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

FORM 10-Q

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

FOR THE QUARTERLY PERIOD ENDED JUNE 30, 2010

OR

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

FOR THE TRANSITION PERIOD FROM TO

COMMISSION FILE NUMBER 000-19319

VERTEX PHARMACEUTICALS INCORPORATED
(Exact name of registrant as specified in its charter)

MASSACHUSETTS (State or other jurisdiction of incorporation or organization)	**04-3039129** (I.R.S. Employer Identification No.)
130 WAVERLY STREET **CAMBRIDGE, MASSACHUSETTS** (Address of principal executive offices)	**02139-4242** (Zip Code)

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

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 o

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 o

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

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

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

Common Stock, par value $0.01 per share Class	**202,831,612** Outstanding at July 29, 2010

VERTEX PHARMACEUTICALS INCORPORATED
FORM 10-Q
FOR THE QUARTER ENDED JUNE 30, 2010

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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" is a registered trademark of Vertex. "Lexiva," "Telzir" and "Agenerase" are registered trademarks of GlaxoSmithKline plc. Other brands, names and trademarks contained in this Quarterly Report on Form 10-Q are the property of their respective owners.

Part I. Financial Information

Item 1. Financial Statements

Vertex Pharmaceuticals Incorporated

Condensed Consolidated Balance Sheets

(unaudited)

(in thousands, except share and per share amounts)

	June 30, 2010	December 31, 2009
Assets		
Current assets:		
Cash and cash equivalents	$ 337,608	$ 446,658
Marketable securities, available for sale	641,537	838,255
Accounts receivable	3,548	9,601
Prepaid expenses and other current assets	21,862	12,512
Total current assets	1,004,555	1,307,026
Restricted cash	34,090	30,313
Property and equipment, net	60,438	62,279
Intangible assets	518,700	518,700
Goodwill	26,102	26,102
Other assets	10,317	11,068
Total assets	$ 1,654,202	$ 1,955,488
Liabilities and Stockholders' Equity		
Current liabilities:		
Accounts payable	$ 46,495	$ 36,989
Accrued expenses and other current liabilities	106,668	118,753
Accrued interest	—	571
Deferred revenues, current portion	78,273	74,956
Accrued restructuring expense, current portion	6,162	6,316
Convertible senior subordinated notes	—	32,071
Secured notes (due October 2012), current portion	45,776	—
Other obligations	9,002	15,227
Total current liabilities	292,376	284,883
Accrued restructuring expense, excluding current portion	27,762	27,701
Secured notes (due October 2012), excluding current portion	86,407	121,765
Liability related to sale of potential future milestone payments	63,082	38,207
Deferred revenues, excluding current portion	195,223	225,575
Deferred tax liability	160,278	160,278
Other liabilities	1,939	733
Total liabilities	827,067	859,142
Commitments and contingencies		
Stockholders' equity:		
Preferred stock, $0.01 par value; 1,000,000 shares authorized; none issued and outstanding at June 30, 2010 and December 31, 2009	—	—
Common stock, $0.01 par value; 300,000,000 shares authorized at June 30, 2010 and December 31, 2009; 202,532,925 and 199,955,023 shares issued and outstanding at June 30, 2010 and December 31, 2009, respectively	2,007	1,982
Additional paid-in capital	3,880,746	3,784,787
Accumulated other comprehensive loss	(558)	(640)
Accumulated deficit	(3,055,060)	(2,689,783)
Total stockholders' equity	827,135	1,096,346
Total liabilities and stockholders' equity	$ 1,654,202	$ 1,955,488

The accompanying notes are an integral part of these condensed consolidated 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,	
	2010	2009	2010	2009
Revenues:				
Royalty revenues	$ 7,262	$ 5,917	$ 13,669	$ 12,057
Collaborative revenues	24,360	13,147	40,382	30,986
Total revenues	31,622	19,064	54,051	43,043
Costs and expenses:				
Royalty expenses	3,086	3,267	6,453	6,843
Research and development expenses	155,082	139,331	298,094	282,912
Sales, general and administrative expenses	40,915	32,526	76,467	61,046
Restructuring expense	2,112	1,107	2,892	3,509
Acquisition-related expenses	—	—	—	7,793
Total costs and expenses	201,195	176,231	383,906	362,103
Loss from operations	(169,573)	(157,167)	(329,855)	(319,060)
Interest income	484	1,489	939	4,088
Interest expense	(3,683)	(3,325)	(7,638)	(6,703)
Change in fair value of derivative instruments	(27,234)	—	(28,723)	—
Loss on exchange of convertible subordinated notes	—	(12,294)	—	(12,294)
Net loss	$ (200,006)	$ (171,297)	$ (365,277)	$ (333,969)
Basic and diluted net loss per common share	$ (1.00)	$ (0.99)	$ (1.83)	$ (2.03)
Basic and diluted weighted-average number of common shares outstanding	200,397	172,563	199,670	164,258

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, 2010	Six Months Ended June 30, 2009
Cash flows from operating activities:		
Net loss	$ (365,277)	$ (333,969)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization expense	15,496	14,909
Stock-based compensation expense	43,782	48,862
Other non-cash based compensation expense	3,497	3,311
Secured notes (due 2012) discount amortization expense	6,570	—
Change in fair value of derivative instruments	28,723	—
Loss on exchange of convertible subordinated notes	—	12,294
Loss on disposal of property and equipment	22	2,076
Changes in operating assets and liabilities, excluding the effect of an acquisition:		
Accounts receivable	6,045	8,744
Prepaid expenses and other current assets	(9,400)	(105)
Accounts payable	9,636	(24,565)
Accrued expenses and other liabilities	(16,884)	(17,770)
Accrued restructuring expense	(93)	(14)
Accrued interest	(431)	(685)
Deferred revenues	(27,035)	(16,712)
Net cash used in operating activities	(305,349)	(303,624)
Cash flows from investing activities:		
Purchases of marketable securities	(321,252)	(250,715)
Sales and maturities of marketable securities	518,141	345,457
Payment for the acquisition of ViroChem, net of cash acquired	—	(87,422)
Expenditures for property and equipment	(12,796)	(11,165)
Increase in restricted cash	(3,777)	—
(Increase) decrease in other assets	(906)	365
Net cash provided by (used in) investing activities	179,410	(3,480)
Cash flows from financing activities:		
Issuances of common stock from employee benefit plans	17,137	16,584
Issuances of common stock from stock offerings, net	—	313,250
Debt conversion/exchange costs	(22)	(85)
Net cash provided by financing activities	17,115	329,749
Effect of changes in exchange rates on cash	(226)	(2,811)
Net (decrease) increase in cash and cash equivalents	(109,050)	19,834
Cash and cash equivalents—beginning of period	446,658	389,115
Cash and cash equivalents—end of period	$ 337,608	$ 408,949
Supplemental disclosure of cash flow information:		
Cash paid for interest	$ 761	$ 6,828
Conversion/exchange of convertible subordinated notes for common stock	$ 32,071	$ 143,500
Accrued interest offset to additional paid-in capital on conversion/exchange of convertible subordinated notes	$ 140	$ 2,099
Unamortized debt issuance costs of converted/exchanged convertible subordinated notes offset to additional paid-in capital	$ 624	$ 3,476
Fair value of common stock issued to acquire ViroChem	$ —	$ 290,557

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

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.

The condensed consolidated financial statements reflect the operations of the Company and its wholly-owned subsidiaries. All significant intercompany balances and transactions have been eliminated.

Certain information and footnote disclosures normally included in the Company's annual financial statements have been condensed or omitted. The 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, 2010 and 2009.

The results of operations for the interim periods are not necessarily indicative of the results of operations to be expected for the fiscal year, although the Company expects to incur a substantial loss for the year ending December 31, 2010. These interim financial statements should be read in conjunction with the audited financial statements for the year ended December 31, 2009, which are contained in the Company's Annual Report on Form 10-K for the year ended December 31, 2009 that was filed with the Securities and Exchange Commission on February 19, 2010.

B. Accounting Policies

Basic and Diluted Net Loss per Common Share

Basic net loss per common share is based upon the weighted-average number of common shares outstanding during the period, excluding restricted stock and restricted stock units that have been issued but are not yet vested. Diluted net loss per common share 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. Common equivalent 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), the assumed conversion of convertible notes and vesting of unvested restricted stock and restricted stock units. Common equivalent shares have not been included in the net loss per common share calculations because the effect would have been anti-dilutive. Total potential gross common equivalent shares consisted of the following:

	At June 30,	
	2010	2009
	(in thousands, except per share amounts)	
Stock options	20,993	18,095
Weighted-average exercise price (per share)	$ 32.07	$ 30.03
Convertible notes	—	6,223
Conversion price (per share)	n/a	$ 23.14
Unvested restricted stock and restricted stock units	1,871	1,778

Vertex Pharmaceuticals Incorporated

Notes to Condensed Consolidated Financial Statements (Continued)

(unaudited)

B. Accounting Policies (Continued)

Stock-based Compensation Expense

The Company expenses the fair value of employee stock options and other forms of stock-based employee compensation over the associated employee service period or, for awards with market conditions, the derived service period. For awards with performance conditions, the Company makes estimates regarding the likelihood of satisfaction of the performance conditions that affect the period over which the expense is recognized. Compensation expense is determined based on the fair value of the award at the grant date, including estimated forfeitures, and is adjusted to reflect actual forfeitures and the outcomes of certain market and performance conditions. Please refer to Note C, "Stock-based Compensation Expense," for further information.

Research and Development Expenses

All research and development expenses, including amounts funded by research and development collaborations, are expensed as incurred. The Company defers and capitalizes nonrefundable advance payments made by the Company for research and development activities until the related goods are delivered or the related services are performed.

Research and development expenses are comprised of costs incurred by the Company in performing research and development activities, including salary and benefits; stock-based compensation expense; laboratory supplies and other direct expenses; contractual services, including clinical trial and pharmaceutical development costs; commercial supply investment in its drug candidates; and infrastructure costs, including facilities costs and depreciation expense. The Company evaluates periodically whether a portion of its commercial supply investment may be capitalized as inventory. Generally, inventory may be capitalized if it is probable that future revenues will be generated from the sale of the inventory and that these revenues will exceed the cost of the inventory. The Company is continuing to expense all of its commercial supply investment due to the high risk inherent in drug development.

The Company's collaborators funded portions of the Company's research and development programs related to specific drug candidates and research targets, including telaprevir, in the three and six months ended June 30, 2010 and 2009. The Company's collaborative revenues, including amortization of up-front license fees received in prior periods, were $24.4 million and $13.1 million, respectively, for the three months ended June 30, 2010 and 2009 and $40.4 million and $31.0 million, respectively, for the six months ended June 30, 2010 and 2009. 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 $40 million and approximately $37 million, respectively, for the three months ended June 30, 2010 and 2009 and approximately $77 million and approximately $86 million, respectively, for the six months ended June 30, 2010 and 2009.

Restructuring Expense

The Company records costs and liabilities associated with exit and disposal activities based on estimates of fair value in the period the liabilities are incurred. In periods subsequent to initial measurement, changes to the liability are measured using the credit-adjusted risk-free discount rate applied in the initial period. Liabilities are evaluated and adjusted as appropriate for changes in

Vertex Pharmaceuticals Incorporated

Notes to Condensed Consolidated Financial Statements (Continued)

(unaudited)

B. Accounting Policies (Continued)

circumstances at least on a quarterly basis. Please refer to Note H, "Restructuring Expense," for further information.

Revenue Recognition

Collaborative Revenues

The Company's revenues are generated primarily through collaborative research, development and/or commercialization agreements. The terms of these agreements typically include payment to the Company of one or more of the following: nonrefundable, up-front license fees; funding of research and/or development activities; payments for services the Company provides through its third-party manufacturing network; milestone payments; and royalties on product sales. Each of these types of payments results in collaborative revenues, except for revenues from royalties on product sales, which are classified as royalty revenues.

Agreements containing multiple elements are divided into separate units of accounting if certain criteria are met, including whether the delivered element has stand-alone value to the collaborator and whether there is objective and reliable evidence of the fair value of the undelivered obligation(s). The consideration received is allocated among the separate units either on the basis of each unit's fair value or using the residual method, and the applicable revenue recognition criteria are applied to each of the separate units.

Up-front Fees

The Company recognizes revenues from nonrefundable, up-front license fees on a straight-line basis over the contracted or estimated period of performance, which is typically the period over which the research and development is expected to occur or manufacturing services are expected to be provided. In order to estimate the period of performance, the Company is required to make estimates regarding the drug development and commercialization timelines for compounds being developed pursuant to the applicable agreement. The Company's estimates regarding the period of performance under certain of its collaboration agreements have changed in the past and may change in the future.

Milestones

At the inception of each agreement that includes milestone payments, the Company evaluates whether each milestone is substantive on the basis of the contingent nature of the milestone, specifically reviewing factors such as the scientific and other risks that must be overcome to achieve the milestone, as well as the level of effort and investment required. The Company recognizes revenues related to substantive milestones in full in the period in which the substantive milestone is achieved, if payment is reasonably assured and the Company's performance obligations are fully satisfied. If the Company has obligations remaining after the achievement of the milestone, the Company considers whether it has sufficient evidence of the fair value of its remaining obligations. If (A) a milestone is not considered substantive or (B) the Company has remaining obligations after the achievement of a substantive milestone and does not have sufficient evidence of the fair value of those obligations, the Company recognizes the applicable milestone over the period of performance.

