by us to Alios increased the net loss attributable to Vertex in the second quarter of 2012 dollar-for-dollar. The fair value of these contingent milestone and royalty payments increased because the positive data from a Phase 1 clinical trial of ALS-2200 made it more likely that these payments will become due from us to Alios.

In the six months ended June 30, 2012, we had net income attributable to Vertex of \$26.7 million as compared to a net loss attributable to Vertex of \$(350.2) million in the six months ended June 30, 2011. Our total revenues increased significantly in the first half of 2012 compared to the first half of 2011 due to a \$674.1 million increase in our net product revenues and a \$56.4 million increase in our royalty revenues, partially offset by a \$61.5 million decrease in our collaborative revenues. Our operating costs and expenses increased from \$513.9 million, including \$59.8 million of stock-based compensation expense, in the first half of 2011 to \$776.2 million, including \$59.1 million of stock-based compensation expense, in the first half of 2012. The increase in operating expenses was primarily due to a \$125.1 million increase in cost of product revenues, which included the \$78.0 million charge in the second quarter of 2012 for excess and obsolete INCIVEK inventories, as well as a \$60.7 million increase in research and development expenses and a \$60.5 million increase in sales, general and administrative expenses. In addition, a \$55.2 million increase in the fair value of the contingent

milestones and royalties payable by us to Alios decreased the net income attributable to Vertex in the first half of 2012 dollar-for-dollar.

### Net Income (Loss) Attributable to Vertex per Diluted Share

Net loss attributable to Vertex was \$(0.31) and \$(0.85), respectively, per diluted share in the three months ended June 30, 2012 and 2011. Net income attributable to Vertex was \$0.12 per diluted share in the six months ended June 30, 2012 compared to a net loss attributable to Vertex of \$(1.72) per diluted share in the six months ended June 30, 2011. The \$78.0 million charge in the second quarter of 2012 for excess and obsolete INCIVEK inventories affected net income (loss) attributable to Vertex per diluted share, net of tax, by \$0.36 for the three and six months ended June 30, 2012, resulting in a net loss attributable to Vertex per diluted share in the second quarter of 2012 and reducing net income attributable to Vertex per diluted share in the first half of 2012.

### Revenues

	Three Months Ended June 30,		Increase/ (Decrease)	Increase/ (Decrease)	Six Months Ended June 30,		Increase/ (Decrease)	Increase/ (Decrease)
	2012	2011	\$	%	2012	2011	\$	%
	(in thousands)				(in thousands)			
Product revenues, net	\$ 373,273	\$ 74,535	\$ 298,738	401%	\$ 748,648	\$ 74,535	\$ 674,113	904%
Royalty revenues	33,480	10,010	23,470	234%	72,461	16,071	56,390	351%
Collaborative revenues	11,552	29,879	(18,327)	(61)%	35,933	97,480	(61,547)	(63)%
Total revenues	<u>\$ 418,305</u>	<u>\$ 114,424</u>	<u>\$ 303,881</u>	266%	<u>\$ 857,042</u>	<u>\$ 188,086</u>	<u>\$ 668,956</u>	356%

### Product Revenues, Net

	Three Months Ended June 30,		Six Months Ended June 30,	
	2012	2011	2012	2011
	(in thousands)			
Product revenues, net				
INCIVEK	\$ 327,739	\$ 74,535	\$ 684,666	\$ 74,535
KALYDECO	45,534	—	63,982	—
Total product revenues, net	<u>\$ 373,273</u>	<u>\$ 74,535</u>	<u>\$ 748,648</u>	<u>\$ 74,535</u>

Our net product revenues in three and six months ended June 30, 2012 increased substantially from our net product revenues in the three and six months ended June 30, 2011. Revenues in the 2012 periods included revenues from both INCIVEK, which was approved by the FDA in May 2011, and KALYDECO, which was approved by the FDA in January 2012. Our net product revenues in the comparable periods in 2011 consisted of net product revenues for INCIVEK for the period from its approval on May 23, 2011 through June 30, 2011.

Our net product revenues of \$373.3 million in the second quarter of 2012 were slightly less than our net product revenues of \$375.4 million in the first quarter of 2012, as a \$27.1 million increase in net product revenues from KALYDECO was offset by a \$29.2 million decrease in net product revenues from INCIVEK. The decrease in INCIVEK net product revenues was the result of lower sales volumes partially offset by a seven percent increase in the wholesale acquisition price of INCIVEK in the United States that became effective on April 1, 2012. We expect that INCIVEK net product revenues will decrease in the second half of 2012 in comparison to the first half of 2012 due to competitive pressures, and that this decrease will be partially offset by an expected increase in KALYDECO net product revenues.

## Royalty Revenues

The increases in our royalty revenues in the second quarter and first half of 2012 as compared to the comparable periods in 2011 were due to royalty revenues recognized from sales of INCIVO by Janssen. INCIVO was approved in the European Union in September 2011, and we recognized \$28.0 million and \$60.9 million, respectively, of royalty revenues from Janssen in the second quarter and first half of 2012. Royalty revenues from Janssen decreased by \$4.9 million from \$32.9 million in the first quarter of 2012 to \$28.0 million in the second quarter of 2012. Mitsubishi Tanabe's license to market telaprevir in Japan is fully paid.

We recognized royalty revenues related to sales by GlaxoSmithKline plc of Lexiva/Telzir, an HIV protease inhibitor that was discovered and developed pursuant to our collaboration with GlaxoSmithKline, of \$5.5 million and \$7.5 million, respectively, in the second quarter of 2012 and 2011, and \$11.6 million and \$13.5 million, respectively, in the first half of 2012 and 2011. We sold our rights to these HIV royalties in 2008 for a one-time cash payment of \$160.0 million.

## Collaborative Revenues

Our collaborative revenues have fluctuated significantly on an annual and quarterly basis. This variability has been due to, among other things, (i) the achievement of significant milestone revenues in 2011, (ii) the April 2011 amendment to our collaboration agreement with the Cystic Fibrosis Foundation Therapeutics Incorporated, or CFFT, which began providing us additional research and development support in April 2011 and (iii) variable revenues we received for providing services to Janssen and Mitsubishi Tanabe through our third-party manufacturing network.

The following table summarizes our collaborative revenues for the three and six months ended June 30, 2012 and 2011:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2012	2011	2012	2011
	(in thousands)			
Collaborative revenues:				
Janssen	\$ 2,180	\$ 9,058	\$ 8,597	\$ 65,174
Mitsubishi Tanabe	4,845	14,873	18,879	26,358
CFFT	4,527	5,948	8,457	5,948
Total collaborative revenues	<u>\$ 11,552</u>	<u>\$ 29,879</u>	<u>\$ 35,933</u>	<u>\$ 97,480</u>

Our Janssen collaborative revenues decreased in the second quarter of 2012 as compared to the second quarter of 2011 primarily due to a decrease in revenues from manufacturing services we provided to Janssen through our third-party manufacturing network. Our collaborative revenues from Janssen decreased significantly in the first half of 2012 as compared to the first half of 2011 because we recognized \$50.0 million in milestone revenues under our collaboration agreement with Janssen in the first half of 2011 for which there were no comparable milestone revenues in the first half of 2012. We do not expect to earn any future milestone payments pursuant to our collaboration agreement with Janssen.

In the second quarter of 2012, we recognized the final \$3.2 million of deferred revenues related to a one-time payment of \$105.0 million that we received in 2009 from Mitsubishi Tanabe. From the fourth quarter of 2009 through the first quarter of 2012, we recognized \$9.6 million in collaborative revenues each quarter related to this one-time payment. We do not expect to recognize any future collaborative revenues pursuant to our collaboration agreement with Mitsubishi Tanabe.

## Operating Costs and Expenses

	Three Months Ended June 30,		Increase/ (Decrease)	Increase/ (Decrease)	Six Months Ended June 30,		Increase/ (Decrease)	Increase/ (Decrease)
	2012	2011	\$	%	2012	2011	\$	%
	(in thousands)				(in thousands)			
Cost of product revenues	\$ 104,549	\$ 5,404	\$ 99,145	1,835%	\$ 130,467	\$ 5,404	\$ 125,063	2,314%
Royalty expenses	9,874	3,902	5,972	153%	23,167	6,568	16,599	253%
Research and development expenses	196,544	173,604	22,940	13%	392,915	332,216	60,699	18%
Sales, general and administrative expenses	117,514	96,663	20,851	22%	228,660	168,186	60,474	36%
Restructuring expense	594	741	(147)	(20)%	954	1,501	(547)	(36)%
Total costs and expenses	\$ 429,075	\$ 280,314	\$ 148,761	53%	\$ 776,163	\$ 513,875	\$ 262,288	51%

### Cost of Product Revenues

Our cost of product revenues includes in each period the cost of producing inventories that corresponds to product revenues for the reporting period, plus the third-party royalties payable on our net sales of INCIVEK and KALYDECO. Most of the manufacturing costs of INCIVEK and KALYDECO sold in the periods presented were expensed as research and development expenses in prior periods. In the second quarter of 2012, we recorded within cost of product revenues a \$78.0 million charge for excess and obsolete INCIVEK inventories, which included an accrual for estimated expenses related to our non-cancelable purchase commitments.

### Royalty Expenses

Royalty expenses include third-party royalties payable on net sales of telaprevir by our collaborators and a subroyalty payable to a third party on net sales of Lexiva/Telzir, an HIV protease inhibitor sold by GlaxoSmithKline. Royalty expenses in the three and six months ended June 30, 2012 increased compared to the three and six months ended June 30, 2011 because of the third-party royalties payable on net sales of INCIVO by Janssen.

### Research and Development Expenses

	Three Months Ended June 30,		Increase	Increase	Six Months Ended June 30,		Increase	Increase
	2012	2011	\$	%	2012	2011	\$	%
	(in thousands)				(in thousands)			
Research expenses	\$ 58,495	\$ 51,733	\$ 6,762	13%	\$ 119,488	\$ 103,104	\$ 16,384	16%
Development expenses	138,049	121,871	16,178	13%	273,427	229,112	44,315	19%
Total research and development expenses	\$ 196,544	\$ 173,604	\$ 22,940	13%	\$ 392,915	\$ 332,216	\$ 60,699	18%

Our research and development expenses include internal and external costs incurred for research and development of our drugs and drug candidates. 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, such as the costs of services provided to us by clinical research organizations and other outsourced research, which we do allocate by individual program. All research and development costs for our drugs and drug candidates are expensed as incurred.

To date, we have incurred in excess of \$5.1 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 recent periods, costs related to our HCV and CF programs have represented the largest portion of our development costs. We expect to continue to incur development costs related to the conduct of additional clinical trials to support potential supplemental applications for telaprevir and ivacaftor. If our clinical trials of VX-222 are successful, we could submit an NDA for an all-oral regimen for the treatment of genotype 1 HCV infection as early as the end of 2014. We plan to evaluate a number of additional potential all-oral combination treatment regimens that would include INCIVEK, VX-222, ALS-2200, ALS-2158 and/or ribavirin in order to identify which all-oral combination treatment regimen or regimens to evaluate in Phase 3 clinical trials. Our drug candidates are still in early and mid-stage clinical development and, as a result, any estimates regarding development and regulatory timelines for these drug candidates are highly subjective and subject to change. We cannot make a meaningful estimate when, if ever, these drug candidates, including VX-222 and those we in-licensed from Alios, will generate revenues and cash flows.

### Research Expenses

	Three Months Ended June 30,		Increase	Increase	Six Months Ended June 30,		Increase	Increase
	2012	2011	\$	%	2012	2011	\$	%
	(in thousands)				(in thousands)			
<b>Research Expenses:</b>								
Salary and benefits	\$ 19,007	\$ 17,798	\$ 1,209	7%	\$ 38,822	\$ 35,750	\$ 3,072	9%
Stock-based								
compensation expense	6,714	6,634	80	1%	12,950	12,889	61	0%
Laboratory supplies and								
other direct expenses	10,300	8,258	2,042	25%	22,213	16,047	6,166	38%
Contractual services	5,119	2,730	2,389	88%	10,679	5,744	4,935	86%
Infrastructure costs	17,355	16,313	1,042	6%	34,824	32,674	2,150	7%
<b>Total research expenses</b>	<b>\$ 58,495</b>	<b>\$ 51,733</b>	<b>\$ 6,762</b>	<b>13%</b>	<b>\$ 119,488</b>	<b>\$ 103,104</b>	<b>\$ 16,384</b>	<b>16%</b>

We have maintained a substantial investment in research activities, with increases in each category of research expense in the second quarter and first half of 2012 as compared to the second quarter and first half of 2011. A portion of the increases in research expenses in the 2012 periods as compared to the 2011 periods is attributable to increased expenses incurred by Alios that are consolidated into our research expenses, but that are not reimburseable by us under our collaboration agreement with Alios. These research expenses incurred by Alios increased by \$2.8 million and \$6.7 million, respectively, in the three and six months ended June 30, 2012 compared to the three and six months ended June 30, 2011. We expect to continue to invest in our research programs in an effort to identify additional drug candidates.

### Development Expenses

	Three Months Ended June 30,		Increase/	Increase/	Six Months Ended June 30,		Increase/	Increase/
	2012	2011	(\$)	(%)	2012	2011	(\$)	(%)
	(in thousands)				(in thousands)			
<b>Development Expenses:</b>								
Salary and benefits	\$ 35,040	\$ 31,504	\$ 3,536	11%	\$ 69,145	\$ 61,288	\$ 7,857	13%
Stock-based compensation expense	13,063	13,819	(756)	(5)%	24,031	26,113	(2,082)	(8)%
Laboratory supplies and other direct expenses	9,968	8,391	1,577	19%	19,529	15,740	3,789	24%
Contractual services	52,174	35,316	16,858	48%	99,263	63,807	35,456	56%
Drug supply costs	954	9,680	(8,726)	(90)%	8,976	15,394	(6,418)	(42)%
Infrastructure costs	26,850	23,161	3,689	16%	52,483	46,770	5,713	12%
Total development expenses	<u>\$ 138,049</u>	<u>\$ 121,871</u>	<u>\$ 16,178</u>	13%	<u>\$ 273,427</u>	<u>\$ 229,112</u>	<u>\$ 44,315</u>	19%

Our development expenses increased by \$16.2 million, or 13%, in the second quarter of 2012 as compared to the second quarter of 2011, and by \$44.3 million, or 19%, in the first half of 2012 as compared to the first half of 2011, primarily as a result of increased contractual services expenses related to our ongoing and planned clinical trials.

### Sales, General and Administrative Expenses

	Three Months Ended June 30,		Increase	Increase	Six Months Ended June 30,		Increase	Increase
	2012	2011	(\$)	(%)	2012	2011	(\$)	(%)
	(in thousands)				(in thousands)			
Sales, general and administrative expenses	\$ 117,514	\$ 96,663	\$ 20,851	22%	\$ 228,660	\$ 168,186	\$ 60,474	36%

Sales, general and administrative expenses increased substantially in the second quarter and first half of 2012 as compared to the second quarter and first half of 2011, primarily as a result of increases in workforce and commercial expenses associated with marketing INCIVEK and KALYDECO.

### Restructuring Expense

As of June 30, 2012, our lease restructuring liability was \$24.8 million. In the three months ended June 30, 2012 and 2011, we recorded restructuring expense of \$0.6 million and \$0.7 million, respectively, and in the six months ended June 30, 2012 and 2011, we recorded restructuring expense of \$1.0 million and \$1.5 million, respectively. In the three and six months ended June 30, 2012, we made cash payments of \$3.7 million and \$7.4 million, respectively, against the accrued expense and received \$2.5 million and \$5.0 million, respectively, in sublease rental payments. During the remainder of 2012, we expect to make additional cash payments of \$7.4 million against the accrued expense and to receive \$5.0 million in sublease rental payments.

### Non-operating Items

#### Interest Income

Interest income increased by \$0.4 million to \$0.6 million for the second quarter of 2012 from \$0.2 million for the second quarter of 2011 and decreased by \$0.7 million to \$0.9 million for the first half of 2012 from \$1.6 million for the first half of 2011. Our cash, cash equivalents and marketable securities yielded less than 0.5% on an annual basis in the second quarter of 2012 and first half of 2012.

## Interest Expense

Interest expense decreased by \$2.8 million, or 40%, to \$4.2 million in the second quarter of 2012 from \$7.0 million in the second quarter of 2011, and by \$10.7 million, or 56%, to \$8.3 million in first half of 2012 from \$19.0 million in the first half of 2011. The decrease was the result of decreased interest expense related to our secured notes due 2012, which were redeemed in 2011. During the second half of 2012, we expect that we will incur approximately \$7 million in interest expense related to our convertible senior subordinated notes due 2015, or 2015 Notes.

## Change in Fair Value of Derivative Instruments

In the three and six months ended June 30, 2011, we recorded charges of \$2.2 million and \$7.8 million, respectively, in connection with the embedded and free-standing derivatives associated with our September 2009 financial transactions. In 2011, the contingent milestone payments that were the subject of the September 2009 financial transactions were earned in full. We did not incur any charges related to the September 2009 financial transactions in the first half of 2012 and will not incur any charges related to these financial transactions in future periods.

## Provision for Income Taxes

In the three months ended June 30, 2012, we recorded a benefit from income taxes attributable to Vertex of \$1.2 million. In the six months ended June 30, 2012, we recorded a provision for income taxes attributable to Vertex of \$1.1 million. These were due to state income taxes.

In the three and six months ended June 30, 2012, provisions for income taxes attributable to noncontrolling interest (Alios) of \$21.2 million and \$19.0 million, respectively, were recorded. In the three and six months ended June 30, 2011, we recorded a provision for income taxes attributable to noncontrolling interest (Alios) of \$24.4 million related to the estimated income tax effect on Alios of our \$60.0 million up-front payment to Alios. We have no liability for taxes payable by Alios, and the portion of the income tax provision related to Alios has been allocated to noncontrolling interest (Alios).

## Noncontrolling Interest (Alios)

The net income (loss) attributable to noncontrolling interest (Alios) recorded on our condensed consolidated statements of operations reflects Alios' net income (loss) for the reporting period, as adjusted for changes during the reporting period in the fair value of the contingent milestone payments and royalties payable by us to Alios. The following table summarizes the net income (loss) attributable to noncontrolling interest (Alios) in the three and six months ended June 30, 2012 and 2011:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2012	2011	2012	2011
	(in thousands)			
Net income (loss)	\$ (34,468)	\$ (199,318)	\$ 53,408	\$ (375,414)
Summary of net income (loss) attributable to noncontrolling interest (Alios):				
Operating costs and expenses	\$ (4,646)	\$ (801)	\$ (9,732)	\$ (801)
Other income (expense)	179	—	241	—
Change in fair value of contingent milestone and royalty payments	56,170	—	55,200	—
Provision for income taxes	(21,240)	(24,448)	(18,960)	(24,448)
Net income (loss) attributable to noncontrolling interest (Alios)	\$ 30,463	\$ (25,249)	\$ 26,749	\$ (25,249)
Net income (loss) attributable to Vertex	\$ (64,931)	\$ (174,069)	\$ 26,659	\$ (350,165)



In the three months ended June 30, 2012, the fair value of contingent milestone and royalty payments increased by \$56.2 million primarily because positive data we received from a Phase 1 clinical trial evaluating ALS-2200 made it more likely that these payments will become due from us to Alios. This increase in fair value of these contingent milestone and royalty payments resulted in a corresponding increase in net loss attributable to Vertex in the second quarter of 2012 and a decrease in the net income attributable to Vertex in the first half of 2012. If the Alios HCV nucleotide analogues continue to advance in clinical development, we expect to record additional increases in the fair value of the contingent milestone and royalty payments. Any such increase will reduce net income attributable to Vertex in the period of the adjustment, and any such reduction may be material.

## **LIQUIDITY AND CAPITAL RESOURCES**

We began operating as a cash flow positive company in the second half of 2011. As of June 30, 2012, we had cash, cash equivalents and marketable securities, excluding Alios' cash and cash equivalents, of \$1.2 billion, which was an increase of \$254.4 million from \$968.9 million as of December 31, 2011. This increase principally was due to cash receipts from product and royalty revenues and approximately \$158 million from issuances of common stock from employee benefit plans in the six months ended June 30, 2012, partially offset by cash expenditures we made in the six months ended June 30, 2012 related to, among other things, research and development expenses, sales, general and administrative expenses and milestone payments to Alios.

### *Sources of Liquidity*

We intend to rely on cash flows from product sales as our primary source of liquidity and cash flows from royalties as a secondary source of liquidity. We also generate proceeds from the issuance of common stock under our employee benefit plans. Other possible sources of liquidity include commercial debt, public and private offerings of our equity and debt securities, strategic collaborative agreements that include research and/or development funding, development milestones and royalties on the sales of products, strategic sales of assets or businesses and financial transactions. Our credit facility expired in July 2012.

### *Future Capital Requirements*

We are incurring substantial expenses to commercialize INCIVEK and KALYDECO, while at the same time continuing diversified research and development efforts for our drugs and drug candidates. We may in the future require capital to repay the \$400.0 million in aggregate principal amount of 2015 Notes. The 2015 Notes bear interest at the rate of 3.35% per annum, and we are required to make semi-annual interest payments on the outstanding principal balance of the 2015 Notes on April 1 and October 1 of each year. The 2015 Notes will mature on October 1, 2015 and are convertible, at the option of the holder, into our common stock at a price equal to approximately \$48.83 per share, subject to adjustment, and can be called by us at any time on or after October 1, 2013. In addition, we have substantial lease obligations that will continue through 2028.

Since the third quarter of 2011, our cash flows from INCIVEK/INCIVO and KALYDECO have exceeded our operating expenses, and we expect our cash flows from INCIVEK/INCIVO and KALYDECO 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 INCIVEK/INCIVO and KALYDECO, and the number, breadth, cost and prospects of our discovery and development programs.

*Financing Strategy*

Although we do not have any plans to do so in the near term, we may raise additional capital through public offerings or private placements of our securities, securing new collaborative agreements or other methods of financing. As part of our strategy for managing our capital structure, we have from time to time adjusted the amount and maturity of our debt obligations through new issues, privately negotiated transactions and market purchases, depending on market conditions and our perceived needs at the time. We expect to continue pursuing a general financial strategy that may lead us to undertake one or more additional transactions with respect to our outstanding debt obligations, and the amounts involved in any such transactions, individually or in the aggregate, may be material. We will continue to manage our capital structure and to consider all financing opportunities, whenever they may occur, that could strengthen our long-term liquidity profile. Any capital transaction related to our outstanding debt obligations may or may not be similar to transactions in which we have engaged in the past. 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, 2011, which was filed with the Securities and Exchange Commission, or SEC, on February 22, 2012. 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 is based upon our condensed consolidated financial statements prepared in accordance with generally accepted accounting principles in the United States. 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 three months ended June 30, 2012, 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, 2011, which was filed with the SEC on February 22, 2012.

**RECENT ACCOUNTING PRONOUNCEMENTS**

Refer to Note A, "Basis of Presentation and Accounting Policies—Recent Accounting Pronouncements," in the accompanying notes to the condensed consolidated financial statements. In the first quarter of 2012, we retrospectively adopted amended guidance issued in June 2011 by the Financial Accounting Standards Board that resulted in two separate, but consecutive, statements of operations and comprehensive income (loss) that affected the presentation of our condensed consolidated financial statements. There were no new accounting pronouncements adopted during the three months ended June 30, 2012 that had a material effect on our financial statements.

### **Item 3. Quantitative and Qualitative Disclosures About Market Risk**

As part of our investment portfolio, we own financial instruments that are sensitive to market risk. The investment portfolio is used to preserve our capital until it is required to fund operations, including our research and development activities. None of these market risk-sensitive instruments are held for trading purposes. We do not have derivative financial instruments in our investment portfolio.

#### **Interest Rate Risk**

We invest our cash in a variety of financial instruments, principally securities issued by the U.S. government and its agencies, investment grade corporate bonds and commercial paper, and money market funds. These investments are denominated in U.S. dollars. All of our interest-bearing securities are subject to interest rate risk, and could decline in value if interest rates fluctuate. Substantially all of our investment portfolio consists of marketable securities with active secondary or resale markets to help ensure portfolio liquidity, and we have implemented guidelines limiting the term-to-maturity of our investment instruments. Due to the conservative nature of these instruments, we do not believe that we have a material exposure to interest rate risk.

#### **Foreign Exchange Market Risk**

As a result of our foreign operations, we face exposure to movements in foreign currency exchange rates, primarily the Euro, Swiss Franc, British Pound and Canadian Dollar against the U.S. dollar. The current exposures arise primarily from cash, accounts receivable, intercompany receivables and payables, and calculations of royalties receivable from net sales denominated in foreign currencies. Both positive and negative impacts to our international product sales from movements in foreign currency exchange rates are partially mitigated by the natural, opposite impact that foreign currency exchange rates have on our international operating expenses.

We are considering a foreign currency management program with the objective of reducing the volatility of exchange rate fluctuations on our operating results and to increase the predictability of the foreign exchange impact on forecasted revenues and expenses.

### **Item 4. Controls and Procedures**

#### **Evaluation of Disclosure Controls and Procedures**

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, have concluded that, based on such evaluation, as of June 30, 2012 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, 2012 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

## Part II. Other Information

### Item 1A. Risk Factors

Information regarding risk factors appears in Item 1A of our Annual Report on Form 10-K for the year ended December 31, 2011, which was filed with the SEC on February 22, 2012 as supplemented by Item 1A of our Quarterly Report on Form 10-Q for the quarter ended March 31, 2012, which was filed with the SEC on May 10, 2012. There have been no material changes from the risk factors previously disclosed in that Annual Report on Form 10-K as supplemented by our Quarterly Report on Form 10-Q for the quarter ended March 31, 2012, except:

***In the second quarter of 2012, we recorded a \$78.0 million charge for excess and obsolete INCIVEK inventories, and future adverse changes in the outlook for commercial sales of INCIVEK could result in additional inventory write-downs and related charges.***

In the second quarter of 2012, we recorded a \$78.0 million charge for excess and obsolete INCIVEK inventories. The charge was based on an analysis of our INCIVEK inventory levels in relation to our commercial outlook for INCIVEK. As part of the analysis, we considered, among other factors, (i) recent decreases in demand for INCIVEK and our expectation the demand will decrease further in the second half of 2012, (ii) the potential development by us and our competitors of other drugs and combination treatments for HCV infection, (iii) positive results released in the second quarter of 2012 from Phase 2 clinical trials of drug candidates being developed by our competitors and (iv) the recent initiation by our competitors of a number of additional Phase 2 and Phase 3 clinical trials of drug candidates for the treatment of HCV infection. We will continue to evaluate our INCIVEK inventories on a quarterly basis, and future adverse changes in the outlook for commercial sales of INCIVEK, including changes due to future developments with respect to demand for INCIVEK or the advancement or approval of other drugs or combination treatments for HCV infection, could result in additional inventory write-downs and related charges in future periods, which could be material.

### **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 or incorporate a number of forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended, including statements regarding:

- expectations regarding the amount of, timing of and trends with respect to our revenues, costs and expenses and other gains and losses, including those related to product revenues from sales of INCIVEK and KALYDECO and royalty revenues from sales of INCIVO and to the intangible assets associated with the ViroChem acquisition and the Alios collaboration;
- our expectations regarding development timelines and regulatory authority filings and submissions for VX-222, ALS-2158, ALS-2200, VX-809, VX-661, VX-509 and VX-787;
- our plans to initiate a pivotal program to evaluate VX-809 in combination with KALYDECO, a Phase 3 clinical trial of KALYDECO in patients who are two to five years old and Phase 2 clinical trials of ALS-2200;
- our ability to successfully market INCIVEK and/or KALYDECO or any of our drug candidates if we obtain regulatory approval;
- our expectations regarding the timing and structure of clinical trials of our drugs and drug candidates, including INCIVEK, KALYDECO, VX-222, ALS-2158, ALS-2200, VX-809, VX-661,

VX-509 and VX-787, and the expected timing of our receipt of data from our and our collaborators' ongoing and planned clinical trials;

- the data that will be generated by ongoing and planned clinical trials and the ability to use that data to support regulatory filings, as well as the expected timing of such regulatory filings and resulting potential approvals;
- our beliefs regarding the support provided by clinical trials and preclinical and nonclinical studies of our drug candidates for further investigation, clinical trials or potential use as a treatment;
- the focus of our drug development efforts and our financial and management resources and our plan to continue investing in our diversified research and development programs and to develop and commercialize selected drug candidates that emerge from those programs, alone or with third-party collaborators;
- the establishment, development and maintenance of collaborative relationships;
- potential business development activities;
- our ability to use our research programs to identify and develop new drug candidates to address serious diseases and significant unmet medical needs;
- our estimates regarding obligations associated with a lease of a facility in Kendall Square, Cambridge, Massachusetts; and
- our liquidity and our expectations regarding the possibility of raising additional capital.