Vertex Pharmaceuticals Incorporated

Notes to Condensed Consolidated Financial Statements (Continued)

(unaudited)

B. Accounting Policies (Continued)

Research and Development Activities/Manufacturing Services

Under certain of its collaboration agreements, the Company is entitled to reimbursement from its collaborators for specified research and development expenses and/or payments for specified manufacturing services that the Company provides through its third-party manufacturing network. The Company typically recognizes the revenues related to these reimbursable expenses and manufacturing services in the period in which the reimbursable expenses are incurred or the manufacturing services are provided. The Company considers the nature and contractual terms of the arrangement and the nature of the Company's business operations in order to determine whether research and development funding will result in collaborative revenues or an offset to research and development expenses.

Royalty Revenues

Royalty revenues typically are recognized based upon actual and estimated net sales of licensed products in licensed territories, as provided by the licensee, and generally are recognized in the period the sales occur. The Company reconciles and adjusts for differences between actual royalty revenues and estimated royalty revenues in the quarter they become known. These differences have not historically been significant.

The Company has sold its rights to certain royalties on sales of HIV protease inhibitors and recognizes the revenues related to this sale as royalty revenues. In the circumstance where the Company has sold its rights to future royalties under a license agreement and also maintains continuing involvement in the royalty arrangement (but not significant continuing involvement in the generation of the cash flows due to the purchaser of the future royalty rights), the Company defers recognition of the proceeds it receives for the royalty stream and recognizes these deferred revenues over the life of the license agreement. The Company recognizes these deferred revenues pursuant to the units-of-revenue method. Under this method, the amount of deferred revenues to be recognized as royalty revenues in each period is calculated by multiplying the following: (1) the royalty payments due to the purchaser for the period by (2) the ratio of the remaining deferred revenue amount to the total estimated remaining royalty payments due to the purchaser over the term of the agreement. The Company's estimates regarding the estimated remaining royalty payments due to the purchaser have changed in the past and may change in the future.

Financial Transaction Expenses

Issuance costs incurred to complete the Company's convertible senior subordinated note offering and the financial transactions that the Company entered into in September 2009 are deferred and included in other assets on the Company's condensed consolidated balance sheets. The issuance costs are amortized using the effective interest rate method over the term of the related debt or financial instrument. The amortization expense related to the issuance costs is included in interest expense on the condensed consolidated statements of operations.

The Company defers direct and incremental costs associated with the sale of its rights to future royalties. These costs are included in other assets on the Company's condensed consolidated balance sheets and are amortized in the same manner and over the same period during which the related deferred revenues are recognized as royalty revenues. The amortization expense related to these

Vertex Pharmaceuticals Incorporated

Notes to Condensed Consolidated Financial Statements (Continued)

(unaudited)

B. Accounting Policies (Continued)

transaction expenses is included in royalty expenses on the condensed consolidated statements of operations.

Expenses incurred in connection with common stock issuances are recorded as an offset to additional paid-in capital on the condensed consolidated balance sheets.

Business Combinations

The Company assigns the value of the consideration transferred to acquire a business to the tangible assets and identifiable intangible assets acquired and liabilities assumed on the basis of their fair values at the date of acquisition. The Company assesses the fair value of assets, including intangible assets such as in-process research and development, using a variety of methods including present-value models. Each asset is measured at fair value from the perspective of a market participant. The method used to estimate the fair values of in-process research and development assets incorporates significant assumptions regarding the estimates market participants would make in order to evaluate an asset: including market participants' assumptions regarding the probability of completing in-process research and development projects, which would require obtaining regulatory approval for marketing of the associated drug candidate; market participants' estimates regarding the timing of and the expected costs to complete in-process research and development projects; market participants' estimates of future cash flows from potential product sales; and the appropriate discount rates for market participants. Transaction costs and restructuring costs associated with the transaction are expensed as incurred.

In-process Research and Development Assets

In-process research and development assets acquired in a business combination are recorded as of the acquisition date at fair value and accounted for as indefinite-lived intangible assets. These assets are maintained on the Company's condensed consolidated balance sheets until either the project underlying them is completed or the assets become impaired. If a project is completed, the carrying value of the related intangible asset is amortized over the remaining estimated life of the asset beginning in the period in which the project is completed. If a project becomes impaired or is abandoned, the carrying value of the related intangible asset is written down to its fair value and an impairment charge is taken in the period in which the impairment occurs. In-process research and development assets are tested for impairment on an annual basis as of October 1, or earlier if impairment indicators are present.

Goodwill

The difference between the purchase price and the fair value of assets acquired and liabilities assumed in a business combination is allocated to goodwill. Goodwill is evaluated for impairment on an annual basis as of October 1, or earlier if impairment indicators are present.

Derivative Instruments and Embedded Derivatives

The Company has entered into financial transactions involving a free-standing derivative instrument and embedded derivatives. These financial transactions include arrangements involving

Vertex Pharmaceuticals Incorporated

Notes to Condensed Consolidated Financial Statements (Continued)

(unaudited)

B. Accounting Policies (Continued)

secured notes, the sale of potential future milestone payments and convertible notes. The embedded derivatives are required to be bifurcated from the host instruments because the derivatives are not clearly and closely related to the host instruments. The Company determines the fair value of each derivative instrument or embedded derivative on the date of issuance. The estimates of the fair value of these derivatives, particularly with respect to derivatives related to the achievement of milestones in the development of specific drug candidates, include significant assumptions regarding the estimates market participants would make in order to evaluate the derivative. Changes in the fair value of these derivatives are evaluated on a quarterly basis. Please refer to Note L, "September 2009 Financial Transactions," for further information.

C. 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 issues, to certain members of senior management, restricted stock and restricted stock units that vest upon the earlier of the satisfaction of (i) market or performance conditions or (ii) a service condition, and stock options that vest upon the earlier of the satisfaction of (1) performance conditions or (2) a service condition. In the second quarter of 2010, based on the advancement of the telaprevir registration program, the Company began recognizing a portion of the stock-based compensation expense related to certain grants that contain performance conditions and a service condition over an implicit service period that is shorter than the service period over which the Company had been recognizing the expense. The implicit service period is the period that will be required to meet the performance condition based on the Company's estimates.

These stock options, restricted stock and restricted stock units are granted under the Company's stock and option plans. In addition, the Company issues shares pursuant to an employee stock purchase plan ("ESPP"). On May 13, 2010, the Company's shareholders approved an increase in the number of shares of common stock authorized for issuance under the Company's Amended and Restated 2006 Stock and Option Plan by 12,000,000 shares, from 21,602,380 shares to 33,602,380 shares.

The effect of stock-based compensation expense during the three and six months ended June 30, 2010 and 2009 was as follows:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2010	2009	2010	2009
	(in thousands)			
Stock-based compensation expense by line item:				
Research and development expenses	$ 17,735	$ 20,542	$ 32,055	$ 37,894
Sales, general and administrative expenses	6,714	6,043	11,727	10,968
Total stock-based compensation expense included in net loss	$ 24,449	$ 26,585	$ 43,782	$ 48,862

Vertex Pharmaceuticals Incorporated

Notes to Condensed Consolidated Financial Statements (Continued)

(unaudited)

C. Stock-based Compensation Expense (Continued)

The stock-based compensation expense by type of award during the three and six months ended June 30, 2010 and 2009 was as follows:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2010	2009	2010	2009
	(in thousands)			
Stock-based compensation expense by type of award:				
Stock options	$ 17,735	$ 20,707	$ 31,203	$ 36,864
Restricted stock and restricted stock units	5,743	4,948	10,490	9,705
ESPP share issuances	971	930	2,089	2,293
Total stock-based compensation expense included in net loss	$ 24,449	$ 26,585	$ 43,782	$ 48,862

The stock-based compensation expense for the three and six months ended June 30, 2009 included $4.5 million and $9.2 million, respectively, related to accelerated vesting and the modification of stock options and $0.6 million and $1.3 million, respectively, related to accelerated vesting of restricted stock awards, in each case in connection with Dr. Joshua Boger's transition arrangement. The stock-based compensation expense for the three and six months ended June 30, 2009 also included $1.5 million related to accelerated vesting of stock options and $0.3 million related to accelerated vesting of restricted stock awards, in each case in connection with another executive officer's severance arrangement. The following table sets forth the unrecognized stock-based compensation expense, net of estimated forfeitures, as of June 30, 2010 by type of award and the weighted-average period over which that expense is expected to be recognized for the Company's stock options, restricted stock and restricted stock units, and ESPP share issuances:

	As of June 30, 2010	
	Unrecognized Expense, Net of Estimated Forfeitures	Weighted-average Recognition Period
	(in thousands)	*(in years)*
Type of award:		
Stock options	$ 124,087	2.84
Restricted stock and restricted stock units	39,186	2.30
ESPP share issuances	3,157	0.64

Vertex Pharmaceuticals Incorporated

Notes to Condensed Consolidated Financial Statements (Continued)

(unaudited)

D. Marketable Securities

A summary of cash, cash equivalents and marketable securities is shown below:

June 30, 2010	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
		(in thousands)		
Cash and cash equivalents				
Cash and money market funds	$ 295,498	$ —	$ —	$ 295,498
Government-sponsored enterprise securities	42,109	3	(2)	42,110
Total cash and cash equivalents	$ 337,607	$ 3	$ (2)	$ 337,608
Marketable securities				
U.S. Treasury securities (due within 1 year)	$ 205,968	$ 23	$ —	$ 205,991
Government-sponsored enterprise securities (due within 1 year)	435,439	108	(1)	435,546
Total marketable securities	$ 641,407	$ 131	$ (1)	$ 641,537
Total cash, cash equivalents and marketable securities	$ 979,014	$ 134	$ (3)	$ 979,145
December 31, 2009				
Cash and cash equivalents				
Cash and money market funds	$ 251,005	$ —	$ —	$ 251,005
U.S. Treasury securities	20,198	—	(5)	20,193
Government-sponsored enterprise securities	175,455	8	(3)	175,460
Total cash and cash equivalents	$ 446,658	$ 8	$ (8)	$ 446,658
Marketable securities				
U.S. Treasury securities (due within 1 year)	$ 223,422	$ —	$ (99)	$ 223,323
Government-sponsored enterprise securities (due within 1 year)	614,869	81	(18)	614,932
Total marketable securities	$ 838,291	$ 81	$ (117)	$ 838,255
Total cash, cash equivalents and marketable securities	$ 1,284,949	$ 89	$ (125)	$ 1,284,913

The Company reviews investments in marketable securities for other-than-temporary impairment whenever the fair value of an investment is less than amortized cost and evidence indicates that an investment's carrying amount is not recoverable within a reasonable period of time. To determine whether an impairment is other-than-temporary, the Company considers the intent to sell, or whether it is more likely than not that the Company will be required to sell, the investment before recovery of the investment's amortized cost basis. Evidence considered in this assessment includes reasons for the impairment, compliance with the Company's investment policy, the severity and the duration of the impairment and changes in value subsequent to period end.

As of June 30, 2010, the Company had one government-sponsored enterprise security that was in a gross unrealized loss position and no marketable securities in any other category that were in a gross unrealized loss position. The following table summarizes the fair value and gross unrealized losses

Vertex Pharmaceuticals Incorporated

Notes to Condensed Consolidated Financial Statements (Continued)

(unaudited)

D. Marketable Securities (Continued)

related to marketable securities, aggregated by investment category and length of time that individual securities have been in a continuous gross unrealized loss position as of June 30, 2010:

	Less than 12 months		12 months or more		Total	
	Fair Value	Gross Unrealized Loss	Fair Value	Gross Unrealized Loss	Fair Value	Gross Unrealized Loss
	(in thousands)					
Government-sponsored enterprise securities	$ 40,019	$ (1)	$ —	$ —	$ 40,019	$ (1)
Total	$ 40,019	$ (1)	$ —	$ —	$ 40,019	$ (1)

The following table summarizes the fair value and gross unrealized losses related to marketable securities, aggregated by investment category and length of time that individual securities have been in a continuous gross unrealized loss position as of December 31, 2009:

	Less than 12 months		12 months or more		Total	
	Fair Value	Gross Unrealized Loss	Fair Value	Gross Unrealized Loss	Fair Value	Gross Unrealized Loss
	(in thousands)					
U.S. Treasury securities	$ 221,412	$ (99)	$ —	$ —	$ 221,412	$ (99)
Government-sponsored enterprise securities	118,950	(18)	—	—	118,950	(18)
Total	$ 340,362	$ (117)	$ —	$ —	$ 340,362	$ (117)

In the three months ended June 30, 2010 and 2009, the Company had proceeds of $333.9 million and $171.5 million, respectively, from sales and maturities of available-for-sale securities. In the six months ended June 30, 2010 and 2009, the Company had proceeds of $518.1 million and $345.5 million, respectively, from sales and maturities of available-for-sale securities.

Realized gains and losses are determined using the specific identification method and are included in interest income on the condensed consolidated statements of operations. There were no gross realized gains and losses for the three and six months ended June 30, 2010 and 2009.

E. 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

Vertex Pharmaceuticals Incorporated

Notes to Condensed Consolidated Financial Statements (Continued)

(unaudited)

E. Fair Value of Financial Instruments (Continued)

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 credit quality standards as outlined in the Company's investment policy guidelines. These guidelines also limit the amount of credit exposure to any one issue or type of instrument. Beginning in the fourth quarter of 2007, the Company began to shift its investments to instruments that carry less exposure to market volatility and liquidity pressures. As of June 30, 2010, the Company's investments are in money market funds and short-term government guaranteed or supported securities.