Without limiting the foregoing, the words "believes," "anticipates," "plans," "intends," "expects" and similar expressions are intended to identify forward-looking statements. Any or all of our forward-looking statements in this Quarterly Report on Form 10-Q may turn out to be wrong. They can be affected by inaccurate assumptions we might make or by known or unknown risks and uncertainties. Many factors mentioned in our discussion in this Quarterly Report on Form 10-Q will be important in determining future results. Consequently, no forward-looking statement can be guaranteed. Actual future results may vary materially from expected results. We also provide a cautionary discussion of risks and uncertainties under "Risk Factors" in Item 1A of our Annual Report on Form 10-K for the year ended December 31, 2011, which was filed with the SEC on February 22, 2012, and updated and supplemented by "Part II—Item 1A—Risk Factors" of our Quarterly Report on Form 10-Q for the three months ended March 31, 2012 and this Quarterly Report on Form 10-Q. These are factors that we think could cause our actual results to differ materially from expected results. Other factors besides those listed could also adversely affect us. In addition, the forward-looking statements contained herein represent our estimate only as of the date of this filing and should not be relied upon as representing our estimate as of any subsequent date. While we may elect to update these forward-looking statements at some point in the future, we specifically disclaim any obligation to do so to reflect actual results, changes in assumptions or changes in other factors affecting such forward-looking statements.

**Item 2. Unregistered Sales of Equity Securities and Use of Proceeds****Issuer Repurchases of Equity Securities**

The table set forth below shows all repurchases of securities by us during the three months ended June 30, 2012:

<u>Period</u>	<u>Total Number of Shares Purchased</u>	<u>Average Price Paid per Share</u>	<u>Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs</u>	<u>Maximum Number of Shares That May Yet be Purchased under Publicly Announced Plans or Programs</u>
April 1, 2012 to April 30, 2012	15,748	\$ 0.01	—	—
May 1, 2012 to May 31, 2012	11,305	\$ 0.01	—	—
June 1, 2012 to June 30, 2012	60,616	\$ 0.01	—	—

The repurchases were made under the terms of our Amended and Restated 2006 Stock and Option Plan. Under this plan, we award shares of restricted stock to our employees that typically are subject to a lapsing right of repurchase by us. We may exercise this right of repurchase if a restricted stock recipient's service to us is terminated. If we exercise this right, we are required to repay the purchase price paid by or on behalf of the recipient for the repurchased restricted shares, which typically is the par value per share of \$0.01. Repurchased shares are returned to the Amended and Restated 2006 Stock and Option Plan and are available for future awards under the terms of that plan.

**Item 6. Exhibits**

<u>Exhibit No.</u>	<u>Description</u>
10.1	Employment Agreement, dated as of June 11, 2012, between Vertex Pharmaceuticals Incorporated and Kenneth L. Horton.*
10.2	Change of Control Agreement, dated as of June 11, 2012, between Vertex Pharmaceuticals Incorporated and Kenneth L. Horton.*
10.3	Amended and Restated 2006 Stock and Option Plan.*
10.4	Amended and Restated Employee Stock Purchase Plan.*
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 Chief Financial Officer under Section 906 of the Sarbanes-Oxley Act of 2002.
101.INS	XBRL Instance
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

\* Management contract, compensatory plan or agreement.







## EMPLOYMENT AGREEMENT

This Employment Agreement (this "Agreement") is made and entered into as of this 11<sup>th</sup> day of June, 2012, by and between Vertex Pharmaceuticals Incorporated, a Massachusetts corporation (together with its successors and assigns, the "Company"), and Kenneth Horton (the "Executive").

### WITNESSETH

WHEREAS, the Company is employing the Executive as the Company's Executive Vice President, Chief Legal Officer; and

WHEREAS, the Executive has been designated as a member of the Executive Team of the Company;

NOW, THEREFORE, in consideration of the premises and mutual covenants contained herein and for other good and valuable consideration, the receipt of which mutually is acknowledged, the Company and the Executive (each individually a "Party", and together the "Parties") agree as follows:

#### 1. DEFINITIONS.

"Base Salary" shall mean the Executive's base salary in accordance with Section 4 below.

"Board" shall mean the Board of Directors of the Company.

"Cause" shall mean (i) the Executive is convicted of a crime involving moral turpitude, (ii) the Executive commits a material breach of any provision of this Agreement not involving the performance or nonperformance of duties, or (iii) the Executive, in carrying out the Executive's duties, acts or fails to act in a manner that is determined, in the sole discretion of the Board, after written notice of any such act or failure to act and a reasonable opportunity to cure the deficiency has been provided to the Executive, to be (A) willful gross neglect or (B) willful gross misconduct resulting, in either case, in material harm to the Company unless such act, or failure to act, was believed by the Executive, in good faith, to be in the best interests of the Company.

"Change of Control" shall have the meaning set forth in the Change of Control Agreement.

"Change of Control Agreement" shall mean the Change of Control letter agreement between the Company and the Executive dated June 11, 2012.

"Code" shall mean the Internal Revenue Code of 1986, as amended.

"Common Stock" shall mean the common stock of the Company.

"Disability" or "Disabled" shall mean a disability as determined under the Company's long-term disability plan or program in effect at the time the disability first occurs, or if no such plan or program exists at the time of disability, then a "disability" as defined under Section 22(e)(3) of the Code.

"Effective Date" shall mean June 11, 2012.

"Good Reason" shall mean that, without the Executive's consent, one or more of the following events occurs:

- (i) the Executive's Base Salary is decreased unless such reduction is part of an across-the-board proportionate reduction in the salaries of the Company's senior management team; or
- (ii) the office to which the Executive is assigned is relocated to a place 35 or more miles away and such relocation is not at the Executive's request or with the Executive's prior agreement (and other than, for Executives assigned to the Company's principal executive offices, in connection with a change in location of the Company's principal executive offices);

provided that Good Reason shall not exist unless and until within 30 days after the event giving rise to Good Reason under either (i) or (ii) above has occurred, the Executive delivers a written termination notice to the Company stating that an event giving rise to Good Reason has occurred and identifying with reasonable detail the event that the Executive asserts constitutes Good Reason under either (i) or (ii) above and the Company fails or refuses to cure or eliminate the event giving rise to Good Reason on or within 30 days after receiving such notice. To avoid doubt, the termination of the Executive's employment would become effective at the close of business on the thirtieth day after the Company receives the Executive's termination notice, unless the Company cures or eliminates the event giving rise to Good Reason prior to such time.

"Severance Payment" shall mean an amount equal to the sum of the Base Salary in effect on the date of termination of Executive's employment, plus the amount of the Target Bonus for the Executive for the year in which the Executive's employment is terminated; provided, however, that if the Executive terminates the Executive's employment for Good Reason based on a reduction in Base Salary, then the Base Salary to be used in calculating the Severance Payment shall be the Base Salary in effect immediately prior to such reduction in Base Salary.

"Target Bonus" shall mean the target cash bonus for which the Executive is eligible on an annual basis, at a level consistent with the Executive's title and responsibilities, under the Company's bonus program then in effect and applicable to the Company's senior executives generally.

#### 2. TERM OF EMPLOYMENT.

The Company hereby employs the Executive, and the Executive hereby accepts such employment, continuing until termination in accordance with the terms of this Agreement. The period during which the Executive is employed hereunder is referred to in this Agreement as the "term of employment."

#### 3. POSITION.

#### 4. BASE SALARY.

The Executive's annualized Base Salary as of the date of this Agreement is \$465,000, payable in accordance with the regular payroll practices of the Company. The Base Salary shall be reviewed no less frequently than annually, and any changes thereto (which shall thereafter be deemed the Executive's Base Salary) shall be solely within the discretion of the Board.

#### 5. TARGET BONUS PROGRAM/SIGN ON COMPENSATION

(a) **Target Bonus Program:** During the term of employment, the Executive shall be eligible to participate in the Company's Target Bonus program (and other cash incentive compensation programs) applicable to the Company's senior executives, as any such programs are established and modified from time to time by the Board in its sole discretion, and in accordance with the terms of such program.

(b) **Sign-On Stock Option Grants:** the Executive shall be granted a stock option under the Company's 2006 Stock and Option Plan (the "Stock Plan") to purchase 72,000 shares of the Company's common stock at a price equal to the Fair Market Value of Vertex's shares, as defined in the Stock Plan, on the Effective Date. The option will vest and become exercisable as to equal numbers of shares quarterly in arrears over the four year period commencing on the Effective Date, and as otherwise specified herein and in the Stock Plan, and shall be subject to the other terms and conditions specified in a separate grant agreement.

(c) **Sign-On Restricted Stock Grant:** The Executive will purchase, in accordance with the terms of a Restricted Stock Agreement executed and delivered to the Company by the Executive on the Effective Date (the "Grant Date"), 9,667 shares of the Company's Common Stock, at a purchase price per share of \$0.01. The Company will retain the right to repurchase these shares at \$0.01 per share purchase price should the Executive experience a termination of employment, as such term is used in the Stock Plan, but this repurchase right will lapse as to one quarter of the total number of shares on the last calendar day of the anniversary month of hire each year the executive is employed until fully vested, and as otherwise specified herein (including in Section 9(c)) and in the Stock Plan, and shall be subject to the other terms and conditions specified in a separate grant agreement.

#### 6. INCENTIVE COMPENSATION PROGRAMS.

During the term of employment, the Executive shall be eligible to participate in the Company's incentive compensation programs applicable to the Company's senior executives, as such programs may be established and modified from time to time by the Board in its sole discretion.

#### 7. EMPLOYEE BENEFIT PROGRAMS.

During the term of employment, the Executive shall be entitled to participate in all employee welfare and pension benefit plans, programs and/or arrangements offered by the Company to its senior executives, as such plans, programs and arrangements may be amended from time to time, to the same extent and on the same terms applicable to other senior executives. Nothing in this section shall preclude the Company from amending or terminating any of its employee benefit plans, programs or arrangements.

#### 8. VACATION.

During the term of employment, the Executive shall be entitled to paid vacation days each calendar year in accordance with the Company's vacation policy then in effect.

#### 9. TERMINATION OF EMPLOYMENT.

(a) **Termination in Connection with a Change of Control.** To the extent the Executive is entitled, in connection with the Executive's termination of employment, to severance or other benefits under the Change of Control Agreement, the Executive shall not be entitled to corresponding benefits under this Section 9.

(b) **Termination by the Company for Cause; or Termination by the Executive without Good Reason.** If the Company terminates the Executive's employment for Cause, or if the Executive voluntarily terminates the Executive's employment, other than for Good Reason, death or Disability, the term of employment shall end as of the date specified below, and the Executive shall be entitled to the following:

- (i) Base Salary earned by Executive but not paid through the date of termination of Executive's employment under this Section 9(b); and
- (ii) any amounts earned, accrued or owing to the Executive but not yet paid under Sections 5, 6, or 7 above.

Termination by Company for Cause shall be effective as of the date noticed by the Company. Voluntary termination by Executive other than for Good Reason, death or Disability shall be effective upon 90 days' prior written notice to the Company and shall not be deemed a breach of this Agreement.

(c) **Termination by the Company Without Cause; or Termination by the Executive for Good Reason.** If the Executive's employment is terminated by the Company without Cause (other than due to death or Disability), or is terminated by the Executive for Good Reason (in accordance with the notice and cure provisions set forth in the definition of "Good Reason" above), the Executive shall be entitled to the following (provided that, with respect to (iii) and (v) such amounts shall be subject to and in exchange for a general release of all claims against the Company, its subsidiaries, and their officers, directors, agents and representatives, which is executed by Executive and becomes enforceable and non-revocable within 60 days of the date of termination):

- (i) Base Salary earned by Executive but not paid through the date of termination of Executive's employment under this Section 9(c);

- (ii) all incentive compensation awards earned by Executive but not paid prior to the date of termination of Executive's employment under this Section 9(c);
- (iii) a cash payment to the Executive in an amount equal to the Severance Payment, payable within ten days after the execution of a general release and expiration, without revocation, of any applicable revocation periods under the general release, provided that if the 60 day period during which the release is required to become

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effective and irrevocable begins in one calendar year and ends in another calendar year, the Severance Payment shall be made in the second calendar year;

- (iv) any amounts earned, accrued or owing to the Executive but not yet paid under Sections 5, 6 or 7 above;
- (v) if COBRA coverage is elected by the Executive, the Company shall pay the cost of insurance continuation premiums on the Executive's behalf (whether or not covered by COBRA) to continue standard medical, dental and life insurance coverage for the Executive (or the cash equivalent of same in the event the Executive is ineligible for continued coverage) until the earlier of:
  - (A) the date 12 months after the date the Executive's employment is terminated; or
  - (B) the date, or dates, on which the Executive receives equivalent coverage and benefits under the plans, programs and/or arrangements of a subsequent employer (such coverage and benefits to be determined on a coverage-by-coverage or benefit-by-benefit basis).

If Executive is a "specified employee" under Section 409A(a)(2)(B)(i) of the Code, any payment of "nonqualified deferred compensation" (as defined under Section 409A of the Code and related guidance) attributable to a "separation from service" (as defined under Section 409A of the Code and related guidance) shall not commence until the first full business day that is more than six months after the applicable separation from service ("Deferred Payment Date"). Any payments that would otherwise have been made between the separation from service and the Deferred Payment Date, but for this paragraph, shall be made in a lump sum on the Deferred Payment Date. Payments that, in any case, are scheduled to be made after the Deferred Payment Date shall continue according to the applicable payment schedule. To the extent that the termination of the Executive's employment does not constitute a separation of service under Section 409A(a)(2)(A)(i) of the Code (as the result of further services that reasonably are anticipated to be provided by the Executive to the Company at the time the Executive's employment is terminated), the payment of any nonqualified deferred compensation will be further delayed until the date that is the first full business day that is more than six months after the date of a subsequent event constituting a separation of service under Section 409A(a)(2)(A)(i) of the Code.

#### 10. ASSIGNABILITY; BINDING NATURE.

This Agreement shall be binding upon and inure to the benefit of the Parties and their respective successors, heirs (in the case of the Executive) and assigns. No rights or obligations of the Company under this Agreement may be assigned or transferred by the Company except that such rights or obligations may be assigned or transferred pursuant to a merger or consolidation in which the Company is not the continuing entity, or the sale or liquidation of all or substantially all of the assets of the Company; provided, however, that the assignee or transferee is the successor to all or substantially all of the assets of the Company and such assignee or transferee assumes the liabilities, obligations and duties of the Company, as contained in this Agreement, either contractually or as a matter of law.

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#### 11. REPRESENTATIONS.

The Company represents and warrants that it is fully authorized and empowered to enter into this Agreement, and that the performance of its obligations under this Agreement will not violate any agreement between it and any other person, firm or organization. The Executive represents and warrants that no agreement exists between her and any other person, firm or organization that would be violated by the performance of the Executive's obligations under this Agreement.

#### 12. INDEMNIFICATION; INSURANCE.

The Executive shall at all times be indemnified and eligible for advancement of expenses on the same basis as is provided for the Company's other executive officers and in accordance with the provisions of the Company's charter and by-laws then in effect. The Executive shall also be covered under all of the Company's policies of liability insurance maintained for the benefit of its directors and officers on the same basis as is provided for its other executive officers.

#### 13. ENTIRE AGREEMENT; TERMINATION.

This Agreement, the agreements referenced herein and the Employee Non-Disclosure, Non-Competition & Inventions Agreement between the Executive and the Company contain the entire understanding and agreement between the Parties concerning the subject matter hereof and supersedes all prior agreements, understandings, discussions, negotiations and undertakings, whether written or oral, between the Parties with respect thereto. Subject to the terms of this Agreement, the Company shall be entitled to terminate the Executive's employment at any time, and the Executive may terminate the Executive's employment by the Company, at any time subject to the provisions of Section 9(b) of this Agreement, in each case by written notice provided in accordance with Section 20 of this Agreement.

#### 14. AMENDMENT OR WAIVER.

No provision in this Agreement may be amended unless such amendment is agreed to in writing and signed by the Executive and an authorized officer of the Company. No waiver by either Party of any breach by the other Party of any condition or provision contained in this Agreement to be performed by such other Party shall be deemed a waiver of a similar or dissimilar condition or provision at the same or any prior or subsequent time. Any waiver must be in writing and signed by the Executive or an authorized officer of the Company, as the case may be.

#### 15. SEVERABILITY.

If any provision or portion of this Agreement shall be determined to be invalid or unenforceable for any reason, in whole or in part, the remaining provisions of this Agreement shall be unaffected thereby and shall remain in full force and effect to the fullest extent permitted by law.

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#### 16. SURVIVORSHIP.

The respective rights and obligations of the Parties hereunder shall survive any termination of the Executive's employment to the extent necessary to the intended preservation of such rights and obligations.

#### 17. BENEFICIARIES/REFERENCES.

The Executive shall be entitled, to the extent permitted under any applicable law, to select and change a beneficiary or beneficiaries to receive any compensation or benefit payable hereunder following the Executive's death by giving the Company written notice thereof. In the event of the Executive's death or a judicial determination of the Executive's incompetence, reference in this Agreement to the Executive shall be deemed, where appropriate, to refer to the Executive's beneficiary, estate or other legal representative.

#### 18. GOVERNING LAW/JURISDICTION.

This Agreement shall be governed by and construed and interpreted in accordance with the laws of The Commonwealth of Massachusetts without reference to principles of conflict of laws.

#### 19. RESOLUTION OF DISPUTES.

Any disputes arising under or in connection with this Agreement may, at the election of the Executive or the Company, be resolved by binding arbitration, to be held in Massachusetts in accordance with the Rules and Procedures of the American Arbitration Association. If arbitration is elected, the Executive and the Company shall mutually select the arbitrator. If the Executive and the Company cannot agree on the selection of an arbitrator, each Party shall select an arbitrator and the two arbitrators shall select a third arbitrator, and the three arbitrators shall form an arbitration panel that shall resolve the dispute by majority vote. Judgment upon the award rendered by the arbitrator or arbitrators may be entered in any court having jurisdiction thereof. Costs of the arbitrator or arbitrators and other similar costs in connection with an arbitration shall be shared equally by the Parties; all other costs, such as attorneys' fees incurred by each Party, shall be borne by the Party incurring such costs.

#### 20. NOTICES.

All notices that are required or permitted hereunder shall be in writing and sufficient if delivered personally, sent by facsimile (and promptly confirmed by personal delivery, registered or certified mail or overnight courier), sent by nationally-recognized overnight courier or sent by registered or certified mail, postage prepaid, addressed as follows:

If to the Company: Vertex Pharmaceuticals Incorporated  
130 Waverly Street  
Cambridge, MA 02139-4242  
Attn: Chief Executive Officer  
with copies to:  
the General Counsel

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If to the Executive: at the Executive's home address listed in the Company records.

Any such notice shall be deemed to have been given: (a) when delivered if personally delivered or sent by facsimile on a business day; (b) on the business day after dispatch if sent by nationally-recognized overnight courier; and/or (c) on the fifth business day following the date of mailing if sent by mail.

#### 21. HEADINGS.

The headings of the sections contained in this Agreement are for convenience only and shall not be deemed to control or affect the meaning or construction of any provision of this Agreement.

#### 22. COUNTERPARTS.

This Agreement may be executed in two or more counterparts.

#### 23. SECTION 409A COMPLIANCE.

It is the intention of the Company and the Executive that this Agreement and the payments provided for herein meet the requirements of Section 409A of the Code, to the extent applicable to this Agreement and such payments. The Company and the Executive agree to cooperate in good faith in preparing and executing, at such time as sufficient guidance is available under Section 409A and from time to time thereafter, such amendments to this Agreement, if any, as the Executive may reasonably request solely for the purpose of assuring that this Agreement and the payments provided hereunder meet the requirements of Section 409A. Nothing in this Section 23 shall require the Company to increase the Executive's compensation or make the Executive whole for any requested changes.

24. TAX WITHHOLDING; NO GUARANTEE OF ANY TAX CONSEQUENCES.

All payments hereunder shall be subject to all applicable withholding for any federal, state or local income taxes including any excise taxes under the Code. Notwithstanding any other provision of this Agreement to the contrary or other representation, the Company does not in any way guarantee the tax consequences of any payment or compensation under this Agreement including, without limitation, under Section 409A of the Code.

*[Signature page follows; Remainder of Page Left Intentionally Blank]*

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IN WITNESS WHEREOF, the undersigned have executed this Agreement as of the date first written above.

**Vertex Pharmaceuticals Incorporated**

/s/ Jeffrey Leiden

Jeffrey Leiden, President, Chairman and  
Chief Executive Officer

/s/ Kenneth Horton

Kenneth Horton

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**VERTEX PHARMACEUTICALS INCORPORATED**  
**130 WAVERLY STREET · CAMBRIDGE, MA 02139-4242**  
**TEL. 617.444.6100 · FAX 617.444-6483**  
**<http://www.vrtx.com>**

June 11, 2012

Kenneth Horton  
 Executive Vice President, Chief Legal Officer  
 44 Rae Avenue  
 Needham, MA  
 02492

RE: Change of Control Agreement

Dear Kenneth:

You are a key member of the senior management team of Vertex Pharmaceuticals Incorporated (the "Company"). As a result, the Company would like to provide you with the following "change of control" benefits to help ensure that if the Company becomes involved in a "change of control" transaction, there will be no distraction from your attention to the needs of the Company. This Change of Control Agreement (this "Agreement") is entered into as of June 11, 2012, by and between you and the Company.

I. Definitions. For the purposes of this Agreement, capitalized terms shall have the following meanings:

1. "Cause" shall mean:

- (a) your conviction of a crime involving moral turpitude;
- (b) your willful refusal or failure to follow a lawful directive or instruction of the Company's Board of Directors or the individual(s) to whom you report, provided that you receive prior written notice of the directive(s) or instruction(s) that you failed to follow, and provided further that the Company, in good faith, gives you 30 days to correct such failure and further provided that if you correct the failure(s), any termination of your employment on account of such failure shall not be treated for purposes of this Agreement as a termination of employment for "Cause";
- (c) in carrying out your duties you commit (i) willful gross negligence, or (ii) willful gross misconduct, resulting in either case in material harm to the Company, unless such act, or failure to act, was believed by you, in good faith, to be in the best interests of the Company; or
- (d) your violation of the Company's policies made known to you regarding confidentiality, securities trading or inside information.

2. "Change of Control" shall mean that:

- (a) any "person" or "group" as such terms are used in Sections 13(d) and 14(d)(2) of the Securities Exchange Act of 1934 (the "Act"), becomes a beneficial owner, as such term is used in Rule 13d-3 promulgated under the Act, of securities of the Company representing more than 50% of the combined voting power of the outstanding securities of the Company having the right to vote in the election of directors; or
- (b) all or substantially all the business or assets of the Company are sold or disposed of, or the Company or a subsidiary of the Company combines with another company pursuant to a merger, consolidation, or other similar transaction, other than (i) a transaction solely for the purpose of reincorporating the Company or one of its subsidiaries in a different jurisdiction or recapitalizing or reclassifying the Company's stock; or (ii) a merger or consolidation in which the shareholders of the Company immediately prior to such merger or consolidation continue to own at least a majority of the outstanding voting securities of the Company or the surviving entity immediately after the merger or consolidation.

3. "Code" shall mean the Internal Revenue Code of 1986, as amended.

4. "Disability" shall mean a disability as determined under the Company's long-term disability plan or program in effect at the time the disability first occurs, or if no such plan or program exists at the time of disability, then a "disability" as defined Section 22(e)(3) of the Code.

5. "Good Reason" shall mean one of the following events has occurred without your consent:

- (a) you suffer a material reduction in the authorities, duties and responsibilities associated with your position as Executive Vice President, Chief Legal Officer as of the date hereof;
- (b) your annual base salary is decreased;

- (c) the office to which you are assigned is relocated to a place 35 or more miles away; or
- (d) following a Change of Control, the Company's successor fails to assume the Company's rights and obligations under this Agreement;

provided that Good Reason shall not exist unless and until within 30 days after the event giving rise to Good Reason under (a), (b), (c) or (d) above has occurred, you deliver a written termination notice to the Company stating that an event giving rise to Good Reason has occurred and identifying with reasonable detail the event that you assert constitutes Good Reason under (a), (b), (c) or (d) above and the Company fails or refuses to cure or eliminate the event giving rise to Good Reason on or within 30 days after receiving your notice. To avoid doubt, the termination of your employment would become effective at the close of business on the thirtieth day after the Company receives your termination notice, unless the Company cures or eliminates the event giving rise to Good Reason prior to such time.

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6. "Termination Date" shall mean the last day of your employment with the Company.

II. *Severance Benefits upon Change of Control.* If:

- (A) your employment is terminated by the Company (except for termination for Cause or due to a Disability) and the Termination Date is within 90 days prior to a Change of Control or within 12 months after a Change of Control; or
- (B) you, of your own initiative, (i) terminate your employment for Good Reason (in accordance with the notice and cure provisions set forth in Section I.5 above) and (ii) the event giving rise to Good Reason occurs within 90 days prior to a Change of Control or within 12 months after a Change of Control;

then, in exchange for a general release executed by you, which becomes enforceable and irrevocable within 60 days of your Termination Date, of all claims against the Company, its subsidiaries, and its and their officers, directors and representatives, in a form satisfactory to the Company, you shall receive the following benefits:

1. *Severance Payment.* The Company shall make a cash payment (the "Severance Payment") to you in an amount equal to:
  - (a) your annual base salary (provided, however, that if you terminate your employment for Good Reason based on a reduction in your annual base salary, then the annual base salary to be used in calculating the Severance Payment shall be your annual base salary in effect immediately prior to such reduction in annual base salary) plus your target bonus under any bonus program applicable to you for the year in which the Termination Date occurs; plus
  - (b) a pro rata portion of your target bonus for the portion of the year in which the Termination Date occurs under any bonus program applicable to you; plus
  - (c) all cash incentive compensation awards earned by you but not paid prior to the Termination Date; provided that, if a fiscal year has been completed and the incentive award for such fiscal year has not been determined, the incentive compensation for such completed fiscal year shall equal the target bonus for such fiscal year.

Except with respect to any portion of the Severance Payment that is delayed as set forth in this paragraph, the Severance Payment shall be made in cash within ten days after the execution by you of the general release referred to above and expiration without revocation of any applicable revocation periods under such general release (or, if the Change of Control resulting in your becoming entitled to such benefits occurs after such

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execution and expiration, within ten days after the Change of Control), provided that, if the 60 day period during which the release is required to become effective and irrevocable begins in one calendar year and ends in another calendar year, the Severance Payment shall be made in the second calendar year. The Severance Payment shall be divided into two portions, consisting of a portion that does not constitute "nonqualified deferred compensation" within the meaning of Section 409A of the Code and a portion, if any, that does constitute nonqualified deferred compensation. If you are a "specified employee" as defined in Section 409A(a)(2)(B)(i) of the Code, the commencement of the delivery of any such payments that constitute nonqualified deferred compensation payable upon a "separation from service" under Section 409A(a)(2)(A)(i) of the Code will be delayed until the first business day that is more than six months after your Termination Date. The determination of whether, and the extent to which, any of the payments to be made to you hereunder are nonqualified deferred compensation shall be made after the application of all applicable exclusions, including those set forth under Treasury Reg. § 1.409A-1(b)(9). Any payments that are intended to qualify for the exclusion for separation pay due to involuntary separation from service set forth in Reg. § 1.409A-1(b)(9)(iii) must be paid no later than the last day of the second taxable year following the taxable year in which the Termination Date occurs. To the extent that the termination of your employment does not constitute a separation of service under Section 409A(a)(2)(A)(i) of the Code (as the result of further services that are reasonably anticipated to be provided by you to the Company or any affiliate of the Company or its successor at the time your employment is terminated), the payment of any non-qualified deferred compensation will be further delayed until the first business day that is more than six months after the date of a subsequent event constituting a separation of service under Section 409A(a)(2)(A)(i) of the Code.

2. *Accelerated Vesting.*

- (a) Stock options for the purchase of the Company's securities held by you as of the Termination Date and not then exercisable shall immediately become exercisable in full. The options to which this accelerated vesting applies shall remain exercisable until the earlier of (a) the end of the 90-day period immediately following the later of (i) the Termination Date or (ii) the date of the Change of Control and (b) the date the stock option(s) would otherwise expire; and



- (b) the Company's lapsing repurchase right with respect to shares of restricted stock held by you shall lapse in full (subject to your making satisfactory arrangements with the Company providing for the payment to the Company of all required withholding taxes).

Notwithstanding anything to the contrary in this Agreement, the terms of any option agreement or restricted stock agreement shall govern the acceleration, if any, of vesting or lapsing of the Company's repurchase rights and period of exercisability of such awards, as applicable, except to the extent that the terms of this Agreement are more favorable to you.