As of June 30, 2010, all of the Company's financial assets that were subject to fair value measurements were valued using observable inputs. The Company's financial assets that were valued based on Level 1 inputs consist of a money market fund, U.S. Treasuries and government-sponsored enterprise securities, which are government-supported. The money market fund in which the Company invests also holds government-sponsored enterprise securities. During the three and six months ended June 30, 2010 and 2009, the Company did not record an other-than-temporary impairment charge related to its financial assets. The Company's financial liabilities that were subject to fair value measurement relate to the financial transactions that the Company entered into in September 2009 and are valued based on Level 3 inputs. Please refer to Note L, "September 2009 Financial Transactions."

Vertex Pharmaceuticals Incorporated

Notes to Condensed Consolidated Financial Statements (Continued)

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E. Fair Value of Financial Instruments (Continued)

The following table sets forth the Company's financial assets and liabilities subject to fair value measurements as of June 30, 2010:

	Fair Value Measurements as of June 30, 2010			
		Fair Value Hierarchy		
	Total	Level 1	Level 2	Level 3
	(in thousands)			
Financial assets carried at fair value:				
Cash equivalents:				
Money market funds	$ 234,793	$ 234,793	$ —	$ —
Government-sponsored enterprise securities	42,110	42,110	—	—
Marketable securities:				
U.S. Treasury securities	205,991	205,991	—	—
Government-sponsored enterprise securities	435,546	435,546	—	—
Restricted cash	34,090	34,090	—	—
Total	$ 952,530	$ 952,530	$ —	$ —
Financial liabilities carried at fair value:				
Embedded derivative related to 2012 Notes	$ 14,300	$ —	$ —	$ 14,300
Liability related to sale of potential future milestone payments	63,082	—	—	63,082
Total	$ 77,382	$ —	$ —	$ 77,382

The following table is a reconciliation of financial liabilities measured at fair value using significant unobservable inputs (Level 3):

	Six Months Ended June 30, 2010
	(in thousands)
Balance, December 31, 2009	$ 48,659
Change in fair value of derivative instruments	28,723
Balance, June 30, 2010	$ 77,382

Vertex Pharmaceuticals Incorporated

Notes to Condensed Consolidated Financial Statements (Continued)

(unaudited)

F. Comprehensive Loss

For the three and six months ended June 30, 2010 and 2009, comprehensive loss was as follows:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2010	2009	2010	2009
	(in thousands)			
Net loss	$ (200,006)	$ (171,297)	$ (365,277)	$ (333,969)
Changes in other comprehensive income (loss):				
Unrealized holding gains (losses) on marketable securities	40	(843)	168	(2,836)
Foreign currency translation adjustment	482	118	(86)	86
Total change in other comprehensive income (loss)	522	(725)	82	(2,750)
Total comprehensive loss	$ (199,484)	$ (172,022)	$ (365,195)	$ (336,719)

G. Income Taxes

At June 30, 2010 and December 31, 2009, 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 at June 30, 2010 and December 31, 2009.

The Company files United States 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 originate before 2005. The Company completed an examination by the Internal Revenue Service with respect to 2006 in June 2009 with no material change. The Company currently is not under examination by any jurisdiction for any tax year.

H. 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.

Vertex Pharmaceuticals Incorporated

Notes to Condensed Consolidated Financial Statements (Continued)

(unaudited)

H. Restructuring Expense (Continued)

The restructuring expense incurred in the three and six months ended June 30, 2010 and 2009 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, and the effect of any such adjustments could be material. 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 will record 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.

For the three months ended June 30, 2010, the Company recorded restructuring expense of $2.1 million, which was partially due to revisions of key estimates and assumptions related to the exercise by a sublessee of an option to continue subleasing a portion of the Kendall Square Facility through 2015 and changes to certain assumptions for the period from 2015 to 2018, and partially the result of the imputed interest cost relating to the restructuring liability. The activity related to the restructuring liability for the three months ended June 30, 2010 was as follows (in thousands):

	Liability as of March 31, 2010	Cash payments in the second quarter of 2010	Cash received from subleases in the second quarter of 2010	Charge in the second quarter of 2010	Liability as of June 30, 2010
Lease restructuring liability	$ 33,333	$ (3,754)	$ 2,233	$ 2,112	$ 33,924

For the three months ended June 30, 2009, the Company recorded restructuring expense of $1.1 million, which was primarily the result of the imputed interest cost relating to the restructuring

Vertex Pharmaceuticals Incorporated

Notes to Condensed Consolidated Financial Statements (Continued)

(unaudited)

H. Restructuring Expense (Continued)

liability. The activity related to the restructuring liability for the three months ended June 30, 2009 was as follows (in thousands):

	Liability as of March 31, 2009	Cash payments in the second quarter of 2009	Cash received from subleases in the second quarter of 2009	Charge in the second quarter of 2009	Liability as of June 30, 2009
Lease restructuring liability	$ 34,811	$ (3,985)	$ 2,117	$ 1,107	$ 34,050

For the six months ended June 30, 2010, the Company recorded restructuring expense of $2.9 million, which was primarily the result of the imputed interest cost relating to the restructuring liability and partially the result of revisions to key estimates and assumptions in the second quarter of 2010. The activity related to the restructuring liability for the six months ended June 30, 2010 was as follows (in thousands):

	Liability as of December 31, 2009	Cash payments in the first half of 2010	Cash received from subleases in the first half of 2010	Charge in the first half of 2010	Liability as of June 30, 2010
Lease restructuring liability	$ 34,017	$ (7,415)	$ 4,430	$ 2,892	$ 33,924

For the six months ended June 30, 2009, the Company recorded restructuring expense of $3.5 million, which was the result of incremental lease obligations related to the revision of certain key estimates and assumptions about facility operating costs as well as the imputed interest cost relating to the restructuring liability. The activity related to the restructuring liability for the six months ended June 30, 2009 was as follows (in thousands):

	Liability as of December 31, 2008	Cash payments in the first half of 2009	Cash received from subleases in the first half of 2009	Charge in the first half of 2009	Liability as of June 30, 2009
Lease restructuring liability	$ 34,064	$ (7,757)	$ 4,234	$ 3,509	$ 34,050

I. Equity and Debt Offerings and Debt Exchanges and Conversions

February 2009 Equity Offering

In February 2009, the Company completed an offering of 10,000,000 shares of common stock (the "February 2009 Equity Offering"), which were sold at a price of $32.00 per share. This offering resulted in $313.3 million of net proceeds to the Company. The underwriting discount of $6.4 million and other

I. Equity and Debt Offerings and Debt Exchanges and Conversions (Continued)

expenses of $0.3 million related to the February 2009 Equity Offering were recorded as an offset to additional paid-in capital.

December 2009 Equity Offering

In December 2009, the Company completed an offering of 13,000,000 shares of common stock (the "December 2009 Equity Offering"), which were sold at a price of $38.50 per share. This offering resulted in $488.1 million of net proceeds to the Company. The underwriting discount of $12.1 million and other expenses of $0.3 million related to the December 2009 Equity Offering were recorded as an offset to additional paid-in capital.

2009 Debt Exchanges and 2010 Debt Conversions

As of January 1, 2009, the Company had outstanding $287.5 million in aggregate principal amount of 4.75% convertible senior subordinated notes due 2013 (the "2013 Notes"). The 2013 Notes were convertible, at the option of the holder, into common stock at a price equal to $23.14 per share or 43.22 shares of common stock per $1,000 in principal amount of the 2013 Notes, subject to adjustment. The 2013 Notes bore interest at the rate of 4.75% per annum, and the Company was required to make semi-annual interest payments on the outstanding principal balance of the 2013 Notes on February 15 and August 15 of each year. The Company had the right to redeem the 2013 Notes, in whole or in part, on or after February 15, 2010, at the redemption prices stated in the indenture, plus accrued and unpaid interest to, but excluding, the redemption date. The 2013 Notes would have matured on February 15, 2013.

In the second quarter of 2009, the Company exchanged $143.5 million in aggregate principal amount of the 2013 Notes, plus accrued interest, for 6,601,000 shares of newly-issued common stock. In order to induce the holders of the 2013 Notes to enter into these exchanges, the Company agreed to issue 46 shares of common stock for each $1,000 in principal amount of the 2013 Notes, which was 2.78 more shares of common stock per $1,000 in principal amount than were provided for upon conversion pursuant to the terms of the 2013 Notes. As a result of these exchanges, the Company incurred a non-cash charge of $12.3 million in the second quarter of 2009 related to the incremental shares that were issued to the holders of the 2013 Notes. In addition, accrued interest of $2.1 million and unamortized debt issuance costs of the 2013 Notes of $3.5 million were recorded as an offset to additional paid-in capital.

In the fourth quarter of 2009, the Company exchanged $111.9 million in aggregate principal amount of the 2013 Notes, plus accrued interest, for 4,980,838 shares of newly-issued common stock. In order to induce the holders of the 2013 Notes to enter into these exchanges, the Company agreed to issue 44.5 shares of common stock for each $1,000 in principal amount of the 2013 Notes, which was 1.28 more shares of common stock per $1,000 in principal amount than were provided for upon conversion pursuant to the terms of the 2013 Notes. As a result of these exchanges, the Company incurred a non-cash charge of $5.8 million in the fourth quarter of 2009 related to the incremental shares that were issued to the holders of the 2013 Notes. In addition, accrued interest of $1.3 million and unamortized debt issuance costs of the 2013 Notes of $2.4 million were recorded as an offset to additional paid-in capital.

Vertex Pharmaceuticals Incorporated

Notes to Condensed Consolidated Financial Statements (Continued)

(unaudited)

I. Equity and Debt Offerings and Debt Exchanges and Conversions (Continued)

In the first quarter of 2010, the Company announced that it would redeem the remaining $32.1 million in aggregate principal amount of the 2013 Notes on March 19, 2010. Instead, the holders of the remaining 2013 Notes elected to convert their 2013 Notes, pursuant to the original terms of the 2013 Notes, into 1,386,006 shares of newly-issued common stock in full satisfaction of the 2013 Notes. Accrued interest of $0.1 million and unamortized debt issuance costs of the 2013 Notes of $0.6 million were recorded as an offset to additional paid-in capital.

J. Collaborative Arrangements

Janssen Pharmaceutica, N.V.

In June 2006, the Company entered into a collaboration agreement with Janssen Pharmaceutica, N.V. ("Janssen") for the development, manufacture and commercialization of telaprevir. Under the agreement, Janssen has 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 the Far East, for Janssen) and has exclusive rights to commercialize telaprevir in its territories including Europe, South America, the Middle East, Africa and Australia.

Janssen made a $165.0 million up-front license payment to the Company in July 2006. The up-front license payment is being amortized over the Company's estimated period of performance under the collaboration agreement. The Company's estimates regarding the period of performance under the Janssen collaboration agreement were adjusted in 2007, in the third quarter of 2009 and in the first quarter of 2010, as a result of changes in the global development plan for telaprevir, which contemplates the conduct of certain development activities in the post-approval period, if telaprevir is approved for marketing. These adjustments were made on a prospective basis beginning in the periods in which the changes were identified and resulted in a decrease in the amount of revenues the Company recognized from the Janssen agreement by $2.6 million per quarter for the first adjustment, by $1.1 million per quarter for the second adjustment and by $1.4 million per quarter for the third adjustment. As of June 30, 2010, there was $74.6 million in deferred revenues related to this up-front license payment that will be recognized over the remaining estimated period of performance.

Under the agreement, Janssen agreed to make contingent milestone payments, which could have totaled up to $380.0 million for successful development, approval and launch of telaprevir as a product. As of June 30, 2010, the Company had earned $100.0 million of these contingent milestone payments. The remaining $280.0 million in milestones under the Company's agreement with Janssen include $100.0 million related to the regulatory filing with and approval of telaprevir by the European Medicines Evaluation Agency, and $150.0 million related to the launch of telaprevir in the European Union. On September 30, 2009, the Company entered into two financial transactions related to the $250.0 million in milestones related to the filing, approval and launch of telaprevir in the European Union. Please refer to Note L, "September 2009 Financial Transactions." No revenues from milestone payments were recognized in the three or six month periods ended June 30, 2010 or 2009.

J. Collaborative Arrangements (Continued)

Under the collaboration agreement for telaprevir, each party incurs internal and external reimbursable expenses related to the telaprevir development program and is reimbursed 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 and recognizes the net amount that Janssen is obligated to pay the Company with respect to reimbursable expenses, after offsetting reimbursable expenses incurred by Janssen, as collaborative revenues.

In addition, the collaboration agreement requires the Company to provide Janssen certain services through the Company's third-party manufacturing network. Reimbursements from Janssen for manufacturing services are recorded as collaborative revenues.

The collaboration agreement with Janssen also provides the Company with royalties on any sales of telaprevir in the Janssen territories, with a tiered royalty averaging in the mid-20% range, as a percentage of net sales in the Janssen territories. Each of the parties will be responsible for drug supply in their respective territories. In addition, Janssen will be responsible for certain third-party royalties on net sales in its territories. Janssen may terminate the agreement (A) prior to the receipt of marketing approval for telaprevir, without cause at any time upon six months' notice to the Company or (B) if marketing approval has been obtained, 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.

During the three and six months ended June 30, 2010 and 2009, the Company recognized the following collaborative revenues attributable to the Janssen collaboration:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2010	2009	2010	2009
	(in thousands)			
Amortized portion of up-front payment	$ 3,107	$ 5,610	$ 6,214	$ 11,220
Net reimbursement for telaprevir development costs	3,501	7,180	5,907	18,705
Reimbursement for manufacturing services	5,274	—	6,225	—
Total collaborative revenues attributable to the Janssen collaboration	$ 11,882	$ 12,790	$ 18,346	$ 29,925

Mitsubishi Tanabe Pharma Corporation

In June 2004, the Company entered into a collaboration agreement (the "MTPC Agreement") with Mitsubishi Tanabe Pharma Corporation ("Mitsubishi Tanabe"), pursuant to which Mitsubishi Tanabe agreed to provide financial and other support for the development and commercialization of telaprevir. Under the terms of the agreement, Mitsubishi Tanabe has the right to develop and commercialize telaprevir in Japan and certain other Far East countries. The MTPC Agreement provided for payments by Mitsubishi Tanabe to the Company through Phase 2 clinical development, including an up-front license fee, development-stage milestone payments and reimbursement of certain drug development costs for telaprevir.

On July 30, 2009, the Company and Mitsubishi Tanabe amended the MTPC Agreement. Under the amended agreement, Mitsubishi Tanabe paid the Company $105.0 million in the third quarter of 2009,

J. Collaborative Arrangements (Continued)

and the Company may receive a further contingent milestone payment ranging from between $15.0 million to $65.0 million. The amended agreement provides to Mitsubishi Tanabe a fully-paid license to commercialize telaprevir to treat HCV infection in Japan and specified other countries in the Far East, as well as rights to manufacture telaprevir for sale in its territory. Mitsubishi Tanabe is responsible for its own development and manufacturing costs in its territory. Mitsubishi Tanabe may terminate the agreement at any time without cause upon 60 days' prior written notice to the Company.

Prior to the amendment, the Company recognized revenues based on an amortized portion of the 2004 up-front payment, milestones, if any, and reimbursement of certain of the Company's expenses incurred in telaprevir development. The $105.0 million payment that the Company received in the third quarter of 2009 pursuant to the amended agreement is a nonrefundable, up-front license fee and revenues related to this payment are being recognized on a straight-line basis over the Company's expected period of performance under the amended agreement. As of June 30, 2010, there was $70.1 million in deferred revenues related to this up-front license payment that will be recognized over the remaining period of performance. In connection with the amendment to the MTPC Agreement, the Company agreed to supply manufacturing services to Mitsubishi Tanabe through the Company's third-party manufacturing network. The payments that the Company receives from Mitsubishi Tanabe for manufacturing services are recognized as collaborative revenues.

During the three and six months ended June 30, 2010 and 2009, the Company recognized the following collaborative revenues attributable to the Mitsubishi Tanabe collaboration:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2010	2009	2010	2009
	(in thousands)			
Amortized portion of up-front payment	$ 9,558	$ 42	$ 19,116	$ 83
Reimbursement for telaprevir development costs	—	620	—	760
Payments for manufacturing services	2,478	—	2,478	—
Total collaborative revenues attributable to the Mitsubishi Tanabe collaboration	$ 12,036	$ 662	$ 21,594	$ 843

K. 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, for $100.0 million in cash and 10,733,527 shares of the Company's common stock. Vertex acquired ViroChem in order to add two clinical development-stage HCV polymerase inhibitors to Vertex's HCV drug development portfolio. At the time of the acquisition, ViroChem was also engaged in research activities related to viral diseases and was developing an early-stage drug candidate for the treatment of patients with HIV infection. The transaction was accounted for under the acquisition method of accounting. All of the assets acquired and liabilities assumed in the transaction were recognized at their acquisition-date fair values, while transaction costs and restructuring costs associated with the transaction were expensed as incurred. The intangible assets and goodwill related to the ViroChem

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K. Acquisition of ViroChem Pharma Inc. (Continued)

acquisition are tested for impairment on an annual basis as of October 1, or earlier if impairment indicators are present.

All of the intangible assets acquired in the ViroChem acquisition related to in-process research and development assets. These in-process research and development assets primarily related to ViroChem's two clinical development-stage HCV polymerase inhibitors, VX-222 and VX-759, which accounted for $412.9 million and $105.8 million, respectively, of the intangible assets reflected on the Company's condensed consolidated balance sheets as of June 30, 2010 and December 31, 2009. The Company's condensed consolidated balance sheets also reflect goodwill that relates to the potential synergies from the possible development of combination therapies involving telaprevir and the acquired drug candidates. No impairment has been found for VX-222 or VX-759 or goodwill since the acquisition date.

In addition, the Company considered ViroChem's other clinical drug candidates and determined that VCH-286, ViroChem's lead HIV drug candidate, had an estimated fair value of $7.2 million at the acquisition date, based on development costs through the acquisition date. Pursuant to the Company's annual impairment analysis, the Company determined that VCH-286's fair value was zero, resulting in a $7.2 million impairment charge in the fourth quarter of 2009.

The deferred tax liability of $160.3 million as of June 30, 2010 and December 31, 2009 primarily relates to the tax impact of future amortization or impairments associated with the identified intangible assets acquired from ViroChem, which are not deductible for tax purposes. In connection with the impairment charge for VCH-286, the Company also recorded an adjustment of $2.2 million to the deferred tax liability in the fourth quarter of 2009.

In connection with the acquisition of ViroChem, the Company incurred $7.8 million in expenses in the first quarter of 2009, which are reflected as acquisition-related expenses on the condensed consolidated statement of operations in the six months ended June 30, 2009. These costs include transaction expenses as well as a restructuring charge the Company incurred in March 2009 when it determined it would restructure ViroChem's operations in order to focus on ViroChem's HCV development programs. As a result of this restructuring plan, which was completed in the second quarter of 2009, Vertex recorded a $2.1 million expense related to employee severance, benefits and related costs in the first quarter of 2009.

L. September 2009 Financial Transactions

2012 Notes

On September 30, 2009, the Company sold $155.0 million in aggregate principal amount 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 issued pursuant to, and the 2012 Notes are governed by the terms of, an indenture entered into on September 30, 2009 between the Company and U.S. Bank National Association, as trustee and collateral agent. In connection with the issuance of the 2012 Notes, the Company granted a security interest to the Purchaser with respect to $155.0 million of future telaprevir milestone payments that the Company is eligible to earn from Janssen for the future filing, approval and launch of telaprevir in the European Union.

Vertex Pharmaceuticals Incorporated

Notes to Condensed Consolidated Financial Statements (Continued)

(unaudited)

L. September 2009 Financial Transactions (Continued)

The 2012 Notes were issued at a discount and do not pay current interest prior to maturity. The 2012 Notes will mature on October 31, 2012, subject to earlier mandatory redemption to the extent specified milestone events set forth in the Company's collaboration with Janssen occur prior to October 31, 2012. $100.0 million of these potential milestone payments relate to the regulatory filing with and approval of telaprevir by the European Medicines Evaluation Agency, and $55.0 million of these potential milestone payments relate to the launch of telaprevir in the European Union. The Company will be required to redeem the portion of the 2012 Notes equal to each milestone payment as each such milestone payment is earned under the Janssen collaboration.

The holders of the 2012 Notes have the right to cause the Company to repay all or any part of the 2012 Notes at 100% of the principal amount of the 2012 Notes to be repurchased if a change of control of the Company occurs. The Company may also redeem all or any part of the 2012 Notes at any time at 100% of the principal amount of the 2012 Notes to be redeemed. Upon certain events of default occurring and continuing, either the trustee or the holders of not less than 25% in aggregate principal amount of the 2012 Notes then outstanding may declare the principal of the 2012 Notes immediately due and payable. In the case of certain events of bankruptcy, insolvency or reorganization relating to the Company, the principal amount of the 2012 Notes shall automatically become immediately due and payable.

The Company has determined that the 2012 Notes contain an embedded derivative related to the potential mandatory redemption or early repayment of the 2012 Notes at the principal amount prior to their maturity date. The Company bifurcated the embedded derivative from the 2012 Notes because the features of the embedded derivative were not clearly and closely related to the 2012 Notes.

The Company determines the fair value of the embedded derivative based on a probability-weighted model of the discounted value that market participants would ascribe to the potential mandatory redemption and early repayment features of the 2012 Notes. The Company records quarterly interest expense related to the 2012 Notes determined using the effective interest rate method. The fair value of this embedded derivative is evaluated quarterly, with any changes in the fair value of the embedded derivative resulting in a corresponding loss or gain. Changes in the fair value of the embedded derivative that result in a loss increase the liability each quarter by an amount corresponding to the loss and changes in the fair value of the embedded derivative that result in a gain decrease the liability each quarter by an amount corresponding to the gain. The liabilities related to the 2012 Notes, including the embedded derivative, are reflected together on the Company's condensed consolidated balance sheets. As of June 30, 2010, a portion of these liabilities, corresponding to the portion of the 2012 Notes that will be repaid in connection with achieving the first potential milestone, is reflected as a current liability. The balance of the liabilities related to the 2012 Notes is reflected as a long-term liability.

Sale of Future Milestone Payments

On September 30, 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 potential future milestone payments pursuant to the Janssen agreement related to the launch of telaprevir in the European Union, for nonrefundable payments totaling $32.8 million. The purchase agreements contain representations, warranties, covenants and indemnification obligations of each party, including the

L. September 2009 Financial Transactions (Continued)

obligation of the Company to make the milestone payments to the Purchaser when the underlying milestone events are achieved if the Janssen agreement has been terminated.

The Company determined that this sale of a potential future revenue stream should be accounted for as a liability because the Company has significant continuing involvement in the generation of the potential milestone payments pursuant to its collaboration agreement with Janssen. As a result, the Company records a liability on its condensed consolidated balance sheets equal to the fair value of the purchase agreements. No revenues or deferred revenues have been recorded on account of the amounts that the Company received from the Purchaser pursuant to these purchase agreements. In addition, the Company determined that the purchase agreements are free-standing derivative instruments. The aggregate fair value of the free-standing derivatives created by the sale of the rights to future milestone payments to the Purchaser pursuant to the purchase agreements is based on a probability-weighted model of the discounted value that market participants would ascribe to these rights. The models used to estimate the fair value of the rights sold to the Purchaser pursuant to the purchase agreements require the Company to make estimates regarding, among other things, the assumptions market participants would make regarding the timing and probability of achieving the milestones and the appropriate discount rates. The fair value of the rights sold to the Purchaser pursuant to the purchase agreements will be evaluated each reporting period, with any 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. Because the Company's estimate of the fair value of the rights to the future milestone payments includes the application of a discount rate to reflect the time-value-of-money, the Company expects to record costs related to this liability each quarter.

Costs and Liabilities Related to September 2009 Financial Transactions

In May 2010, the Company received positive data from the first Phase 3 clinical trial of telaprevir. Based on the positive data, the Company revised its estimates regarding the timing and probability of achieving the milestones pursuant to the Janssen agreement, which resulted in a significant increase in

Vertex Pharmaceuticals Incorporated

Notes to Condensed Consolidated Financial Statements (Continued)

(unaudited)

L. September 2009 Financial Transactions (Continued)

the fair value of the embedded derivative related to the 2012 Notes and the liability related to the sale of potential future milestone payments during the second quarter of 2010.

	Three Months Ended June 30, 2010	Three Months Ended June 30, 2009	Six Months Ended June 30, 2010	Six Months Ended June 30, 2009
	(in thousands)			
Expenses and Losses:				
Interest expense related to 2012 Notes	$ 3,702	$ —	$ 7,285	$ —
Change in fair value of embedded derivative related to 2012 Notes	3,528	—	3,848	—
Change in fair value of free-standing derivatives related to sale of potential future milestone payments	23,706	—	24,875	—
Total September 2009 financial transaction expenses	$ 30,936	$ —	$ 36,008	$ —

	June 30, 2010	December 31, 2009
	(in thousands)	
Liabilities:		
2012 Notes, excluding fair value of embedded derivative	$ 117,883	$ 111,313
Embedded derivative related to 2012 Notes	14,300	10,452
Liability related to sale of potential future milestone payments	63,082	38,207
Total liabilities related to September 2009 financial transactions	$ 195,265	$ 159,972

M. Sale of HIV Protease Inhibitor Royalty Stream

In December 1993, the Company and GlaxoSmithKline plc entered into a collaboration agreement to research, develop and commercialize HIV protease inhibitors, including Agenerase (amprenavir) and Lexiva/Telzir (fosamprenavir calcium). Under the collaboration agreement, GlaxoSmithKline agreed to pay the Company royalties on net sales of drugs developed under the collaboration. GlaxoSmithKline has the right to terminate its arrangement with the Company without cause upon twelve months' notice. Termination of the collaboration agreement by GlaxoSmithKline will relieve it of its obligation to make further payments under the agreement and will end any license granted to GlaxoSmithKline by the Company under the agreement. In June 1996, the Company and GlaxoSmithKline obtained a worldwide, non-exclusive license under certain G.D. Searle & Co. ("Searle," now owned by Pharmacia/Pfizer) patents in the area of HIV protease inhibition. Searle is paid royalties based on net sales of Agenerase and Lexiva/Telzir.