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3. *Continued Insurance Coverage.* If COBRA coverage is elected by you, the Company shall pay the cost of insurance continuation premiums on your behalf (whether or not covered by COBRA) to continue standard medical, dental and life insurance coverage for you (or the cash equivalent of same if you are ineligible for continued coverage) until the earlier of (i) the date 12 months after the Termination Date or (ii) the date you begin receiving substantially equivalent coverage and benefits through a subsequent employer.
  4. *No Mitigation.* You shall not be required to mitigate the amount of the Severance Payment or any other benefit provided under this Agreement by seeking other employment or otherwise, nor shall the amount of any payment or benefit provided for in this Agreement be reduced (except as provided in Article II Section 3(ii)) by any compensation earned by you as the result of other employment, by retirement benefits, or be offset against any amount claimed to be owed by you to the Company or otherwise (except for any required withholding taxes); provided, that if the Company makes any other severance payments to you under any other program or agreement, including any payments under the Employment Agreement, of even date herewith, between you and the Company, as it may be amended from time to time (the "Employment Agreement"), such amounts shall be offset against the payments the Company is obligated to make pursuant to this Agreement.
  5. *Excess Parachute Payments.* To the extent that the payments and benefits to be provided under Section II.1, II.2 and II.3, or any other type of benefit or payment made to you or for your benefit by the Company or any of its affiliates, whether paid or payable, provided or to be provided, or distributed or distributable pursuant to the terms of this Agreement or otherwise (collectively, the "Total Payments") would be subject to the excise tax imposed under Section 4999 of the Code, the Total Payments shall be reduced so that the maximum value of the Total Payments (after reduction) shall be one dollar (\$1.00) less than the amount that would cause the Total Payments to be subject to the excise tax imposed by Section 4999 of the Code, provided that no reduction in the Total Payments shall be made if the net after-tax amount of the Total Payments retained by you after reduction are less than the net-after tax amount of the Total Payments retained by you without any reduction under this Section II.5. If the Total Payments are subject to reduction under this Section II.5, the Company shall reduce or eliminate the Total Payments by first reducing or eliminating the cash payments to be made under Section II.1 (with the payments to be made furthest in the future being reduced first), then by reducing or eliminating any accelerated vesting of any stock options under Section II.2(a), then by reducing or eliminating any accelerated lapsing of repurchase rights for restricted stock held by you under Section II.2(b) and finally by reducing or eliminating any other remaining Total Payments. The preceding provisions of this Section shall take precedence over the provisions of any other plan, arrangement or agreement governing your rights and entitlements to any benefits or compensation. Any determination that the Total Payments must be reduced in accordance with this Section and the assumptions to be utilized in arriving at such determination, shall be made by the Board in the exercise of its reasonable, good faith discretion based upon the advice of such professional advisors it may deem appropriate in the circumstances.

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### III. *Miscellaneous.*

1. *Employee's Obligations.* Upon the termination of employment, you shall promptly deliver to the Company all property of the Company and all material documents, statistics, account records, programs and other similar tangible items which may be in your possession or under your control and which relate in a material way to the business or affairs of the Company or its subsidiaries, and no copies of any such documents or any part thereof shall be retained by you.
2. *Entire Agreement.* This Agreement, the Employment Agreement and the "*Employee Non-Disclosure, Non-Competition & Inventions Agreement*" together cover the entire understanding of the parties as to the subject matter hereof, superseding all prior understandings and agreements related hereto. No modification or amendment of the terms and conditions of this Agreement shall be effective unless in writing and signed by the parties or their respective duly authorized agents.
3. *Governing Law.* This Agreement shall be governed by the laws of The Commonwealth of Massachusetts, as applied to contracts entered into and performed entirely in Massachusetts by Massachusetts residents.
4. *Successors and Assigns.* This Agreement may be assigned by the Company upon a sale, transfer or reorganization of the Company. Upon a Change of Control, the Company shall require the successor to assume the Company's rights and obligations under this Agreement. The Company's failure to do so shall constitute a material breach of this Agreement. This Agreement shall be binding upon and inure to the benefit of the parties hereto and their successors, permitted assigns, legal representatives and heirs.

*[Signature page follows; Remainder of Page Left Intentionally Blank]*

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Very truly yours,

Vertex Pharmaceuticals Incorporated

By: /s/ Jeffrey Leiden  
Jeffrey Leiden President, Chairman and  
Chief Executive Officer

ACCEPTED AND AGREED:

/s/ Kenneth Horton  
Kenneth Horton

6/11/2012  
Date

**VERTEX PHARMACEUTICALS INCORPORATED  
AMENDED AND RESTATED 2006 STOCK AND OPTION PLAN**

**1. DEFINITIONS**

Unless otherwise specified or unless the context otherwise requires, the following terms, as used in this Vertex Pharmaceuticals Incorporated Amended and Restated 2006 Stock and Option Plan, have the following meanings:

**Administrator** means the Board of Directors and/or a committee of the Board of Directors to which the Board of Directors has delegated power to act on its behalf in administering this Plan in whole or in part.

**Affiliate** means a corporation that, for purposes of Section 424 of the Code, is a parent or subsidiary of the Company, direct or indirect.

**Board of Directors** means the Board of Directors of the Company.

**Code** means the United States Internal Revenue Code of 1986, as amended.

**Common Stock** means shares of the Company's common stock, \$.01 par value.

**Company** means Vertex Pharmaceuticals Incorporated, a Massachusetts corporation.

**Employee** means an employee of the Company or of an Affiliate (including, without limitation, an employee who is also serving as an officer or director of the Company or of an Affiliate), designated by the Administrator to be eligible to be granted one or more Stock Rights under the Plan.

**Exchange Act** means the Securities Exchange Act of 1934, as amended.

**Fair Market Value** of a Share of Common Stock on a particular date shall be the mean between the highest and lowest quoted selling prices on such date (the "valuation date") on the securities market where the Common Stock is traded, or if there were no sales on the valuation date, on the next preceding date within a reasonable period (as determined in the sole discretion of the Administrator) on which there were sales. If there were no sales in such a market within a reasonable period, the fair market value shall be as determined in good faith by the Administrator in its sole discretion. The Fair Market Value as determined in this paragraph shall be rounded down to the next lower whole cent if the foregoing calculation results in fractional cents.

**ISO** means an option intended to qualify as an incentive stock option under Code Section 422.

**Non-Employee Director** means a member of the Board of Directors who is not an employee of the Company or any Affiliate.

**Non-Qualified Option** means an option that is not intended to qualify as an ISO.

**Option** means an ISO or Non-Qualified Option granted under the Plan.

**Participant** means an Employee, Non-Employee Director, consultant or advisor of the Company or an Affiliate to whom one or more Stock Rights are granted under the Plan. As used herein, "Participant" shall include "Participant's Survivors" and a Participant's permitted transferees where the context requires.

**Participant's Survivors** means a deceased Participant's legal representatives and/or any person or persons who acquires the Participant's rights to a Stock Right by will or by the laws of descent and distribution.

**Plan** means this Vertex Pharmaceuticals Incorporated Amended and Restated 2006 Stock and Option Plan, as amended from time to time.

**Shares** means shares of the Common Stock as to which Stock Rights have been or may be granted under the Plan or any shares of capital stock into which the Shares are changed or for which they are exchanged within the provisions of Section 3 of the Plan. The Shares subject to Stock Rights granted under the Plan may be authorized and unissued shares or shares held by the Company in its treasury, or both.

**Stock Agreement** means an agreement between the Company and a Participant delivered pursuant to the Plan with respect to a Stock Right, in such form as the Administrator shall approve.

**Stock-Based Award** means a grant by the Company under the Plan of an equity award or equity-based award that is not an Option or Stock Grant.

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**Stock Grant** means a grant by the Company of Shares under the Plan.

**Stock Right** means a right to Shares or the value of Shares of the Company granted pursuant to the Plan as an ISO, a Non-Qualified Option, a Stock Grant or a Stock-Based Award.

**2. PURPOSES OF THE PLAN**

The Plan is intended to encourage ownership of Shares by Employees, Non-Employee Directors and certain consultants and advisors to the Company in order to attract such persons, to induce them to work for the benefit of the Company or of an Affiliate and to provide additional incentive for them to promote the success of the Company or of an Affiliate. The Plan provides for the granting of Stock Rights to Employees, Non-Employee Directors, consultants and advisors of the Company.

### 3. SHARES SUBJECT TO THE PLAN

The number of Shares subject to this Plan as to which Stock Rights may be granted from time to time shall be 13,902,380 or the equivalent of such number of Shares after the Administrator, in its sole discretion, has interpreted the effect of any stock split, stock dividend, combination, recapitalization or similar transaction in accordance with Section 17 of this Plan. The number of Shares subject to this Plan shall be reduced, share for share, by the number of shares underlying Stock Rights, if any, that are granted under the Company's 2007 New Hire Stock and Option Plan after March 17, 2008.

If an Option granted hereunder ceases to be outstanding, in whole or in part (other than by exercise), or if the Company shall reacquire (at no more than its original issuance price) any Shares issued pursuant to a Stock Grant, or if any Stock Right expires or is forfeited, cancelled or otherwise terminated or results in any Shares not being issued, the unissued Shares that were subject to such Stock Right shall again be available for issuance from time to time pursuant to this Plan; provided that, the following Shares may not again be made available for issuance as Awards under the Plan: (i) Shares that are not issued or delivered as a result of the net settlement of an outstanding Stock- Based Award or Option and (ii) Shares that the Company acquires from a Participant for a price that is more than the original issuance price of the Share, including any Share acquired by the Company to fund employee payroll tax withholding obligations on a Stock Grant or Shares applied to payment of the exercise price for an Option.

After May 14, 2008, the number Shares that may be subject to or delivered pursuant to any form of Stock Right other than an Option shall not exceed 20% of the aggregate of (A) the number of Shares available as to which Stock Rights may be granted under this Plan on May 15, 2008 (taking in account the Shares added on such date, but which amount does not include those 536,625 Shares as to which the Company granted Options on February 7, 2008, subject to obtaining subsequent shareholder approval of such Options) and (B) any Shares that again become available for issuance on or after May 15, 2008 pursuant to the preceding paragraph.

### 4. ADMINISTRATION OF THE PLAN

The Administrator shall administer the Plan. Subject to the provisions of the Plan, the Administrator is authorized to:

- a. Interpret the provisions of the Plan and of any Stock Right or Stock Agreement and to make all rules and determinations that it deems necessary or advisable for the administration of the Plan;
- b. Determine which Employees, Non-Employee Directors, consultants and advisors of the Company and its Affiliates shall be granted Stock Rights;
- c. Determine the number of Shares and exercise price for which a Stock Right shall be granted;
- d. Specify the terms and conditions upon which a Stock Right or Stock Rights may be granted;
- e. In its discretion, accelerate:
  - (i) the date of exercise of any installment of any Option; provided that the Administrator shall not, without the consent of the Option holder accelerate the exercise date of any installment of any Option granted to any Employee as an ISO (and not previously converted into a Non-Qualified Option pursuant to Section 20) if such acceleration would violate the annual vesting limitation contained in Section 422(d) of the Code, as described in Section 6.2.3; or
  - (ii) the date or dates of vesting of Shares, or lapsing of Company repurchase rights with respect to any Shares, under any Stock Rights; and

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- f. In its discretion, extend the exercise date for any Option;

provided, however, that all such interpretations, rules, determinations, terms and conditions shall be made and prescribed in the context of preserving the tax status under Code Section 422 of those Options which are designated as ISOs (unless the holder of any such Option otherwise agrees). Subject to the foregoing, the interpretation and construction by the Administrator of any provisions of the Plan or of any Stock Right granted under it shall be final, unless otherwise determined by the Board of Directors, if the Administrator is other than the Board of Directors.

The Administrator may employ attorneys, consultants, accountants or other persons, and the Administrator, the Company and its officers and directors shall be entitled to rely upon the advice, opinions or valuations of such persons. All actions taken and all interpretations and determinations made by the Administrator in good faith shall be final and binding upon the Company, all Participants, and all other interested persons. No member or agent of the Administrator shall be personally liable for any action, determination, or interpretation made in good faith with respect to this Plan or grants hereunder. Each member of the Administrator shall be indemnified and held harmless by the Company against any cost or expense (including counsel fees) reasonably incurred by him or her or any liability (including any sum paid in settlement of a claim with the approval of the Company) arising out of any act or omission to act in connection with this Plan unless arising out of such member's own fraud or bad faith. Such indemnification shall be in addition to any rights of indemnification the members of the Administrator may have as directors or otherwise under the by-laws of the Company, or any agreement, vote of stockholders or disinterested directors, or otherwise.

### 5. ELIGIBILITY FOR PARTICIPATION

The Administrator shall, in its sole discretion, name the Participants in the Plan, provided, however, that each Participant must be a Employee, Non-Employee Director, consultant or advisor of the Company or of an Affiliate at the time a Stock Right is granted. Notwithstanding the foregoing, the Administrator may authorize the grant of a Stock Right to a person not then an Employee, Non-Employee Director, consultant or advisor of the Company or of an Affiliate; *provided, however*, that the actual grant of such Stock Right shall be conditioned upon such person becoming eligible to become a Participant at or prior to the time of execution of the Stock Agreement evidencing such Stock Right. ISOs may be granted only to Employees. The granting of any Stock Right to any individual shall neither entitle that individual to, nor disqualify him or her from, participation in other grants of Stock Rights.

## **6. TERMS AND CONDITIONS OF OPTIONS**

6.1 *General.* Each Option shall be set forth in writing in a Stock Agreement, duly executed by the Company and, to the extent required by law or requested by the Company, by the Participant. The Administrator may provide that Options be granted subject to such terms and conditions, consistent with the terms and conditions specifically required under this Plan, as the Administrator may deem appropriate including, without limitation, subsequent approval by the stockholders of the Company of this Plan or any amendments thereto. Each Stock Agreement shall state the option price (per share) of the Shares covered by each Option, the number of Shares to which it pertains, the date or dates on which it first is exercisable and the date after which it may no longer be exercised (subject to Sections 11, 12 and 13 of this Plan). Option rights may accrue or become exercisable in installments over a period of time, or upon the achievement of certain conditions or the attainment of stated goals or events. The Option Price per share of Shares covered by an Option (including both ISOs and Non-Qualified Options) shall not be less than one hundred percent (100%) of the Fair Market Value per share of the Common Stock on the date of grant.

6.2 *ISOs.* Each Option intended to be an ISO shall be issued only to Employees. In addition to the minimum standards set forth in Section 6.1, ISOs shall be subject to the following terms and conditions, with such additional restrictions or changes as the Administrator determines are appropriate but not in conflict with Code Section 422 and relevant regulations and rulings of the Internal Revenue Service:

6.2.1 *ISO Option Price.* In addition to the limitation set forth in Section 6.1, the Option price per share of the Shares covered by each ISO granted to a Participant who owns, directly or by reason of the applicable attribution rules in Code Section 424(d), more than ten percent (10%) of the total combined voting power of all classes of stock of the Company or an Affiliate shall not be less than one hundred ten percent (110%) of the Fair Market Value on the date of grant.

6.2.2 *Term of ISO.* Each ISO shall expire not more than ten (10) years from the date of grant; provided, however, that an ISO granted to a Participant who owns, directly or by reason of the applicable attribution rules in Code Section 424(d), more than ten percent (10%) of the total combined voting power of all classes of stock of the Company or an Affiliate shall expire not more than five (5) years from the date of grant.

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6.2.3 *Annual Limit on Incentive Stock Options.* To the extent required for "incentive stock option" treatment under Section 422 of the Code, the aggregate Fair Market Value (determined as of the time of grant) of the Shares with respect to which ISOs granted under this Plan and any other plan of the Company or its Affiliate become exercisable for the first time by a Participant during any calendar year shall not exceed the aggregate threshold for ISOs established by the Code (\$100,000 as of March 22, 2006). To the extent that any Option exceeds this limit, it shall constitute a Non-Qualified Option.

6.3 *Non-Employee Directors' Options.* Each Non-Employee Director, upon first being elected or appointed to the Board of Directors, shall be granted a Non-Qualified Option to purchase that number of Shares as shall be established for such Option grants from time to time by the Board of Directors. Each such Option shall (i) have an exercise price equal to the Fair Market Value (per share) on the date of grant of the Option, (ii) have a term of ten (10) years, and (iii) shall become cumulatively exercisable in sixteen (16) equal quarterly installments, upon completion of each full quarter of service on the Board of Directors after the date of grant. In addition, on June 1 of each year, each Non-Employee Director shall be granted a Non-Qualified Option to purchase that number of Shares as shall be established for such Option grants from time to time by the Board of Directors. Each such Option shall (i) have an exercise price equal to the Fair Market Value (per share) on the date of grant of such Option, (ii) have a term of ten (10) years, and (iii) be exercisable in full immediately on the date of grant. Any director entitled to receive an Option grant under this Section may elect to decline the Option. If a Non-Employee Director ceases to be any of an Employee, Non-Employee Director, consultant or advisor of the Company, Options granted under this Section 6.3 shall remain exercisable to the extent such Options are exercisable on the date of such termination of service, for their full term, and the provisions of Sections 11 and 13 below shall not apply to any such Options.

6.4 *Limitation on Number of Options Granted.* Notwithstanding anything in this Plan to the contrary, no Participant shall be granted an aggregate of Options and/or Stock-Based Awards under this Plan in any calendar year for more than an aggregate of 600,000 Shares (subject to adjustment pursuant to Section 17 to the extent consistent with Section 162(m) of the Code).

## **7. TERMS AND CONDITIONS OF STOCK GRANTS**

Each Stock Grant shall be set forth in a Stock Agreement, duly executed by the Company and, to the extent required by law or requested by the Company, by the Participant. The Stock Agreement shall be in the form approved by the Administrator, with such changes and modifications to such form as the Administrator, in its discretion, shall approve with respect to any particular Participant or Participants. The Stock Agreement shall contain terms and conditions that the Administrator determines to be appropriate and in the best interest of the Company; provided, however, that the purchase price per share of the Shares covered by each Stock Grant shall not be less than the par value per Share. Each Stock Agreement shall state the number of Shares to which the Stock Grant pertains and the terms of any right of the Company to reacquire the Shares subject to the Stock Grant, including the time and events upon which such rights shall accrue and the purchase price therefor, and any restrictions on the transferability of such Shares.

## **8. TERMS AND CONDITIONS OF OTHER STOCK-BASED AWARDS**

The Administrator shall have the right to grant other Stock-Based Awards having such terms and conditions as the Administrator may determine, including, without limitation, the grant of Shares based upon certain conditions, the grant of securities convertible into Shares and the grant of stock appreciation rights, phantom stock awards or stock units. The principal terms of each Stock-Based Award shall be set forth in a Stock Agreement, duly executed by the Company and, to the extent required by law or requested by the Company, by the Participant. The Stock Agreement shall be in a form approved by the Administrator and shall contain terms and conditions that the Administrator determines to be appropriate.

## **9. EXERCISE OF OPTIONS AND ISSUANCE OF SHARES**

An Option (or any part or installment thereof) shall be exercised by giving written notice to the Company or its designee, together with provision for payment of the full purchase price in accordance with this Section for the Shares as to which the Option is being exercised, and upon compliance with any other conditions set forth in the Stock Agreement. Such notice shall be signed by the person exercising the Option, shall state the number of Shares with respect to which the Option is being exercised and shall contain any representation required by the Plan or the Stock Agreement.

Payment of the purchase price for the Shares as to which such Option is being exercised shall be made (a) in United States dollars in cash or by check acceptable to the Administrator, or (b) at the discretion of the Administrator, (i) through delivery of shares of Common Stock not subject to any restriction under any plan and having a Fair Market Value equal as of the date of exercise to the cash exercise price of the Option, (ii) in accordance with a cashless exercise program established with a

securities brokerage firm, and approved by the Company, (iii) by any other means (excluding, however, delivery of a promissory note of the Participant) that the Administrator determines to be consistent with the purpose of this Plan and applicable law, or (iv) by any combination of the foregoing. Notwithstanding the foregoing, the Administrator shall accept only such payment on exercise of an ISO as is permitted by Section 422 of the Code.

The Company shall then as soon as is reasonably practicable deliver the Shares as to which such Option was exercised to the Participant (or to the Participant's Survivors, as the case may be). It is expressly understood that the Company may delay the delivery of the Shares in order to comply with any law or regulation that requires the Company to take any action with respect to the Shares prior to their issuance. The Shares shall, upon delivery, be fully paid, non-assessable Shares.

#### **10. ASSIGNABILITY AND TRANSFERABILITY OF STOCK RIGHTS**

By its terms, a Stock Right granted to a Participant shall not be transferable by the Participant other than by will or by the laws of descent and distribution or pursuant to a qualified domestic relations order as defined by the Code or Title I of the Employee Retirement Income Security Act or the rules thereunder or as approved by the Administrator in its discretion and set forth in the applicable Stock Agreement, provided, however, that the Administrator shall not approve any transfer of a Stock Right for consideration. Except as provided in the preceding sentence or as otherwise permitted under a Stock Agreement, a Stock Right shall be exercisable, during the Participant's lifetime only by such Participant (or by his or her legal representative) and shall not be assigned, pledged or hypothecated in any way (whether by operation of law or otherwise) and shall not be subject to execution, attachment or similar process. Any attempted transfer, assignment, pledge, hypothecation or other disposition of any Stock Right or of any rights granted thereunder contrary to the provisions of this Plan, or the levy of any attachment or similar process upon a Stock Right, shall be null and void.

#### **11. EFFECT ON STOCK RIGHTS OF TERMINATION OF SERVICE**

11.1 Except as otherwise provided in the applicable Stock Agreement or as otherwise provided in Sections 12 or 13, if a Participant ceases to be an Employee, Non-Employee Director, consultant or advisor with the Company and its Affiliates (for any reason other than termination for "cause," or death) (a "Termination of Service") before the Participant has exercised all Stock Rights, the Participant may exercise any Stock Right granted to him or her to the extent that the Stock Right is exercisable on the date of such Termination of Service. Any such Stock Right must be exercised within three months after the date of the Participant's Termination of Service, unless otherwise provided in the applicable Stock Agreement, but in no event after the expiration of the term of the Stock Right.

11.2 The provisions of this Section, and not the provisions of Section 14, shall apply to a Participant who subsequently dies after the Termination of Service; provided, however, that in the case of a Participant's death within three (3) months after the Termination of Service, the Participant's Survivors may exercise the Stock Right within one (1) year after the date of the Participant's death, but in no event after the date of expiration of the term of the Stock Right.

11.3 Notwithstanding anything herein to the contrary, if subsequent to a Participant's Termination of Service, but prior to the exercise of a Stock Right, the Administrator determines that, either prior or subsequent to the Participant's Termination of Service, the Participant engaged in conduct which would constitute "cause" (as defined in Section 12), then such Participant shall forthwith cease to have any right to exercise any Stock Right. Stock Rights that consist of Shares issued under Stock Grants for which any restrictions on transfer or Company repurchase right shall have lapsed, shall be deemed for all purposes to have been "exercised."

11.4 Absence from work with the Company or an Affiliate because of temporary disability or a leave of absence for any purpose, shall not, during the period of any such absence in accordance with Company policies, be deemed, by virtue of such absence alone, a Termination of Service, except as the Administrator may otherwise expressly provide.

11.5 Except as required by law or as set forth in a Participant's Stock Agreement, Stock Rights granted under the Plan shall not be affected by any change of a Participant's status within or among the Company and any Affiliates, so long as the Participant continues to be an employee, director, consultant or advisor of the Company or any Affiliate.

#### **12. EFFECT ON STOCK RIGHTS OF TERMINATION OF SERVICE FOR "CAUSE"**

Except as otherwise provided in a Participant's Stock Agreement or as otherwise agreed in writing by the Administrator, if a Participant's service with the Company or an Affiliate is terminated for "cause," all outstanding and unexercised (vested or unvested) Stock Rights will immediately be forfeited as of the time the Participant is notified that his or her service is terminated for "cause." Stock Rights that consist of Shares issued under Stock Grants for which any restrictions on transfer or

Company repurchase right shall have lapsed, shall be deemed for all purposes to have been "exercised." For purposes of this Plan, "cause" shall include (and is not limited to) dishonesty with respect to the Company and its Affiliates, insubordination, substantial malfeasance or non-feasance of duty, unauthorized disclosure of confidential information, breach by the Participant of any provision of any employment, consulting, advisory, nondisclosure, non-competition or similar agreement between the Participant and the Company, and conduct substantially prejudicial to the business of the Company or any Affiliate. The determination of the Administrator as to the existence of cause will be conclusive on the Participant and the Company. "Cause" is not limited to events that have occurred prior to a Participant's termination of service, nor is it necessary that the Administrator's finding of "cause" occur prior to termination of service. If the Administrator determines, subsequent to a Participant's termination of service but prior to the exercise of a Stock Right, that either prior or subsequent to the Participant's termination of service the Participant engaged in conduct which would constitute "cause," then the right to exercise any Stock Right shall be forfeited as set forth in this Section 12. Any definition in an agreement between a Participant and the Company or an Affiliate which contains a

conflicting definition of “cause” for termination of service and which is in effect at the time of such termination of service shall supersede the definition in this Plan with respect to that Participant.

### **13. EFFECT ON STOCK RIGHTS OF DEATH WHILE AN EMPLOYEE, DIRECTOR, CONSULTANT OR ADVISOR**

Except as otherwise provided in a Participant’s Stock Agreement, in the event of death of a Participant while the Participant is an Employee, Non-Employee Director, consultant or advisor of the Company or of an Affiliate, any Stock Rights granted to such Participant may be exercised by the Participant’s Survivors to the extent exercisable but not exercised on the date of death. Any such Stock Right must be exercised within one (1) year after the date of death of the Participant but in no event after the date of expiration of the term of the Stock Right, notwithstanding that the decedent might have been able to exercise the Stock Right as to some or all of the Shares on a later date if he or she had not died and had continued to be an Employee, Non-Employee Director, consultant or advisor.

### **14. RIGHTS AS A STOCKHOLDER**

No Participant to whom a Stock Right (other than a Stock Grant) has been granted shall have rights as a stockholder with respect to any Shares covered by such Stock Right, except after due exercise thereof and/or tender of the full purchase price for the Shares being purchased pursuant to such exercise. The provisions of this Section 14 shall not be applicable to Shares issued pursuant to Stock Grants, provided that the Participant shall have tendered the purchase price therefore, notwithstanding the existence of stock transfer restrictions on or a Company repurchase right with respect to such Shares.

### **15. EMPLOYMENT OR OTHER RELATIONSHIP**

Nothing in this Plan or any Stock Agreement shall be deemed to prevent the Company or an Affiliate from terminating the employment, consultancy or director status of a Participant, or to prevent a Participant from terminating his or her own employment, consultancy or director status or to give any Participant a right to be retained in employment or other service by the Company or any Affiliate for any period of time.

### **16. DISSOLUTION OR LIQUIDATION OF THE COMPANY**

Upon the dissolution or liquidation of the Company (other than in connection with a transaction subject to the provisions of Section 17.2), all Stock Rights granted under this Plan which as of such date shall not have been exercised will terminate and become null and void; provided, however, that if the rights of a Participant or a Participant’s Survivors have not otherwise terminated and expired, the Participant or Participant’s Survivors will have the right immediately prior to such dissolution or liquidation to exercise any Stock Right to the extent that such Stock Right is exercisable as of the date immediately prior to such dissolution or liquidation. Upon the dissolution or liquidation of the Company, any outstanding Stock-Based Awards shall immediately terminate unless otherwise determined by the Administrator or specifically provided in the applicable Stock Agreement.

### **17. ADJUSTMENTS**

Upon the occurrence of any of the following events, a Participant’s rights with respect to any Stock Right granted to him or her hereunder that have not previously been exercised in full shall be adjusted as hereinafter provided, unless otherwise

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specifically provided in the Stock Agreement or in any employment agreement between a Participant and the Company or an Affiliate:

**17.1 *Stock Dividends and Stock Splits.*** If the shares of Common Stock shall be subdivided or combined into a greater or smaller number of shares or if the Company shall issue any shares of Common Stock as a stock dividend on its outstanding Common Stock, the number of shares of Common Stock subject to or deliverable upon the exercise of a Stock Right shall be appropriately increased or decreased, and appropriate adjustments shall be made in the purchase price per Share to reflect such event. The number of Shares subject to Options to be granted to Non-Employee Directors pursuant to Section 6.3 and the number of Shares subject to the limitation in Section 6.4 shall also be proportionately adjusted upon the occurrence of such events.

**17.2 *Consolidations or Mergers.*** In the event of a consolidation or merger in which the Company is not the surviving corporation or which results in the acquisition of substantially all the Company’s outstanding stock by a single person or entity or by a group of persons and/or entities acting in concert, or in the event of the sale or transfer of substantially all the Company’s assets (any of the foregoing, an “Acquisition”), all then outstanding Stock Rights (excluding any Shares subject to Stock Grants as to which all Company repurchase rights shall have lapsed) shall terminate unless assumed pursuant to clause (i) below; provided that either (i) the Administrator shall provide for the surviving or acquiring entity or an affiliate thereof to assume the outstanding Stock Rights or grant replacement stock rights in lieu thereof, any such replacement to be upon an equitable basis as determined by the Administrator, or (ii) if there is no such assumption or substitution, all outstanding Stock Rights shall become immediately and fully exercisable and all Company repurchase rights with respect to Stock Rights shall lapse, in each case immediately prior to the Acquisition, notwithstanding any restrictions or vesting conditions set forth therein.

**17.3 *Recapitalization or Reorganization.*** In the event of a recapitalization or reorganization of the Company (other than a transaction described in Section 17.2 above) pursuant to which securities of the Company or of another corporation are issued with respect to the outstanding shares of Common Stock, a Participant upon exercising a Stock Right shall be entitled to receive for the purchase price paid upon such exercise the securities he or she would have received if he or she had exercised such Stock Right prior to such recapitalization or reorganization.

**17.4 *Adjustments to Stock Grants and Stock-Based Awards.*** Upon the happening of any of the events described in Sections 17.1, 17.2 or 17.3, any outstanding Stock-Based Award and the Shares subject to any Stock Grant, vested or unvested, shall be appropriately adjusted to reflect the events described in such Sections. The Administrator shall determine the specific adjustments to be made under this Section 17.4.