On May 30, 2008, the Company entered into a purchase agreement (the "Purchase Agreement") with Fosamprenavir Royalty, L.P. ("Fosamprenavir Royalty") pursuant to which the Company sold, and Fosamprenavir Royalty purchased, the Company's right to receive royalty payments, net of royalty amounts to be earned and due to Searle, arising from sales of Lexiva/Telzir and Agenerase under the

Vertex Pharmaceuticals Incorporated

Notes to Condensed Consolidated Financial Statements (Continued)

(unaudited)

M. Sale of HIV Protease Inhibitor Royalty Stream (Continued)

Company's 1993 agreement with GlaxoSmithKline, from April 1, 2008 to the end of the term of the collaboration agreement, for a one-time cash payment of $160.0 million to the Company. In accordance with the Purchase Agreement, GlaxoSmithKline makes all royalty payments, net of the subroyalty amounts payable to Searle, directly to Fosamprenavir Royalty. The Purchase Agreement also contains other representations, warranties, covenants and indemnification obligations. The Company continues to be obligated for royalty amounts earned and that are due to Searle. The Company has instructed GlaxoSmithKline to pay such amounts directly to Searle as they become due.

Because the transaction was structured as a non-cancellable sale, the Company has no significant continuing involvement in the generation of the cash flows due to Fosamprenavir Royalty and there are no guaranteed rates of return to Fosamprenavir Royalty, the Company recorded the proceeds as deferred revenues. These deferred revenues are being recognized as royalty revenues over the life of the collaboration agreement because of the Company's continuing involvement in the royalty arrangement over the term of the Purchase Agreement. Such continuing involvement, which is required pursuant to covenants contained in the Purchase Agreement, includes overseeing GlaxoSmithKline's compliance with the collaboration agreement, monitoring and defending patent infringement, adverse claims or litigation involving the royalty stream, undertaking to cooperate with Fosamprenavir Royalty's efforts to find a new license partner if GlaxoSmithKline terminates the collaboration agreement, and complying with the license agreement with Searle, including the obligation to make future royalty payments to Searle.

The Company recorded $155.1 million, representing the proceeds of the transaction less the net royalty payable to Fosamprenavir Royalty for the period from April 1, 2008 through May 30, 2008, as deferred revenues to be recognized as royalty revenues over the life of the collaboration agreement based on the units-of-revenue method. The amount of deferred revenues to be recognized as royalty revenues in each period is calculated by multiplying the following: (1) the net royalty payments due to Fosamprenavir Royalty for the period by (2) the ratio of the remaining deferred revenue amount to the total estimated remaining net royalties that GlaxoSmithKline is expected to pay Fosamprenavir Royalty over the term of the collaboration agreement. As of June 30, 2010, the Company had $123.1 million in deferred revenues related to the Purchase Agreement. In addition, the Company continues to recognize royalty revenues for the portion of the royalty earned that is due to Searle.

The Company recognizes royalty expenses in each period based on (i) deferred transaction expenses in the same manner and over the same period during which the related deferred revenues are recognized as royalty revenues plus (ii) the subroyalty paid by GlaxoSmithKline to Searle on net sales of Agenerase and Lexiva/Telzir for the period.

N. Guarantees

As permitted under Massachusetts law, the Company's Articles of Organization and Bylaws 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

Vertex Pharmaceuticals Incorporated

Notes to Condensed Consolidated Financial Statements (Continued)

(unaudited)

N. Guarantees (Continued)

amounts paid. No indemnification claims are currently 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, in sponsored research agreements with academic and not-for-profit institutions, in various comparable agreements involving parties performing services for the Company, and in 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, 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 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 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.

On February 12, 2008, the Company entered into underwriting agreements with Merrill Lynch, Pierce, Fenner & Smith Incorporated; on September 18, 2008, the Company entered into an underwriting agreement with Goldman, Sachs & Co.; on February 18, 2009, the Company entered into an underwriting agreement with Merrill Lynch, Pierce, Fenner & Smith Incorporated; and on December 2, 2009, the Company entered into an underwriting agreement with Goldman, Sachs & Co. (collectively, the "Underwriting Agreements"), in each case as the representative of the several underwriters, if any, named in such agreements, relating to the public offering and sale of shares of the Company's common stock or convertible subordinated notes. The Underwriting Agreement relating to each offering requires the Company to indemnify the underwriters of that public offering against any loss they may suffer by reason of the Company's breach of any representation or warranty relating to that public offering, the Company's failure to perform certain covenants in those agreements, the inclusion of any untrue statement of material fact in the prospectus used in connection with that 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 and covenants in the Underwriting Agreements are of a type customary in

N. Guarantees (Continued)

agreements of this sort. The Company believes the estimated fair value of these indemnification arrangements is minimal.

O. 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 contingent liabilities accrued as of June 30, 2010 or December 31, 2009.

P. Recent Accounting Pronouncements

In April 2010, the Financial Accounting Standards Board ("FASB") provided updated guidance on defining a milestone and determining when it may be appropriate to apply the milestone method of revenue recognition for research and development transactions. The update is effective on a prospective basis for fiscal years beginning on or after June 15, 2010, with early adoption permitted. The Company is currently evaluating the effect of this update to its accounting and reporting systems and processes; however, at this time the Company is unable to quantify the impact on its condensed consolidated financial statements of its adoption or determine the timing and method of its adoption.

In September 2009, the FASB provided updated guidance (1) on whether multiple deliverables exist, how the deliverables in a revenue arrangement should be separated and how the consideration should be allocated; (2) requiring an entity to allocate revenue in an arrangement using estimated selling prices of deliverables if a vendor does not have vendor- specific objective evidence or third-party evidence of selling price; and (3) eliminating the use of the residual method and requiring an entity to allocate revenue using the relative selling price method. The update is effective for fiscal years beginning on or after June 15, 2010, with early adoption permitted. Adoption may either be on a prospective basis or by retrospective application. The Company is currently evaluating the effect of this update to its accounting and reporting systems and processes; however, at this time the Company is unable to quantify the impact on its condensed consolidated financial statements of its adoption or determine the timing and method of its adoption.

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

Overview

We are in the business of discovering, developing and commercializing small molecule drugs for the treatment of serious diseases. Telaprevir, our lead drug candidate, is being evaluated in a registration program focused on treatment-naïve and treatment-failure patients with genotype 1 hepatitis C virus, or HCV, infection. In May 2010, we reported positive data from our first Phase 3 clinical trial of telaprevir. We expect to receive data from the other two clinical trials in our registration program for telaprevir, including a second clinical trial evaluating telaprevir in treatment-naïve patients and a clinical trial evaluating telaprevir in patients who failed prior treatment with pegylated-interferon, or peg-IFN, and ribavirin, or RBV, in the third quarter of 2010. Assuming a successful outcome of the clinical program, we intend to complete the submission of our new drug application, or NDA, for telaprevir in the United States in the second half of 2010. We expect to initiate sales of telaprevir in the United States in 2011. We are pursuing a number of other clinical development programs, including a registration program for VX-770, the lead drug candidate in our cystic fibrosis, or CF, program. We plan to continue investing in our research and development programs and to develop selected drug candidates that emerge from those programs, alone or with third-party collaborators.

Business Focus

Over the past several years, we have invested significant financial and management resources in the late-stage development of telaprevir and in strengthening our pipeline of drug candidates, through research and development activities and the acquisition of ViroChem Pharma Inc., or ViroChem. To fund these investments, we have raised significant capital through sales of common stock and convertible debt and other financial transactions. In order to execute our business plan and achieve profitability, we will need to complete the development of telaprevir on a timely basis and effectively commercialize telaprevir in the United States, where we have retained marketing rights to telaprevir.

We believe that over the next several years we will need to further investigate other potential therapies for the treatment of HCV infection in addition to telaprevir and to research, develop and commercialize additional drug candidates in other therapeutic areas with significant unmet needs. As a result, we are committed to advancing the other clinical drug candidates in our pipeline and investing in our preclinical research programs. We are conducting a Phase 2a clinical trial to evaluate telaprevir in combination with VX-222, an investigational HCV polymerase inhibitor that we obtained in 2009 through our acquisition of ViroChem. The objective of our ongoing clinical trials of HCV drug candidates and our earlier-stage activities with respect to potential additional and combination treatments for HCV infection is to significantly improve the treatment options for patients with genotype 1 HCV infection. The most advanced of our other drug candidates is VX-770, which we are evaluating in a fully-enrolled registration program that focuses on patients with CF who have the G551D mutation in the gene responsible for CF. We also are planning to initiate in 2010 a Phase 2a clinical trial to evaluate VX-770 in combination with VX-809 in patients with the F508del mutation, the most common mutation in the gene responsible for CF. In addition, we are conducting a Phase 2a clinical trial of VX-509 in patients with moderate-to-severe rheumatoid arthritis and a fully-enrolled Phase 2a clinical trial of VX-765 in patients with treatment-resistant epilepsy. We expect interim data from the VX-765 clinical trial in the second half of 2010 and the VX-509 clinical trial in 2011.

Drug Discovery, Clinical Development and Regulatory Approval

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. Throughout this entire process, potential drug candidates are subjected to rigorous evaluation, 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. The toxicity characteristics and profiles of drug candidates at varying dose levels administered for varying periods of time also are monitored and evaluated during the nonclinical and clinical development process. Most chemical compounds that are investigated as potential drug candidates never progress into formal development, most drug candidates that do advance into formal development never become commercial products and many drug candidates that complete Phase 3 clinical trials are not approved. A drug candidate's failure to progress or advance may be the result of any one or more of a wide range of adverse experimental outcomes at any point during the discovery, development or approval process, including, for example, a lack of sufficient efficacy against the disease target, a lack of acceptable absorption characteristics or other physical properties, difficulties in developing a cost-effective manufacturing or formulation method, or the discovery of toxicities or side-effects that are unacceptable for the disease indication being targeted or that adversely affect the competitive commercial profile of the drug candidate. Throughout the development process for a drug candidate, we must work collaboratively with regulatory authorities, including the United States Food and Drug Administration, or FDA, in order to identify the specific scientific issues that need to be addressed in the clinical trials to support continued development and approval of the drug candidate. If the data from our ongoing clinical trials or nonclinical studies regarding the safety or efficacy of a drug candidate are not favorable or regulatory authorities request additional clinical trials or changes to existing clinical trial protocols, we may be forced to delay or terminate the clinical development program for that drug candidate, which, particularly in the case of telaprevir, could materially harm our business.

If we complete a registration program for a drug candidate and believe the data supports approval of the drug candidate, we will seek approval from the FDA of an NDA to market the drug candidate in the United States, and we or our collaborators will need to obtain the requisite approval from comparable authorities in foreign jurisdictions. Submitting an NDA and comparable foreign filings requires compiling, analyzing and synthesizing data from the clinical trials and nonclinical studies of the drug candidate and data regarding chemistry, manufacturing and controls, or CMC; developing proposed labeling; and providing plans for post-marketing studies, safety monitoring and risk evaluation and mitigation. To obtain approval, we must, among other things, demonstrate with evidence gathered in nonclinical 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 drug candidate are adequate. After receiving an NDA or foreign regulatory filing, the FDA and/or other regulatory authorities may request supplemental analyses or data and/or ask us to complete additional clinical trials to support approval. In addition, the FDA and/or other regulatory authorities will conduct audits and inspections of our and our third-party contractors' practices, procedures and facilities. The FDA and foreign regulatory authorities will have substantial discretion in deciding whether or not each of our drug candidates should be granted approval based on the benefits and risks of a drug candidate in the treatment of a particular disease. Their review of our NDAs or foreign regulatory filings, including review of our clinical and nonclinical data, CMC processes and plans for post-approval activities, could delay, limit or prevent regulatory approval of the drug candidate in the United States and foreign jurisdictions.

Because our investments are subject to considerable risks, we closely monitor the results of our clinical trials, discovery research and our 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. Although we believe that our development activities and the clinical trial data we have obtained regarding telaprevir have reduced the risks associated with seeking regulatory approval, we cannot be sure that our development of telaprevir will lead to regulatory approval of telaprevir in the United States or that such approval, if obtained, will occur in 2011. With respect to our other drug candidates, including VX-770, we have more limited data from clinical trials and nonclinical studies and as a result it is difficult to predict which, if any, of these drug candidates ultimately will become pharmaceutical products. If regulatory delays are significant or regulatory approval is limited or denied altogether, our financial results and the commercial prospects for the drug candidates involved will be harmed.

Recent Developments in Clinical Programs

Telaprevir Registration Program

Telaprevir, our oral HCV protease inhibitor, is being investigated in a registration program focused on patients with genotype 1 HCV infection that includes ADVANCE and ILLUMINATE, which are Phase 3 clinical trials in treatment-naïve patients, and REALIZE, which is a Phase 3 clinical trial in patients who failed prior treatment with peg-IFN and RBV. We are submitting our NDA for telaprevir on a rolling basis and have submitted our CMC package and nonclinical package. Assuming a successful outcome of the clinical program, we intend to complete the NDA submission for telaprevir in the second half of 2010 with clinical data from our Phase 3 trials in both treatment-naïve and treatment-failure patients with genotype 1 HCV infection. We obtained sustained viral response, or SVR, data and safety data from ADVANCE in May 2010, and we expect to receive SVR data and safety data from ILLUMINATE and REALIZE in August 2010 and September 2010, respectively.