**17.5 *Modification of ISOs.*** Notwithstanding the foregoing, any adjustments made pursuant to Section 17.1, 17.2 or 17.3 with respect to ISOs shall be made only after the Administrator determines whether such adjustments would constitute a “modification” of such ISOs (as that term is defined in Section 424(h) of the Code) or would cause any adverse tax consequences for the holders of such ISOs. If the Administrator determines that such adjustments made with respect to ISOs would constitute a modification of such ISOs, it may refrain from making such adjustments, unless the holder of an ISO specifically requests in writing that such adjustment be made and such writing indicates that the holder has full knowledge of the consequences of such “modification” on his or her income tax treatment with respect to the ISO.

### **18. ISSUANCES OF SECURITIES**

Except as expressly provided herein, no issuance (including for this purpose the delivery of shares held in treasury) by the Company of shares of stock of any class, or securities convertible into shares of stock of any class, shall affect, and no adjustment by reason thereof shall be made with respect to, the number or price of Shares subject to Stock Rights. Except as expressly provided herein, no adjustments shall be made for dividends paid in cash or in property (including without limitation, securities) of the Company.

#### **19. FRACTIONAL SHARES**

No fractional share shall be issued under the Plan and the person exercising any Stock Right shall receive from the Company cash in lieu of any such fractional share equal to the Fair Market Value thereof.

#### **20. CONVERSION OF ISOs INTO NON-QUALIFIED OPTIONS: TERMINATION OF ISOs**

Any Options granted under this Plan that do not meet the requirements of the Code for ISOs shall automatically be deemed to be Non-Qualified Options without further action on the part of the Administrator. The Administrator, at the written request

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of any Participant, may in its discretion take such actions as may be necessary to convert such Participant's ISOs (or any portion thereof) that have not been exercised on the date of conversion into Non-Qualified Options at any time prior to the expiration of such ISOs, regardless of whether the Participant is an employee of the Company or an Affiliate at the time of such conversion. At the time of such conversion, the Administrator (with the consent of the Participant) may impose such conditions on the exercise of the resulting Non-Qualified Options as the Administrator in its discretion may determine, provided that such conditions shall not be inconsistent with this Plan. Nothing in the Plan shall be deemed to give any Participant the right to have such Participant's ISOs converted into Non-Qualified Options, and no such conversion shall occur until and unless the Administrator takes appropriate action. The Administrator, with the consent of the Participant, may also terminate any portion of any ISO that has not been exercised at the time of such termination.

#### **21. WITHHOLDING**

If any federal, state, or local income taxes, employment taxes, Federal Insurance Contributions Act ("FICA") withholdings or other amounts are required by applicable law or governmental regulation to be withheld from the Participant's salary, wages or other remuneration in connection with the exercise of a Stock Right, the lapsing of a Company repurchase right or a Disqualifying Disposition (as defined in Section 22), the Company may withhold from the Participant's compensation, if any, or may require that the Participant advance in cash to the Company, or to any Affiliate of the Company which employs or employed the Participant, the amount of such withholdings unless a different withholding arrangement, including the use of shares of the Company's Common Stock, is authorized by the Administrator (and permitted by law). For purposes hereof, the Fair Market Value of any shares withheld for purposes of payroll withholding shall be determined in the manner provided in Section 1 above, as of the most recent practicable date prior to the date of exercise. If the Fair Market Value of the shares withheld is less than the amount of payroll withholdings required, the Participant may be required to advance the difference in cash to the Company or the Affiliate employer. The Administrator in its discretion may condition the exercise of an Option for less than the then Fair Market Value on the Participant's payment of such additional withholding. In no event shall shares be withheld from any award in satisfaction of tax withholding requirements in an amount that exceeds the statutory minimum amount of tax withholding required.

#### **22. NOTICE TO COMPANY OF DISQUALIFYING DISPOSITION**

Each Employee who receives an ISO must agree to notify the Company in writing immediately after the Employee makes a "Disqualifying Disposition" of any Shares acquired pursuant to the exercise of an ISO. A Disqualifying Disposition is any disposition (as defined in Section 424(c) of the Code) of such Shares before the later of (a) two years from the date the Employee was granted the ISO, or (b) one year after the date the Employee acquired Shares by exercising the ISO. If the Employee has died before such Shares are sold, the notice provisions of this Section 22 shall not apply.

#### **23. EFFECTIVE DATE; TERMINATION OF THE PLAN**

This Plan shall be effective on March 29, 2006, the date of its adoption by the Board of Directors, subject to approval by the shareholders of the Company. The Plan will terminate on March 28, 2016. The Plan also may be terminated at an earlier date by vote of the Board of Directors. Termination of this Plan will not affect any Stock Rights granted or Stock Agreements executed prior to the effective date of such termination.

#### **24. AMENDMENT OF THE PLAN; AMENDMENT OF STOCK RIGHTS**

The Plan may be amended by the stockholders of the Company by affirmative vote of a majority of the votes cast at a meeting of the stockholders at which a quorum is present. The Plan also may be amended by the Board of Directors or the Administrator, including, without limitation, to the extent necessary to qualify any or all outstanding Stock Rights granted under the Plan or Stock Rights to be granted under the Plan for favorable federal income tax treatment (including deferral of taxation upon exercise) as may be afforded incentive stock options under Section 422 of the Code, and to the extent necessary to qualify the shares issuable upon exercise of any outstanding Stock Rights granted, or Stock Rights to be granted, under the Plan for listing on any national securities exchange or quotation in any national automated quotation system of securities dealers. Any amendment approved by the Administrator that the Administrator determines is of a scope that requires stockholder approval shall be subject to stockholder approval. No modification or amendment of the Plan shall adversely affect a Participant's rights under a Stock Right previously granted to the Participant, without such Participant's consent.

In its discretion, the Administrator may amend any term or condition of any outstanding Stock Right, provided: (i) such term or condition is not prohibited by the Plan; (ii) if the amendment is adverse to the Participant, such amendment shall be made

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only with the consent of the Participant or the Participant's Survivors, as the case may be; and (iii) any such amendment of any ISO shall be made only after the Administrator determines whether such amendment would constitute a "modification" of any Stock Right which is an ISO (as that term is defined in Section 424(h) of the Code) or would cause any adverse tax consequences for the holder of such ISO (in which case, the Participant's or Participant's



Survivors' consent to such amendment shall be required). Notwithstanding the foregoing, the Administrator shall not have the authority to reduce the exercise price of any Option after the date of grant, except for adjustments permitted under Section 17 of this Plan.

## 25. GOVERNING LAW

This Plan shall be construed and enforced in accordance with the law of The Commonwealth of Massachusetts.

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**AMENDMENT NO. 1  
TO THE  
AMENDED AND RESTATED  
VERTEX PHARMACEUTICALS INCORPORATED  
2006 STOCK AND OPTION PLAN**

Effective February 5, 2009, the Amended and Restated Vertex Pharmaceuticals Incorporated 2006 Stock and Option Plan (the "*Plan*") is hereby amended as follows:

**Section 6.4 of the Plan is deleted in its entirety and the following is substituted therefor:**

6.4 *Limitation on Number of Shares Granted.* Notwithstanding anything in this Plan to the contrary, no Participant shall be granted an aggregate of Options and/or Stock-Based Awards under this Plan in any calendar year for more than an aggregate of 700,000 Shares (subject to adjustment pursuant to Section 17 to the extent consistent with Section 162(m) of the Code).

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**AMENDMENT NO. 2  
TO THE  
AMENDED AND RESTATED  
VERTEX PHARMACEUTICALS INCORPORATED  
2006 STOCK AND OPTION PLAN**

Effective May 14, 2009, the Amended and Restated Vertex Pharmaceuticals Incorporated 2006 Stock and Option Plan (the "*Plan*") is hereby amended as follows:

**The first paragraph of Section 3 of the Plan is deleted in its entirety and the following is substituted therefor:**

The number of Shares subject to this Plan as to which Stock Rights may be granted from time to time shall be 21,602,380 or the equivalent of such number of Shares after the Administrator, in its sole discretion, has interpreted the effect of any stock split, stock dividend, combination, recapitalization or similar transaction in accordance with Section 17 of this Plan.

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**AMENDMENT NO. 3  
TO THE  
AMENDED AND RESTATED  
VERTEX PHARMACEUTICALS INCORPORATED  
2006 STOCK AND OPTION PLAN**

Effective May 13, 2010, the Amended and Restated Vertex Pharmaceuticals Incorporated 2006 Stock and Option Plan (the "*Plan*") is hereby amended as follows:

**The first paragraph of Section 3 of the Plan is deleted in its entirety and the following is substituted therefor:**

The number of Shares subject to this Plan as to which Stock Rights may be granted from time to time shall be 33,602,380 or the equivalent of such number of Shares after the Administrator, in its sole discretion, has interpreted the effect of any stock split, stock dividend, combination, recapitalization or similar transaction in accordance with Section 17 of this Plan.

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**AMENDMENT NO. 4  
TO THE  
AMENDED AND RESTATED  
VERTEX PHARMACEUTICALS INCORPORATED  
2006 STOCK AND OPTION PLAN**

Effective May 16, 2012, the Amended and Restated Vertex Pharmaceuticals Incorporated 2006 Stock and Option Plan (the “*Plan*”) is hereby amended as follows:

**The first paragraph of Section 3 of the Plan is deleted in its entirety and the following is substituted therefor:**

The number of Shares subject to this Plan as to which Stock Rights may be granted from time to time shall be 36,602,380 or the equivalent of such number of Shares after the Administrator, in its sole discretion, has interpreted the effect of any stock split, stock dividend, combination, recapitalization or similar transaction in accordance with Section 17 of this Plan.

**VERTEX PHARMACEUTICALS INCORPORATED  
EMPLOYEE STOCK PURCHASE PLAN  
(as amended and restated)**

**ARTICLE 1  
PURPOSE AND DEFINITIONS**

SECTION 1.1. PURPOSE. The purpose of the Vertex Pharmaceuticals Incorporated Employee Stock Purchase Plan is to provide employees with an opportunity to purchase Common Stock in the Company through payroll deductions, thereby encouraging employees to share in the economic growth and success of the Company through stock ownership.

SECTION 1.2. DEFINITIONS. Whenever used in the Plan, unless the context clearly indicates otherwise, the following terms shall have the following meanings:

- (a) "BENEFICIARY" with respect to a Participant, means the beneficiary designated by the Participant under the group term life insurance plan maintained by the Company or such other beneficiary as may be designated by a Participant for purposes of this Plan.
- (b) "BOARD OF DIRECTORS" means the Board of Directors of the Company.
- (c) "CODE" means the Internal Revenue Code of 1986, as the same may be amended from time to time, and references thereto shall include the valid Treasury regulations issued thereunder.
- (d) "COMMITTEE" means the Management Development and Compensation Committee of the Board of Directors or such other committee of the Board of Directors designated by the Board of Directors to administer the Company's equity compensation plans.
- (e) "COMMON STOCK" means shares of the \$.01 par value common stock of the Company and any other stock or securities resulting from the adjustment thereof or substitution therefor as described in Section 3.4.
- (f) "COMPANY" means Vertex Pharmaceuticals Incorporated or any successor by merger, purchase, or otherwise.
- (g) "COMPENSATION" means the cash compensation received by an Employee for services, including pre-tax employee compensation made to the Company's 401(k) savings plan, but not including overtime or bonuses.
- (h) "EFFECTIVE DATE" means July 1, 1992.
- (i) "ELECTION" means an election by a Participant to terminate an Offering Period on the first Purchase Date of such Offering Period, which election shall be made within such Offering Period and prior to such First Purchase Date and shall be in writing on a form furnished by the Company for such purpose and shall be made by having such Participant complete, sign and file such form with the Company in the manner prescribed by the Company.
- (j) "EMPLOYEE" means any person who receives a regular stated compensation from the Company or a Subsidiary other than a pension, severance pay, retainer, or fee under contract.
- (k) "FAIR MARKET VALUE" of a Share of Common Stock on a particular date shall be the average of the highest and lowest quoted selling prices on such date (the "valuation date") on the securities market where the Common Stock of the Company is traded, or if there were no sales on the valuation date, on the next preceding date within a reasonable period (as determined in the sole discretion of the Committee) on which there were sales. In the event that there were no sales in such a market within a reasonable period, the fair market value shall be as determined in good faith by the Committee in its sole discretion. The Fair Market Value as determined in this paragraph shall be rounded down to the next lower whole cent if the foregoing calculation results in fractional cents.
- (l) "OFFERING" means the offering of shares of Common Stock to Participants pursuant to this Plan.
- (m) "OFFERING DATE" means each May 15 and November 15. If any such date shall fall other than on a business day, then the Offering Date shall be the next succeeding business day.

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- (n) "OFFERING PERIOD" means either (i) the period from an Offering Date through the second Purchase Date following such Offering Date or (ii) if a Participant validly exercises an Election, the period from an Offering Date through the first Purchase Date following such Offering Date.
  - (o) "PARTICIPANT" means an Employee who has elected to participate in the Plan.
  - (p) "PURCHASE DATE" means each May 14 and November 14.
  - (q) "PLAN" means the Vertex Pharmaceuticals Incorporated Employee Stock Purchase Plan, an "employee stock purchase plan" within the meaning of Section 423(b) of the Code, together with any and all amendments thereto.
  - (r) "STOCK PURCHASE ACCOUNT," with respect to a Participant, means the account established on the books and records of the Company or a Subsidiary for such Participant representing the payroll deductions credited to such account in accordance with the provisions of the Plan.

- (s) "SUBSIDIARY" means any corporation, fifty percent (50%) or more of the total combined voting power of all classes of stock of which is beneficially owned, directly or indirectly, by the Company.

## **ARTICLE II PARTICIPATION**

### **SECTION 2.1. PARTICIPATION REQUIREMENTS.**

- (a) **COMMENCEMENT OF PARTICIPATION.** Subject to Section 2.2 and Section 3.2(b), each person who becomes an Employee after the Effective Date may become a Participant in the Plan on any Offering Date following the date on which such person becomes an Employee.
- (b) **ELIGIBILITY OF FORMER PARTICIPANTS.** If a person terminates employment with the Company after becoming a Participant and subsequently resumes employment with the Company, such person will again become eligible to participate on the Offering Date next following such resumption of employment with the Company.

**SECTION 2.2. EXCLUSIONS.** Notwithstanding any provision of the Plan to the contrary, in no event shall the following persons be eligible to participate in the Plan:

- (a) Any Employee whose customary employment is twenty (20) hours or less per week;
- (b) Any Employee whose customary employment is for not more than five (5) months in any calendar year; or
- (c) Any Employee who, as of the beginning of an Offering Period, owns (or under Section 423(b)(3) of the Code would be deemed to own) stock possessing five percent (5%) or more of the total combined voting power or value of all classes of stock of the Company or a Subsidiary.