ADVANCE was a 3-arm double-blinded placebo-controlled clinical trial that enrolled approximately 1,095 treatment-naïve patients with genotype 1 HCV infection. ADVANCE had two telaprevir-based treatment arms, one in which patients received 12 weeks of telaprevir-based triple combination therapy and one in which patients received 8 weeks of telaprevir-based triple combination therapy, in each case taking peg-IFN and RBV for a period of time after completing telaprevir dosing. Patients in both of the telaprevir-based treatment arms who met criteria for extended rapid viral response, or eRVR, completed all treatment after 24 weeks, while patients who responded to treatment but did not meet the eRVR criteria continued receiving peg-IFN and RBV for a total of 48 weeks of therapy. To satisfy the eRVR criteria, a patient must have had undetectable HCV RNA levels at the end of week 4 and week 12 after the start of treatment. ADVANCE enrolled patients at 114 clinical trial sites worldwide. Approximately 60% of the patients in ADVANCE were enrolled at trial sites in North America, approximately 20% of the patients in ADVANCE were African American, Black, Hispanic or Latino, and approximately 20% had advanced fibrosis or cirrhosis.

SVR Data

The primary endpoint of ADVANCE was SVR, defined as the percentage of patients who had undetectable HCV RNA levels both at the end of treatment and 24 weeks after the end of treatment. The secondary endpoint was the safety of telaprevir when dosed in combination with peg-IFN and RBV. The SVR rates on an intent-to-treat basis for patients in ADVANCE are set forth in the table below:

	SVR
12-week telaprevir-based treatment arm:	
telaprevir in combination with peg-IFN and RBV for 12 weeks, followed by peg-IFN combined only with RBV for 12 weeks or 36 weeks	75%
8-week telaprevir-based treatment arm:	
telaprevir in combination with peg-IFN and RBV for 8 weeks, followed by peg-IFN combined only with RBV for 16 weeks or 40 weeks	69%
48-week control arm:	
48 weeks of therapy with peg-IFN and RBV	44%

The result of statistical testing is often defined in terms of a "p-value," with a p-value of 0.05 or less generally considered to represent a statistically significant difference between two outcomes. The difference between the SVR rates observed in the control arm and each of the two telaprevir-based treatment arms was statistically significant with $p<0.0001$.

Safety & Tolerability Information

The safety and tolerability profile of telaprevir in ADVANCE was similar to the profile reported in Phase 2 trials of telaprevir. The most common adverse events reported in the telaprevir arms were fatigue, rash, pruritus, nausea, headache and anemia, of which anemia, rash, pruritus and nausea occurred more frequently in the telaprevir-based treatment arms than in the control arm. The majority of these adverse events were graded mild to moderate.

Adverse events leading to discontinuation of all study drugs occurred in 6.9%, 7.7% and 3.6% of patients in the 12-week telaprevir-based treatment arm, the 8-week telaprevir-based treatment arm and the control arm, respectively. Discontinuation of all treatment due to rash was 1.4%, 0.5% and 0.0% in the 12-week telaprevir-based treatment arm, the 8-week telaprevir-based treatment arm and the control arm, respectively, while discontinuation due to anemia was 0.8%, 3.3% and 0.6% in the 12-week telaprevir-based treatment arm, the 8-week telaprevir-based treatment arm and the control arm, respectively.

Rapid Viral Response and Relapse Rates

In ADVANCE, 68%, 66% and 9%, respectively, of patients in the 12-week telaprevir-based treatment arm, the 8-week telaprevir-based treatment arm and the control arm had undetectable HCV RNA levels 4 weeks after the initiation of treatment, which corresponds to rapid viral response, or RVR, as defined by the American Association for the Study of Liver Diseases Practice Guidelines.

In ADVANCE, the viral relapse rate was 8.6%, 9.5% and 28%, respectively, in the 12-week telaprevir-based treatment arm, the 8-week telaprevir-based treatment arm and the control arm. The viral relapse rate is the percentage of patients who had achieved undetectable HCV RNA levels at the completion of all treatment but who relapsed during the post-treatment follow-up period.

VX-770 Registration Program

We are conducting a registration program for VX-770, which is focused on patients with CF who have the G551D mutation in the gene responsible for CF. The three clinical trials in this registration program are the Phase 3 STRIVE clinical trial in patients 12 years and older with the G551D mutation, the Phase 3 ENVISION clinical trial in patients between 6 to 11 years of age with the G551D mutation and the Phase 2 DISCOVER trial in patients 12 years and older with only the F508del mutation. We completed enrollment in STRIVE and DISCOVER in the first quarter of 2010 and completed enrollment in ENVISION in the second quarter of 2010. In STRIVE and ENVISION, patients in VX-770 treatment arms will receive 48-weeks of treatment with VX-770. In DISCOVER all patients have completed dosing in their 16-week treatment regimens. We expect that we will receive final data from the registration program in the first half of 2011, and if we believe the data from the registration program supports approval, we could file an NDA for VX-770 in the second half of 2011.

Twice-daily Dosing Trial for Telaprevir

We expect to initiate a Phase 3b clinical trial in the fourth quarter of 2010 to evaluate twice-daily dosing of telaprevir compared to three-times-daily dosing of telaprevir. We expect this trial to enroll approximately 700 treatment-naïve patients with genotype 1 HCV infection in two telaprevir-based treatment arms and to be conducted in the United States, European Union and certain other countries.

Based on advice from regulatory authorities in the United States and European Union, this clinical trial will not include a control arm with only peg-IFN and RBV.

Commercialization

We plan to market telaprevir in North America, if and when it is approved for sale. Over the past several years, we have expanded our commercial organization with a focus on building our understanding of the HCV market, developing our commercial strategy for the potential launch of telaprevir, and planning the infrastructure necessary to support future commercial activities. We expect to expand our commercial organization to an even more significant extent in the period prior to the anticipated launch of telaprevir. This expansion will include implementation of internal systems and infrastructure to support commercial sales, incorporation of appropriate compliance policies and procedures, establishment of patient-focused programs and hiring a sales force and employees for our managed markets organization to promote telaprevir, if approved, to health care providers and payors. In the first half of 2010, we established a commercial leadership team with broad experience in marketing, sales, distribution and cost reimbursement of drugs. Successful development and commercialization of any of our other drug candidates may require further expansion of our commercial capabilities in North America and potentially in other locations if we retain and pursue our current worldwide rights to these drug candidates.

Manufacturing

We will require a supply of telaprevir for sale in North America and a supply of VX-770 for sale worldwide if we are successful in obtaining marketing approval for these drug candidates. We rely on an international network of third parties to manufacture and distribute our drug candidates for clinical trials, and we expect that we will continue to rely on third parties for the foreseeable future to meet our commercial supply needs for any of our drug candidates that are approved for sale. Third-party contract manufacturers, including some in Asia, 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 attempt to effectively manage the business relationships with companies in our supply chain, we do not have complete control over their activities.

Corporate Collaborations and Business Development Activities

Corporate collaborations have been and will continue to be an important component of our business strategy. Historically, we have not had the resources to develop and commercialize all of the drug candidates that we have identified or for which we have rights. Therefore, we have relied on collaborations with third parties for the development and commercialization of some or all of our drug candidates. Collaborations continue to be an important part of our strategy going forward, although the structure and scope of available collaborative opportunities has changed in the past and may change in the future based on prevailing economic and competitive conditions. Business development opportunities have provided us with drug candidates and important research resources that have contributed to a number of the drug candidates in our current development pipeline. In the future, we may seek to license or acquire drugs, drug candidates and other technologies that have the potential to strengthen our development pipeline, drug discovery platform or commercial opportunities.

Financing Strategy

We have incurred losses from our inception and expect to continue to incur losses at least until we obtain approval for and successfully commercialize a product. Therefore, we have been dependent in large part on our ability to raise significant funding to finance our research and development operations, to create a commercial infrastructure and to meet our overhead costs and long-term contractual commitments and obligations. To date, we have secured funds principally through capital market transactions, strategic collaborative agreements, investment income and the issuance of common stock under our employee benefit plans. We have from time to time transferred to third parties future financial rights under certain of our collaborations in exchange for one-time cash payments.

We expect that we will incur substantial expenses in order to complete the development and commercialization of telaprevir while at the same time continuing to pursue diversified research and development efforts for our other drug candidates and to build our other capabilities. For these purposes, we may raise additional capital in order to maintain adequate working capital and cash reserves. We expect in any case that we would need to raise additional capital if the approval of telaprevir is materially delayed. We may raise additional capital from public offerings or private placements of our securities or through other methods of financing. We cannot be sure that financing opportunities will be available on acceptable terms, if at all. If adequate funds are not available on acceptable terms, we may be required to significantly curtail or discontinue one or more of our research or development programs, including clinical trials, incur significant cash exit costs, or attempt to obtain funds through arrangements with collaborators or others that may require that we relinquish rights to certain of our drug candidates.

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 they become known. We base our estimates on historical experience and various other assumptions that we believe to be reasonable under the circumstances. Actual results may differ from our estimates if past experience or other assumptions do not turn out to be substantially accurate. During the six months ended June 30, 2010, 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, 2009.

Results of Operations—Three and Six Months Ended June 30, 2010 Compared with Three and Six Months Ended June 30, 2009

	Three Months Ended June 30, 2010	Three Months Ended June 30, 2009	Increase/ (Decrease) $	Increase/ (Decrease) %	Six Months Ended June 30, 2010	Six Months Ended June 30, 2009	Increase/ (Decrease) $	Increase/ (Decrease) %
		(in thousands)				*(in thousands)*		
Revenues	$ 31,622	$ 19,064	$ 12,558	66%	$ 54,051	$ 43,043	$ 11,008	26%
Operating costs and expenses	201,195	176,231	24,964	14%	383,906	362,103	21,803	6%
Net interest expense	3,199	1,836	1,363	74%	6,699	2,615	4,084	156%
Other loss	27,234	12,294	14,940	122%	28,723	12,294	16,429	134%
Net loss	$ 200,006	$ 171,297	$ 28,709	17%	$ 365,277	$ 333,969	$ 31,308	9%

Net Loss

Our net loss in the second quarter of 2010 increased by $28.7 million, or 17%, as compared to our net loss in the second quarter of 2009. Our net loss in the first half of 2010 increased by $31.3 million, or 9%, as compared to our net loss in the first half of 2009. The increases in our net losses during the 2010 periods as compared to the 2009 periods resulted from a combination of an increase in our operating expenses related to increased expenses for our commercial organization and increased investment in commercial supplies of telaprevir, partially offset by an increase in our revenues, and an increase in non-cash losses that we incurred in the second quarter of 2010 related to the change in fair value of outstanding derivative instruments.

Net Loss per Share

Our net loss for the second quarter of 2010 was $1.00 per basic and diluted common share compared to a net loss of $0.99 per basic and diluted common share for the second quarter of 2009. Our net loss per common share in the second quarter of 2010 was similar to our net loss per common share in the second quarter of 2009 because our increased net loss was offset by an increase in the basic and diluted weighted-average number of common shares outstanding from 172.6 million to 200.4 million. Our net loss for the first half of 2010 was $1.83 per basic and diluted common share compared to a net loss of $2.03 per basic and diluted common share for first half of 2009. This decrease in net loss per common share for the first half of 2010 compared to the first half of 2009 was the result of an increase in the basic and diluted weighted-average number of common shares outstanding from 164.3 million to 199.7 million partially offset by an increase in our net loss. The increases in the number of common shares outstanding resulted primarily from the equity offerings we completed in February 2009 and December 2009, the ViroChem acquisition in March 2009 and the exchanges and conversions of our 4.75% convertible senior subordinated notes due 2013, or 2013 Notes, into common stock during 2009 and the first quarter of 2010.

Stock-based Compensation and Certain Other Expenses

The comparison of our costs and expenses during the three and six months ended June 30, 2010 and 2009 reflects changes in our levels of stock-based compensation expense and certain other expenses during the periods. Our stock-based compensation expense decreased in the three and six months ended June 30, 2010 as compared to the three and six months ended June 30, 2009 principally as a result of one-time expenses that were incurred in the first and second quarters of 2009 related to our CEO transition. In the second quarter of 2010, we incurred $30.9 million in non-cash expenses related to financial transactions that we completed in September 2009. Most of the second quarter 2010 expenses related to the September 2009 financial transactions were recognized as a result of updating our estimates regarding the timing and probability of achieving milestones pursuant to our collaboration with Janssen due to the positive data from our first Phase 3 clinical trial of telaprevir, which we reported in May 2010. We incurred acquisition-related expenses in the first quarter of 2009 and a loss on the exchange of convertible notes in the second quarter of 2009.