## **ARTICLE III OFFERING OF COMMON STOCK**

**SECTION 3.1. RESERVATION OF COMMON STOCK.** The Board of Directors shall reserve 1,748,660 shares of Common Stock for issuance under the Plan after March 17, 2004, subject to adjustment in accordance with Section 3.4, provided that no more than 248,660 of such shares shall be issued prior to May 15, 2004. On May 13, 2008, the Board of Directors shall reserve an additional 2,000,000 shares of Common Stock for issuance under the Plan. On May 16, 2012, the Board of Directors shall reserve an additional 2,500,000 shares of Common Stock for issuance under the Plan.

### **SECTION 3.2. OFFERING OF COMMON STOCK.**

- (a) **GENERAL.** Subject to Section 3.2(b), each Participant in the Plan on an Offering Date shall be entitled to purchase shares of Common Stock on each Purchase Date within the Offering Period that begins with such Offering Date with the amounts deducted from such Participant's Compensation during such Offering Period pursuant to Article IV, provided, however, that a Participant shall not participate in more than one Offering Period simultaneously. The purchase price for such shares of Common Stock shall be determined under Section 3.3.
- (b) **LIMITATIONS.** Notwithstanding Section 3.2(a), no employee may accrue rights to purchase shares of Common Stock attributable to an Offering Period in excess of \$25,000 of fair market value of such shares (measured as of the relevant Offering Date) for each calendar year during which such rights are outstanding. For any year, this limit shall

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be further reduced by the fair market value of stock (measured as of the relevant Offering Date for such stock) purchasable under any prior outstanding rights relating to such calendar year under this Plan and all other Code section 423 employee stock purchase plans of the Company or any Subsidiary. This paragraph is intended to be consistent with the limitation of Code section 423(b)(8) and shall be interpreted accordingly.

**SECTION 3.3. DETERMINATION OF PURCHASE PRICE FOR OFFERED COMMON STOCK.** The purchase price per share of the shares of Common Stock to be acquired by a Participant on a Purchase Date pursuant to an Offering shall be equal to eighty-five percent (85%) of the lesser of:

- (a) the Fair Market Value of a share of Common Stock on the Offering Date for such Offering Period; or
- (b) the Fair Market Value of a share of Common Stock on such Purchase Date;

provided, however, in no event shall the purchase price be less than the par value of a share of Common Stock.

**SECTION 3.4. EFFECT OF CERTAIN TRANSACTIONS.** The number of shares of Common Stock reserved for the Plan pursuant to Section 3.1, the maximum number of shares of Common Stock offered pursuant to Section 3.2(b), and the determination under Section 3.3 of the purchase price per share of the shares of Common Stock offered to Participants pursuant to an Offering shall be appropriately adjusted to reflect any increase or decrease in the number of issued shares of Common Stock resulting from a stock split, a consolidation of shares, the payment of a stock dividend, or any other capital adjustment affecting the number of issued shares of Common Stock. In the event that the outstanding shares of Common Stock shall be changed into or exchanged for a different number or kind of shares of stock or other securities of the Company or another corporation, whether through reorganization, recapitalization, merger, consolidation, or otherwise, then there shall be substituted for each share of Common Stock reserved for issuance under the Plan but not yet purchased by Participants, the number and kind of shares of stock or other securities into which each outstanding share of Common Stock shall be so changed or for which each such share shall be exchanged.

## **ARTICLE IV PAYROLL DEDUCTIONS**

**SECTION 4.1. PAYROLL DEDUCTION ELECTIONS.** Any Employee eligible to participate in the Plan may elect to have the Company deduct from the Compensation payable to such Employee during each Offering Period any amount between one percent (1%) and fifteen percent (15%) of such Participant's Compensation, in whole multiples of one percent (1%). Such election shall be made during the thirty day period preceding the Offering Period to which it first relates. Such election shall become effective as of the first day of such Participant's first pay period that begins on or after the first day of such Offering Period and shall remain effective for each successive pay period and for each subsequent Offering until changed or terminated pursuant to this Article IV. The percentage deduction specified by the Participant will be deducted from each payment of Compensation made to the Participant.

**SECTION 4.2. ELECTION TO INCREASE OR DECREASE PAYROLL DEDUCTIONS.** Subject to Section 4.4, a Participant who has a payroll deduction election in effect under Section 4.1 may prospectively increase or decrease during an Offering Period the percentage amount of the deductions being made by the Company from such Participant's Compensation (including a decrease to zero) by delivering to the Company written direction to make such change. Such change shall become effective as soon as practicable after the Company's receipt of such written direction and shall remain in effect until changed or terminated pursuant to this Article IV. A Participant shall be permitted to increase or decrease the percentage amount of the deductions being made from such Participant's Compensation only once during each of the portions of an Offering Period that ends on a Purchase Date; provided, however, a Participant may terminate the deductions being made from such Participant's Compensation at any time during such Offering Period. If a Participant terminates deductions, such Participant cannot resume deductions during that Offering Period.

**SECTION 4.3. TERMINATION OF ELECTION UPON TERMINATION OF EMPLOYMENT.** The termination of employment of a Participant for any reason shall automatically terminate the election of such Participant to have amounts deducted from such Participant's Compensation pursuant to this Article IV that is then in effect. Such termination shall be effective immediately following the pay period during which such termination of employment occurs, but shall not affect the deduction from Compensation for that pay period.

**SECTION 4.4. FORM OF ELECTIONS.** Except as otherwise permitted by the Company, any election by a Participant regarding participation in or withdrawal from the Plan or deductions from Compensation pursuant to this Article IV shall be in

writing on a form furnished by the Company for such purpose and shall be made by having such Participant file such form with the Company in the manner prescribed from time to time by the Company.

## **ARTICLE V STOCK PURCHASE ACCOUNTS AND PURCHASE OF COMMON STOCK**

**SECTION 5.1. STOCK PURCHASE ACCOUNTS.** A Stock Purchase Account shall be established and maintained on the books and records of the Company for each Participant. Amounts deducted from a Participant's Compensation pursuant to Article IV shall be credited to such Participant's Stock Purchase Account. No interest or other increment shall accrue or be payable to any Participant with respect to any amounts credited to such Stock Purchase Accounts. All amounts credited to such Stock Purchase Accounts shall be withdrawn, paid, or applied toward the purchase of Common Stock pursuant to the provisions of this Article V.

**SECTION 5.2. PURCHASE OF COMMON STOCK.**

- (a) **GENERAL.** As of each Purchase Date, the amount to the credit of a Participant in such Participant's Stock Purchase Account shall be used to purchase from the Company on such Participant's behalf the largest number of whole shares of Common Stock which can be purchased at the price determined under Section 3.3 with the amount then credited to such Participant's Stock Purchase Account, subject to the limitations set forth in Article III on the maximum number of shares of Common Stock such Participant may purchase. As of such date, such Participant's Stock Purchase Account shall be charged with the aggregate purchase price of the shares of Common Stock purchased on such Participant's behalf. No brokerage or other fees are to be charged upon a purchase. Stock transfer taxes, if any, shall be paid by the Company. The remaining balance, if any, credited to such Participant's Stock Purchase Account shall be carried forward and used to purchase shares of Common Stock on the next succeeding Purchase Date; provided that any excess balance remaining in a Participant's Stock Purchase Account after the application of the limitations in Section 3.2 shall be refunded to the Participant.
- (b) **ISSUANCE OF COMMON STOCK.** The shares of Common Stock purchased for a Participant as of a Purchase Date shall be deemed to have been issued by the Company for all purposes as of the close of business on such date. Prior to such date, none of the rights and privileges of a stockholder of the Company shall exist with respect to such shares of Common Stock. As soon as practicable after such a Purchase Date the Company shall issue and deliver, or shall cause its stock transfer agent to issue and deliver, a certificate for the number of shares of Common Stock purchased for a Participant, which certificate shall be issued in the Participant's name or, if so specified by the Participant, in the name of the Participant and such other person as the Participant shall designate as joint tenants with right of survivorship. In lieu of issuing a certificate, the Company may elect to deliver to the Participant a statement which shall indicate the number of shares of Common Stock purchased for such Participant and the aggregate number of shares of Common Stock held on behalf of such Participant under the Plan.
- (c) **INSUFFICIENT COMMON STOCK AVAILABLE.** If, as of any Purchase Date, the aggregate Stock Purchase Accounts available for the purchase of shares of Common Stock pursuant to Section 5.2(a) would purchase a number of shares of Common Stock in excess of the number of shares of Common Stock then available for purchase under the Plan, (i) the number of shares of Common Stock which would otherwise be purchased for each Participant on such date shall be reduced proportionately to the extent necessary to eliminate such excess, (ii) the remaining balance to the credit of each Participant in each such Participant's Stock Purchase Accounts shall be distributed to each such Participant, and (iii) the Plan shall terminate automatically upon the distribution of the remaining balance in such Stock Purchase Accounts.

**SECTION 5.3. WITHDRAWAL FROM PLAN PRIOR TO PURCHASE OF COMMON STOCK.** In the event (i) a Participant elects in writing for any reason to withdraw from the Plan during an Offering Period or (ii) a Participant's employment with the Company terminates for any reason prior to the end of an Offering Period, then the entire amount remaining to the credit of such Participant in such Participant's Stock Purchase Account shall be distributed to such Participant (or, if such Participant is deceased, to such Participant's Beneficiary) as soon as administratively practicable after such withdrawal or termination of employment (as the case may be).

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**ARTICLE VI  
COMMITTEE**

**SECTION 6.1. POWERS OF THE COMMITTEE.** The Committee shall administer the Plan. The Committee shall have all powers necessary to enable it to carry out its duties under the Plan properly. Not in limitation of the foregoing, the Committee shall have the power to construe and interpret the Plan and to determine all questions that shall arise thereunder. The decision of the Committee upon all matters within the scope of its authority shall be final and conclusive on all persons, except to the extent otherwise provided by law.

**SECTION 6.2. INDEMNIFICATION OF THE COMMITTEE.** The Company agrees to indemnify and hold harmless the members of the Committee against any liabilities, loss, costs, or damage that they may incur in acting as such members and to assume the defense of any and allocations, suits, or proceedings against the members of the Committee, to the extent permitted by applicable law.

**ARTICLE VII  
AMENDMENT AND TERMINATION**

**SECTION 7.1. AMENDMENT OF THE PLAN.** The Company expressly reserves the right, at any time and from time to time, to amend in whole or in part any of the terms and provisions of the Plan; provided, however, no amendment may without the approval of the shareholders of the Company increase the number of shares of Common Stock reserved under the Plan.

**SECTION 7.2. TERMINATION OF PLAN.** The Company expressly reserves the right, at any time and for whatever reason it may deem appropriate, to terminate the Plan. The Plan shall continue in effect until terminated pursuant to (i) the preceding sentence or (ii) Section 5.2(c). Upon any termination of the Plan, the entire amount credited to the Stock Purchase Account of each Participant shall be distributed to each such Participant.

**SECTION 7.3. PROCEDURE FOR AMENDMENT OR TERMINATION.** Any amendment to the Plan or termination of the Plan may be retroactive to the extent not prohibited by applicable law. Any amendment to the Plan or termination of the Plan shall be made by the Company by resolution of the Board of Directors (subject to Section 7.1) and shall not require the approval or consent of any Participant or Beneficiary in order to be effective.

**ARTICLE VIII  
MISCELLANEOUS**

**SECTION 8.1. ADOPTION BY A SUBSIDIARY.** A Subsidiary may, with the approval of the Board of Directors and the board of directors of such Subsidiary, elect to adopt the Plan as of a date mutually agreeable to the Board of Directors and the board of directors of such Subsidiary. Any such adoption of the Plan by a Subsidiary shall be evidenced by an appropriate instrument of adoption executed by such Subsidiary.

**SECTION 8.2. AUTHORIZATION AND DELEGATION TO THE BOARD OF DIRECTORS.** Each Subsidiary that hereafter adopts the Plan authorizes the Board of Directors (i) to amend or terminate the Plan without further action by said Subsidiary as provided in Article VII and (ii) to perform such other acts and to do such other things as the Board of Directors is expressly directed, authorized, or permitted to perform or do as provided herein.

**SECTION 8.3. TRANSFERABILITY OF RIGHTS.** Rights under the Plan are not transferable by a Participant other than by will or the laws of descent and distribution and are exercisable during a Participant's lifetime only by the Participant.

**SECTION 8.4. NO EMPLOYMENT RIGHTS.** Participation in the Plan shall not give any employee of the Company or any Subsidiary any right to remain employed or, upon termination of employment, any right or interest in the Plan, except as expressly provided herein.

**SECTION 8.5. COMPLIANCE WITH LAW.** No shares of Common Stock shall be issued under the Plan prior to compliance by the Company to the satisfaction of its counsel with any applicable laws.

**SECTION 8.6. CONSTRUCTION.** Article, Section, and paragraph headings have been inserted in the Plan for convenience of reference only and are to be ignored in any construction of the provisions hereof. If any provision of the Plan shall be invalid or unenforceable, the remaining provisions shall nevertheless be valid, enforceable, and fully effective. It is the intent that the Plan shall at all times constitute an "employee stock purchase plan" within the meaning of Section 423(b) of the Code, and the Plan shall be construed, and interpreted to remain such. The Plan shall be construed, administered, regulated,

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and governed by the laws of the United States to the extent applicable, and to the extent such laws are not applicable, by the laws of The Commonwealth of Massachusetts. Without limiting the foregoing, all Participants for an Offering Period shall have the same rights and privileges with respect to their rights to acquire Common Stock under the Plan for such period, subject to the express terms hereof.

**CERTIFICATION**

I, Jeffrey M. Leiden, 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: August 8, 2012

/s/ JEFFREY M. LEIDEN

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Jeffrey M. Leiden  
Chief Executive Officer  
(principal executive officer)

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## QuickLinks

[Exhibit 31.1](#)



**CERTIFICATION**

I, Ian F. Smith, 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: August 8, 2012

/s/ IAN F. SMITH

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Ian F. Smith  
*Executive Vice President and Chief Financial Officer*  
*(principal financial officer)*

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## QuickLinks

[Exhibit 31.2](#)

**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)**

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, 2012 (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.

Dated: August 8, 2012

/s/ JEFFREY M. LEIDEN

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Jeffrey M. Leiden  
*Chief Executive Officer*  
*(principal executive officer)*

Dated: August 8, 2012

/s/ IAN F. SMITH

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Ian F. Smith  
*Executive Vice President and Chief Financial Officer*  
*(principal financial officer)*

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## QuickLinks

[Exhibit 32.1](#)