Our costs and expenses in the three and six months ended June 30, 2010 and 2009 included the following:

	Three Months Ended June 30, 2010	Three Months Ended June 30, 2009	Six Months Ended June 30, 2010	Six Months Ended June 30, 2009
	(in thousands)			
Stock-based compensation expense	$ 24,449	$ 26,585	$ 43,782	$ 48,862
Restructuring expense	2,112	1,107	2,892	3,509
Acquisition-related expenses (ViroChem)	—	—	—	7,793
September 2009 financial transaction expenses	30,936	—	36,008	—
Loss on exchange of convertible notes	—	12,294	—	12,294

Revenues

	Three Months Ended June 30, 2010	Three Months Ended June 30, 2009	Increase/ (Decrease) $	Increase/ (Decrease) %	Six Months Ended June 30, 2010	Six Months Ended June 30, 2009	Increase/ (Decrease) $	Increase/ (Decrease) %
	(in thousands)				(in thousands)			
Royalty revenues	$ 7,262	$ 5,917	$ 1,345	23%	$ 13,669	$ 12,057	$ 1,612	13%
Collaborative revenues	24,360	13,147	11,213	85%	40,382	30,986	9,396	30%
Total revenues	$ 31,622	$ 19,064	$ 12,558	66%	$ 54,051	$ 43,043	$ 11,008	26%

Our total revenues in recent periods have consisted primarily of collaborative revenues, which have fluctuated significantly on a quarterly basis. This variability is due to, among other things, the July 2009 amendment of our collaboration agreement with Mitsubishi Tanabe, which provided for an up-front payment that is being recognized over the estimated period of performance; the variable level of reimbursement we have received for our development programs; increased revenues from services we provide to our collaborators through our third-party manufacturing network and the timing of recognition of significant milestone payments. During the remainder of 2010, we expect to continue to recognize deferred revenues and additional revenues from our collaborative relationships and other sources. We do not expect to have any product revenues from the sale of telaprevir in 2010. If we are able to successfully commercialize telaprevir in accordance with our current plans, we expect to receive product revenues from the sales of telaprevir beginning in 2011.

Collaborative Revenues

The table presented below is a summary of revenues from our collaborative arrangements for the three and six months ended June 30, 2010 and 2009:

	Three Months Ended June 30, 2010	Three Months Ended June 30, 2009	Six Months Ended June 30, 2010	Six Months Ended June 30, 2009
	(in thousands)			
Janssen	$ 11,882	$ 12,790	$ 18,346	$ 29,925
Mitsubishi Tanabe	12,036	662	21,594	843
Other	442	(305)	442	218
Total collaborative revenues	$ 24,360	$ 13,147	$ 40,382	$ 30,986

Our revenues from the Janssen collaboration in each period consist of:

- net reimbursements from Janssen for costs of developing telaprevir;
- specified manufacturing services, if any, we provided to Janssen in the period; and
- an amortized portion of the $165.0 million up-front payment received from Janssen in 2006.

We record telaprevir clinical development expenses to be reimbursed by Janssen, after we offset amounts to be reimbursed by us for Janssen's telaprevir clinical development expenses, as revenues.

Our revenues from the Janssen collaboration decreased by $0.9 million, or 7%, in the second quarter of 2010 compared to the second quarter of 2009 and decreased by $11.6 million, or 39%, in the first half of 2010 compared to the first half of 2009. These decreases were primarily the result of decreased net reimbursable expenses as we near the completion of our registration program for telaprevir and decreased revenues from the up-front payment, partially offset by increased reimbursement for manufacturing services. We adjusted our estimates regarding the period of performance under the Janssen agreement in the first quarter of 2010, as a result of changes in the global development plan for telaprevir, which contemplates the conduct of certain development activities in the post-approval period if telaprevir is approved for marketing. This adjustment, together with a similar adjustment that we made in the third quarter of 2009, resulted in our recognizing $3.1 million and $6.2 million, respectively, in collaborative revenues related to the up-front payment in the three and six months ended June 30, 2010 as compared to $5.6 million and $11.2 million, respectively, in the three and six months ended June 30, 2009. We did not achieve any development milestones under the Janssen agreement in 2009 or the first half of 2010. In the third quarter of 2009, we entered into two financial transactions related to $250.0 million in potential future milestone payments under the Janssen agreement related to the regulatory filing with and approval of telaprevir by the European Medicines Evaluation Agency, and the launch of telaprevir in the European Union. We anticipate these milestone payments will be earned prior to April 2012. We expect that, when and if earned, these milestone payments will result in collaborative revenues of $250.0 million. We are obligated to apply the proceeds from the first $155.0 million toward redemption of our secured notes due 2012. The remaining $95.0 million are to be paid by Janssen directly to the purchaser of the $95.0 million of these milestone payments.

In the three and six months ended June 30, 2010, the largest portion of our collaborative revenues related to our collaboration with Mitsubishi Tanabe. In the third quarter of 2009, we entered into an amendment to our license, development and commercialization agreement with Mitsubishi Tanabe that resulted in a $105.0 million payment when the amendment was executed. We classified this payment as deferred revenues and are recognizing it over our expected period of performance. In the three and six months ended June 30, 2010, we recognized $9.6 million and $19.1 million, respectively, of revenues from Mitsubishi Tanabe related to the $105.0 million payment. In addition, in the second quarter of 2010, we recognized $2.5 million of revenues related to manufacturing services. During the remainder of 2010, we expect to continue to recognize revenues related to the up-front payment and manufacturing services.

Royalty Revenues

Our royalty revenues relate to sales of the HIV protease inhibitors Lexiva/Telzir and Agenerase by GlaxoSmithKline. In 2008, we sold our right to receive future royalties from GlaxoSmithKline with respect to these HIV protease inhibitors, excluding the portion allocated to pay a subroyalty to a third party, in return for a one-time cash payment of $160.0 million. We are recognizing revenues from this sale transaction on a deferred basis over the term of our agreement with GlaxoSmithKline, under the units-of-revenue method.

Our royalty revenues increased by $1.3 million, or 23%, in the second quarter of 2010 compared to the second quarter of 2009. Our royalty revenues increased by $1.6 million, or 13%, in the first half of 2010 compared to the first half of 2009. In 2010, we expect that we will recognize as royalty revenues a portion of the remaining deferred revenues from the sale of our HIV royalty stream plus the full amount of the third-party subroyalty.

Costs and Expenses

	Three Months Ended June 30, 2010	Three Months Ended June 30, 2009	Increase/ (Decrease) $	Increase/ (Decrease) %	Six Months Ended June 30, 2010	Six Months Ended June 30, 2009	Increase/ (Decrease) $	Increase/ (Decrease) %
	(in thousands)				*(in thousands)*			
Research and development expenses	$ 155,082	$ 139,331	$ 15,751	11%	$ 298,094	$ 282,912	$ 15,182	5%
Sales, general and administrative expenses	40,915	32,526	8,389	26%	76,467	61,046	15,421	25%
Royalty expenses	3,086	3,267	(181)	(6)%	6,453	6,843	(390)	(6)%
Restructuring expense	2,112	1,107	1,005	91%	2,892	3,509	(617)	(18)%
Acquisition-related expenses	—	—	—	n/a	—	7,793	(7,793)	(100)%
Total costs and expenses	$ 201,195	$ 176,231	$ 24,964	14%	$ 383,906	$ 362,103	$ 21,803	6%

Our operating costs and expenses primarily relate to our research and development expenses and our sales, general and administrative expenses. Our research and development expenses fluctuate on a quarterly basis due to the timing and scope of activities related to development of clinical drug candidates. Our sales, general and administrative expenses generally have been increasing as we increase our headcount and expand our capabilities in preparation for the potential commercial launch of telaprevir.

Research and Development Expenses

	Three Months Ended June 30, 2010	Three Months Ended June 30, 2009	Increase/ (Decrease) $	Increase/ (Decrease) %	Six Months Ended June 30, 2010	Six Months Ended June 30, 2009	Increase/ (Decrease) $	Increase/ (Decrease) %
	(in thousands)				*(in thousands)*			
Research expenses	$ 45,776	$ 44,852	$ 924	2%	$ 91,730	$ 86,755	$ 4,975	6%
Development expenses	109,306	94,479	14,827	16%	206,364	196,157	10,207	5%
Total research and development expenses	$ 155,082	$ 139,331	$ 15,751	11%	$ 298,094	$ 282,912	$ 15,182	5%

Our research and development expenses include internal and external costs incurred for our drug candidates, including telaprevir and VX-770. We do not assign our internal costs, such as salary and benefits, stock-based compensation expense, laboratory supplies and infrastructure costs, to individual 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 drug development program. All research and development costs for our drug candidates are expensed as incurred.

To date, we have incurred in excess of $3.6 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 activity. 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.

Over the past several years, telaprevir has represented the largest portion of the development costs for our clinical drug candidates. We anticipate that our ongoing Phase 3 clinical trials of telaprevir will be completed in the third quarter of 2010, but that development costs associated with other clinical trials of telaprevir may continue after the completion of the telaprevir registration trials. If we are able to successfully commercialize telaprevir in accordance with current development timelines, we anticipate that we will begin generating revenues and cash flows from the sales of telaprevir in 2011. If our registration program for VX-770 is successful and completed on currently projected timelines, we could submit an NDA for VX-770 in the second half of 2011. Our other drug candidates are less advanced 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 the drug candidates we acquired from ViroChem, will generate revenues and cash flows.

Research Expenses

	Three Months Ended June 30, 2010	Three Months Ended June 30, 2009	Increase/ (Decrease) $	Increase/ (Decrease) %	Six Months Ended June 30, 2010	Six Months Ended June 30, 2009	Increase/ (Decrease) $	Increase/ (Decrease) %
	(in thousands)				*(in thousands)*			
Research Expenses:								
Salary and benefits	$ 16,129	$ 15,549	$ 580	4%	$ 32,614	$ 30,120	$ 2,494	8%
Stock-based compensation expense	6,277	7,252	(975)	(13)%	11,925	13,605	(1,680)	(12)%
Laboratory supplies and other direct expenses	7,460	7,668	(208)	(3)%	15,160	14,283	877	6%
Contractual services	1,321	1,372	(51)	(4)%	4,259	2,346	1,913	82%
Infrastructure costs	14,589	13,011	1,578	12%	27,772	26,401	1,371	5%
Total research expenses	$ 45,776	$ 44,852	$ 924	2%	$ 91,730	$ 86,755	$ 4,975	6%

Our research expenses primarily are related to expenses for our workforce and generally are not dependent on the timing of clinical development activities. Our total research expenses in the second quarter of 2010 were relatively consistent with our total research expenses in the second quarter of 2009, with small fluctuations in various components of our research expenses resulting in small increases in our total research expenses. Our total research expenses in the first half of 2010 were 6% higher than our total research expenses in the first half of 2009, as increases in most components of our research expenses were partially offset by a decrease in stock-based compensation expense. We expect to continue to invest in our research programs in an effort to identify additional drug candidates for development.

Development Expenses

	Three Months Ended June 30, 2010	Three Months Ended June 30, 2009	Increase/ (Decrease) $	Increase/ (Decrease) %	Six Months Ended June 30, 2010	Six Months Ended June 30, 2009	Increase/ (Decrease) $	Increase/ (Decrease) %
	(in thousands)				(in thousands)			
Development Expenses:								
Salary and benefits	$ 25,208	$ 23,406	$ 1,802	8%	$ 50,195	$ 46,436	$ 3,759	8%
Stock-based compensation expense	11,458	13,290	(1,832)	(14)%	20,130	24,289	(4,159)	(17)%
Laboratory supplies and other direct expenses	8,214	7,242	972	13%	14,447	13,823	624	5%
Contractual services	24,677	28,197	(3,520)	(12)%	46,898	62,871	(15,973)	(25)%
Commercial supply investment	18,549	3,743	14,806	396%	35,024	10,417	24,607	236%
Infrastructure costs	21,200	18,601	2,599	14%	39,670	38,321	1,349	4%
Total development expenses	$ 109,306	$ 94,479	$ 14,827	16%	$ 206,364	$ 196,157	$ 10,207	5%

The increases in our development expenses in the second quarter and first half of 2010 compared to the second quarter and first half of 2009 were primarily the result of increases in our commercial supply investment, which was primarily for telaprevir. While we believe that the development activities and clinical trial data to date have reduced the risks associated with obtaining marketing approval for telaprevir, we are continuing to expense all of our costs related to commercial supplies of telaprevir. We expect that our expense for commercial supply investment will continue to increase until we can begin capitalizing this investment. Our development expenses in the second quarter of 2010, excluding our commercial supply investment, were consistent with our development expenses in the second quarter of 2009, excluding our commercial supply investment, as decreases in contractual services expenses and stock-based compensation expense were offset by increases in our expenses for salaries and benefits and infrastructure costs. Our development expenses in the first half of 2010, excluding our commercial supply investment, decreased by $14.4 million as compared to our development expenses in the first half of 2009, excluding our commercial supply investment, as a significant decrease in our contractual services expenses and a decrease in our stock-based compensation expense were partially offset by an increase in expenses for salaries and benefits.

Sales, General and Administrative Expenses

	Three Months Ended June 30, 2010	Three Months Ended June 30, 2009	Increase/ (Decrease) $	Increase/ (Decrease) %	Six Months Ended June 30, 2010	Six Months Ended June 30, 2009	Increase/ (Decrease) $	Increase/ (Decrease) %
	(in thousands)				(in thousands)			
Sales, general and administrative expenses	$ 40,915	$ 32,526	$ 8,389	26%	$ 76,467	$ 61,046	$ 15,421	25%

The increases in sales, general and administrative expenses in the 2010 periods as compared to the 2009 periods are the result of increased headcount and external costs in 2010 as we advance our drug candidates, particularly telaprevir, through late-stage development. We expect our sales, general and administrative expenses to continue to increase as we prepare for the potential commercial launch of telaprevir in 2011. In the three months ended June 30, 2010 and 2009, our sales, general and administrative expenses included $6.7 million and $6.0 million, respectively, of stock-based compensation expense. In the six months ended June 30, 2010 and 2009, our sales, general and administrative expenses included $11.7 million and $11.0 million, respectively, of stock-based compensation expense.

Royalty Expenses

Royalty expenses decreased by 6% in each of the three and six months ended June 30, 2010 as compared to the three and six months ended June 30, 2009. Royalty expenses primarily relate to a subroyalty payable to a third party on net sales of Lexiva/Telzir. The subroyalty results in both a royalty expense and corresponding royalty revenues. We expect to continue to recognize this subroyalty as an expense in future periods.

Restructuring Expense

We recorded restructuring expense of $2.1 million for the three months ended June 30, 2010 compared to $1.1 million for the three months ended June 30, 2009 and restructuring expense of $2.9 million for the six months ended June 30, 2010 compared to $3.5 million for the six months ended June 30, 2009. The restructuring expense in all periods included imputed interest cost related to the restructuring liability associated with our Kendall Square lease. The increase in restructuring expense in the second quarter of 2010 as compared to the second quarter of 2009 was primarily the result of revisions in the second quarter of 2010 to key estimates and assumptions related to the exercise by one of our sublessees of an option to continue subleasing a portion of the Kendall Square facility through 2015 and changes to certain assumptions for the period from 2015 to 2018. The decrease in restructuring expense for the six months ended June 30, 2010 compared to the six months ended June 30, 2009 was primarily the result of a revision, in the first half of 2009, of certain key estimates and assumptions about facility operating costs for the remaining period of the lease commitment. The lease restructuring liability was $33.9 million as of June 30, 2010.

We review our estimates and assumptions with respect to the Kendall Square lease at least on a quarterly basis, and will make whatever modifications we believe are necessary to reflect any changed circumstances, based on our best judgment, until the termination of the lease. Our estimates have changed in the past, and may change in the future, resulting in additional adjustments to the estimate of the liability, and the effect of any such adjustments could be material.

Acquisition-related Expenses

We incurred $7.8 million of expenses in the six months ended June 30, 2009 in connection with our acquisition of ViroChem, including $5.7 million in transaction expenses and $2.1 million related to a restructuring of ViroChem's operations that we undertook in March 2009 in order to focus ViroChem's activities on its HCV assets. We did not have corresponding acquisition-related expenses in the first half of 2010.

Non-operating Items

Interest Income

Interest income decreased by $1.0 million, or 67%, to $0.5 million for the second quarter of 2010 from $1.5 million for the second quarter 2009. Interest income decreased by $3.1 million, or 77%, to $0.9 million for the first half of 2010 from $4.1 million for the first half of 2009. These decreases were the result of lower portfolio yields during the 2010 periods as compared to the 2009 periods. Our cash, cash equivalents and marketable securities yielded approximately 0% on an annual basis in the second quarter of 2010 compared to approximately 1% on an annual basis in the second quarter of 2009.

Interest Expense

Interest expense increased by $0.4 million, or 11%, to $3.7 million in the second quarter of 2010 from $3.3 million in the second quarter of 2009 and by $0.9 million, or 14%, to $7.6 million in the first half of 2010 from $6.7 million in the first half of 2009. These increases were the result of interest expense related to the 2012 Notes that we issued in September 2009, partially offset by a decrease in interest expense related to our 2013 Notes. During the second half of 2010, we will not have any interest expense related to our 2013 Notes, the remainder of which were converted into common stock in the first quarter of 2010, but we expect that we will continue to incur interest expense related to our 2012 Notes.

Change in Fair Value of Derivative Instruments

In the three and six months ended June 30, 2010, we recorded losses of $27.2 million and $28.7 million, respectively, in connection with the embedded and free-standing derivatives associated with our September 2009 financial transactions. These losses were principally related to adjustments we made in the second quarter of 2010 to estimates regarding the timing and probability of achieving the milestones under the Janssen agreement based on the positive data from our first Phase 3 clinical trial of telaprevir that we received in May 2010. These losses also included time-value-of-money adjustments to the estimated fair value of the free-standing derivative. If we earn the $250.0 million in milestone payments under the Janssen agreement, we expect that we will incur $54.7 million in additional expenses related to the September 2009 financial transactions. We expect the majority of these additional expenses to be reflected as changes in the fair value of derivative instruments and a portion of these additional expenses to be reflected as interest expense.

Loss on Exchange of Convertible Subordinated Notes

In the three and six months ended June 30, 2009, we incurred a non-cash charge of $12.3 million in connection with the exchange of $143.5 million in aggregate principal amount of the 2013 Notes for 6.6 million newly-issued shares of our common stock. The charge related to the approximately 400,000 shares of common stock that we issued in excess of the number of shares of common stock into which such 2013 Notes were convertible prior to the exchange. We did not have comparable charges in the three or six months ended June 30, 2010.

Liquidity and Capital Resources

We have incurred operating losses since our inception and have financed our operations principally through 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, financial transactions, investment income and proceeds from the issuance of common stock under our employee benefit plans. We expect that we will incur substantial expenses in order to complete the development and commercialization of telaprevir while at the same time continuing to pursue diversified research and development efforts for our other drug candidates and to build our other capabilities. For these purposes, we may raise additional capital in order to maintain adequate working capital and cash reserves. We expect we would need to raise additional capital if the approval of telaprevir were materially delayed.

At June 30, 2010, we had cash, cash equivalents and marketable securities of $979.1 million, which was a decrease of $305.8 million from $1.3 billion at December 31, 2009. The decrease was primarily the result of cash expenditures we made in the first half of 2010 related to, among other things, research and development expenses and sales, general and administrative expenses. Capital expenditures for property and equipment during the first half of 2010 were $12.8 million.

We had $155.0 million in aggregate principal amount of 2012 Notes outstanding on June 30, 2010. The 2012 Notes mature on October 31, 2012, subject to earlier mandatory redemption as specified milestone events under our collaboration with Janssen are achieved prior to October 31, 2012. In addition, in September 2009, we sold our rights to receive an additional $95.0 million of potential future milestone payments that we expect to receive from Janssen for the launch of telaprevir in the European Union. As a result of these transactions, the $250.0 million of potential milestone payments from Janssen related to the filing, approval and launch of telaprevir in the European Union, if and when earned, will not provide us with liquidity in the future except to the extent that they fund redemption of $155.0 million in principal amount of our 2012 Notes.

Our accrued restructuring expense of $33.9 million at June 30, 2010 relates to the portion of the facility that we lease in Kendall Square that we do not intend to occupy and includes other related lease obligations, recorded at net present value. In the first half of 2010, we made cash payments of $7.4 million against the accrued expense and received $4.4 million in sublease rental payments. During the second half of 2010, we expect to make additional cash payments of $7.5 million against the accrued expense and to receive $4.2 million in sublease rental payments.

We expect to continue to make significant investments in our development pipeline, particularly for clinical trials of telaprevir and VX-770, in our effort to prepare for potential registration, regulatory approval and commercial launch of telaprevir and VX-770, and in clinical trials for our other drug candidates, including VX-222, VX-809, VX-509 and VX-765. We also expect to continue to make a substantial investment in drug discovery research. As a result, we expect to incur future losses on a quarterly and annual basis at least until we obtain marketing approval and successfully commercialize a product. The adequacy of our available funds to meet our future operating and capital requirements will depend on many factors, including the number, breadth and prospects of our discovery and development programs, the costs and timing of obtaining regulatory approvals for any of our drug candidates and our decisions regarding manufacturing and commercial investments.

We believe that our current cash, cash equivalents and marketable securities will be sufficient to fund our operations for at least the next twelve months. We may raise additional capital in order to maintain adequate working capital and cash reserves to continue our diversified research, discovery and development efforts through public offerings or private placements of our securities, securing new collaborative agreements or other methods of financing. Any such capital transactions may or may not be similar to transactions in which we have engaged in the past. 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. There can be no assurance that any such financing opportunities will be available on acceptable terms, if at all. If adequate funds are not available, we may be required to curtail significantly or discontinue one or more of our research, drug discovery or development programs or attempt to obtain funds through arrangements that may require us to relinquish rights to certain of our technologies or drug candidates.

Contractual Commitments and Obligations

Our commitments and obligations were reported in our Annual Report on Form 10-K for the year ended December 31, 2009, which was filed with the Securities and Exchange Commission, or SEC, on February 19, 2010. There have been no material changes from the contractual commitments and obligations previously disclosed in that Annual Report on Form 10-K, except that, as anticipated, the holders of our remaining 2013 Notes converted those 2013 Notes into 1.4 million shares of our common stock in the first quarter of 2010.

Recent Accounting Pronouncements

Refer to Note P, "Recent Accounting Pronouncements," in the accompanying notes to the condensed consolidated financial statements for a discussion of recent accounting pronouncements.

Item 3. Quantitative and Qualitative Disclosures About Market Risk

As part of our investment portfolio, we own financial instruments that are sensitive to market risks. 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 United States government and its agencies, investment grade corporate bonds and notes and money market instruments. These investments are denominated in United States 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.

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, 2010 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 second quarter of 2010 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, 2009, which was filed with the SEC on February 19, 2010. There have been no material changes from the risk factors previously disclosed in that Annual Report on Form 10-K.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This Quarterly Report on Form 10-Q and, in particular, our Management's Discussion and Analysis of Financial Condition and Results of Operations set forth in Part I—Item 2, contain 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:

- our expectations regarding clinical trials, development timelines and regulatory authority filings and submissions for telaprevir, VX-770, VX-222, VX-809, VX-509, VX-765 and other drug candidates under development by us and our collaborators, including our intention to complete the NDA submission for telaprevir in the United States in the second half of 2010, and the possibility that we could submit an NDA for VX-770 in the second half of 2011;
- our expectations regarding the expected date by which SVR data and safety data will be available and/or publicly announced for REALIZE and ILLUMINATE, and our expectations regarding the timing and structure of clinical trials of our other drug candidates, including VX-770, VX-222, VX-509 and VX-765 and combinations of telaprevir with VX-222 and VX-770 with VX-809;
- 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 the intangible assets associated with the ViroChem acquisition and to the liabilities we recorded in connection with the September 2009 financial transactions;
- our belief that if we are able to successfully commercialize telaprevir in accordance with current development timelines, we will begin generating revenues and cash flows from sales of telaprevir in 2011;
- the data that will be generated by ongoing and planned clinical trials and the ability to use that data to support regulatory filings, including potential applications for marketing approval for telaprevir and VX-770;
- our plan to initiate a Phase 3b clinical trial of telaprevir to evaluate twice-daily dosing in the fourth quarter of 2010 and a Phase 2a clinical trial to evaluate combination regimens of VX-770 and VX-809 in patients with CF in 2010;
- 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 of those drug candidates;
- our ability to successfully market telaprevir and VX-770 or any of our other drug candidates if we are able to obtain regulatory approval;
- the focus of our drug development efforts and our financial and management resources and our plan to invest significant resources in telaprevir and our other drug candidates;
- 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 our needs for and ability to raise 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, 2009, which was filed with the SEC on February 19, 2010, and updated and supplemented by "Part II—Item 1A—Risk Factors" of Quarterly Reports 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, 2010:

Period	Total Number of Shares Purchased	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	Maximum Number of Shares That May Yet be Purchased under Publicly Announced Plans or Programs
April 1, 2010 to April 30, 2010	8,881	$ 0.01	—	—
May 1, 2010 to May 31, 2010	13,298	$ 0.01	—	—
June 1, 2010 to June 30, 2010	3,701	$ 0.01	—	—

The repurchases were made under the terms of our 2006 Stock and Option Plan. Under this plan, we award shares of restricted stock to our employees and consultants that typically are subject to a lapsing right of repurchase by us. We may exercise this right of repurchase in the event that 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 2006 Stock and Option Plan and are available for future awards under the terms of that plan.

Item 6. Exhibits

Exhibit No.	Description
10.1	Amended and Restated 2006 Stock and Option Plan, as amended.*
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 Pursuant to 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.

** Pursuant to applicable securities laws and regulations, we will be deemed to have complied with the reporting obligation relating to the submission of interactive data files in such exhibits and will not be subject to liability under any anti-fraud provisions of the federal securities laws with respect to such interactive data files as long as we have made a good faith attempt to comply with the submission requirements and promptly amend the interactive data files after becoming aware that the interactive data files fail to comply with the submission requirements. Users of this data are advised that, pursuant to Rule 406T of Regulation S-T, these interactive data files are deemed not filed and otherwise are not subject to liability, except as provided by applicable securities laws and regulations.

Signatures

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

August 3, 2010	VERTEX PHARMACEUTICALS INCORPORATED	
	By:	/s/ IAN F. SMITH
		Ian F. Smith *Executive Vice President and Chief Financial Officer* *(principal financial officer and duly authorized officer)*

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Exhibit 10.1

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.

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

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.

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 (ii) 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 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 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' 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 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.

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).

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.

**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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Exhibit 31.1

CERTIFICATION

I, Matthew W. Emmens, 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 3, 2010

/s/ MATTHEW W. EMMENS

Matthew W. Emmens
Chief Executive Officer
(principal executive officer)

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Exhibit 31.2

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 3, 2010	/s/ IAN F. SMITH
	Ian F. Smith *Executive Vice President and Chief Financial Officer* *(principal financial officer)*

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Exhibit 32.1

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, 2010 (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 3, 2010	/s/ MATTHEW W. EMMENS
	Matthew W. Emmens *Chief Executive Officer* *(principal executive officer)*
Dated: August 3, 2010	/s/ IAN F. SMITH
	Ian F. Smith *Executive Vice President and Chief Financial Officer* *(principal financial officer)*

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Exhibit 32.1